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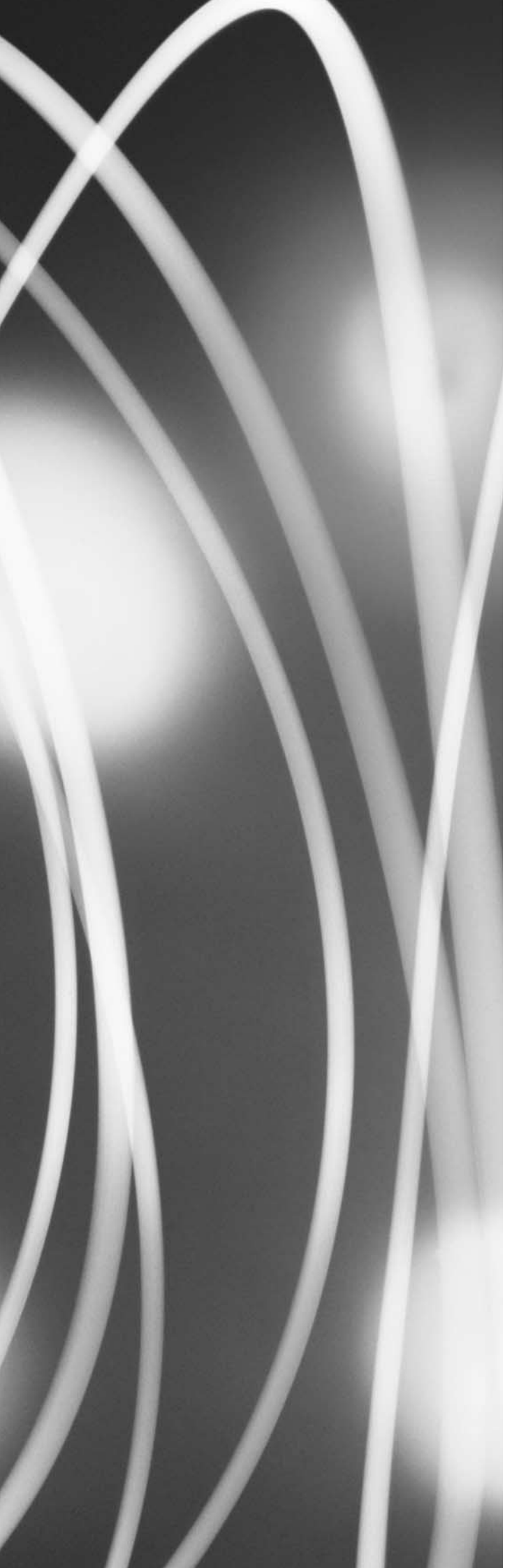
implementation
GUIDE

Clinical guidelines for the management of venous leg ulcers



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Clinical guidelines for the management of venous leg ulcers

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The Clinical Guidelines Implementation Resource Pack Steering Group

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Introduction

The most recent strategy for nursing states: "It is for every nurse, midwife and health visitor to strive for quality improvement in all aspects of practice" (Strategy for Nursing – Department of Health, 1999). This implementation guide forms part of a set, the focus of which is the development of care to people living with venous leg ulcers. The guide sets out in very practical ways how to strive for quality improvement using clinical practice guidelines.

Decisions about health care are complicated for professionals and for patients. The potential benefits and hazards of different interventions have to be considered against a background of limited resources and varying needs. Given this complexity, there is increasing interest in clinical guidelines as a way of assisting decision-making.

Clinical guidelines are developed using systematic reviews of research findings. Systematic reviews classify research studies by design and give an indication of the reliability and validity of their findings. A clinical guideline takes those findings and turns them into an active document by making recommendations for practice. Increasingly patients' views are included in guidelines, which ensure that patients' preferences are highlighted and thus included in clinical decision making.

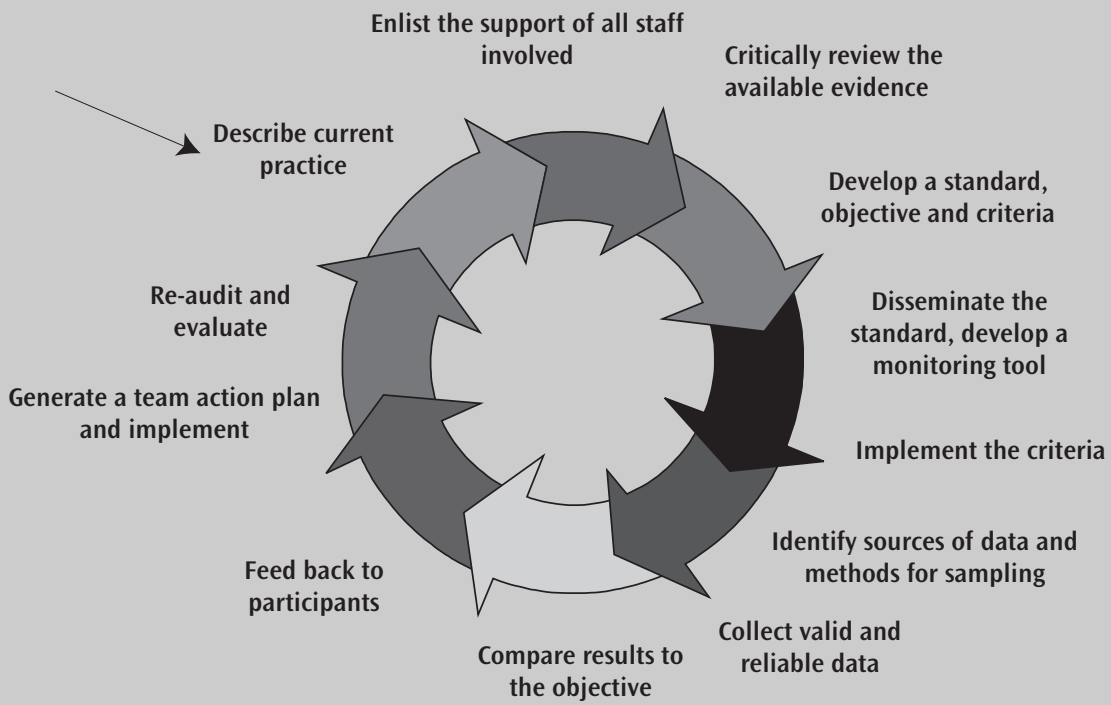
This guide is designed to help you turn the guideline recommendations into reality. It aims to set out practical ways in which you can improve care locally by implementing the clinical guideline for the management of venous leg ulcers.

The clinical audit cycle can provide a useful framework for implementing guidelines and evaluating improvement. This cycle contains the same elements as the process involved in implementing guidelines. The processes are essentially the same, having quality improvement as their goal. As you read textbooks and articles you will find slight differences in the order in which the elements are described. The clinical audit cycle is set out in figure 1. Both processes start with involving the entire team and finding the right leadership. They end by feeding into a programme of regular re-audit so that care is continually reviewed and improved. The steps in between vary slightly, but draw on the same sets of skills.

You may have been involved in clinical audit projects before. Much time is spent in defining standards or best practice. By using a clinical guideline as a definition of best practice and a national audit tool to monitor, a great deal of time can be saved. This enables the clinical team to focus on the most important part of the audit cycle, taking action to implement the guideline recommendations to improve the service.

Translating guidelines into practice is a complex undertaking and the guide sets out a number of techniques that have been tried and tested to make this process easier. This process of development can be divided into steps.

Figure 1 – The Clinical Audit Cycle



Six steps to improve the management of venous leg ulcers	
Step1	Deciding who will lead the work
Step2	Determining where you are now
Step3	Preparing to implement the guideline
Step4	Identifying techniques to assist
Step5	Devising an action plan
Step6	Evaluating your progress

The guide takes you through the steps in turn, outlining things that you can do as you plan to implement the guideline recommendations locally. The steps are illustrated with examples from practice, which you will find throughout the text. The steps are intended to provide a flexible model, recognising that organisations and teams will be starting from different places. Wherever you are starting from, we hope that you find the guide useful as you seek to improve the services your team is able to offer locally.

Step 1: Decide who will lead and co-ordinate the work

The first step in implementing a clinical guideline is to decide who will lead and co-ordinate the work. Successful behaviour change is usually achieved when people, who may not usually work in the same team, are brought together to achieve a common goal. It is helpful, therefore, to set up an inter-professional group to lead and co-ordinate the implementation of the guideline. The group should include representatives of everyone who will be affected by the guideline. These people are often referred to as the stakeholders.

Identify the stakeholders
Set up a group of stakeholder representatives to lead implementation of the guideline

Studies show that inter-professional work groups achieve more when they have a facilitator (Harvey and Kitson, 1996). A facilitator is someone who enables the group to work together to achieve its goals by attending to the group dynamics and the needs of the participating individuals.

Identify a facilitator

All members of the implementation group should be clear about their contribution to the group and to the work involved in implementing the clinical guideline. If roles and responsibilities are not agreed at the outset, one or two people might take on all the work thereby limiting the degree to which others can feel involved and able to participate in the change. Sharing the work will also make the tasks quicker and less onerous. The implementation team may then carry out each step in the process of implementing the guideline themselves or may enlist the support of others, for example, to conduct the clinical audit or to review the environment.

Clarify and agree the roles and contributions of all group members

It is also important for the group to agree what it wants the clinical guideline to accomplish. Members may otherwise disagree about priorities and feel confused and disillusioned if their expectations are not met.

Agree the purpose of the clinical guideline

Step 2: Determine where you are now

To effectively prepare to implement a clinical guideline you first have to know what changes are needed, whether the organisation is ready to make them and what resources you have to support them. That is, you need to evaluate current clinical practice to find out the degree to which current care conforms with that recommended by the guideline. You also need to review the environment to find out how ready health professionals and patients are to implement the guideline and what systems and structures are already in place, or are needed, to support any changes required.

Evaluation of clinical care

The degree to which current care conforms with the guideline recommendations and what changes are needed can be determined by conducting a local audit.

Measurement is undertaken using the national sentinel audit protocol, which forms part of the management of venous leg ulcers set. There are three stages:

Measuring current clinical practice

- Collecting audit data
- Collating audit data
- Summarising audit data

During the audit you need to evaluate different aspects of the care you provide including the

resources that are available (structure), the actions and decisions you take in practice (process) and the outcomes of care (outcomes). The audit protocol that comes with the set focuses on the actions that take place in clinical practice and some of the outcomes that result from those actions. You may also want to ask questions to find out whether you have all the resources, staffing and materials that you need to achieve the clinical guideline.

The audit protocol focuses on evaluating the clinical care of venous leg ulcers. It is also important to find out what patients think about the service offered. Additional guidance notes on involving patients and other service users in the evaluation of the service are available as part of the set. The audit protocol also gives you suggestions about when to carry out the audit, how to collect the data, the number of patients and staff that you need to include in the audit (the sample) and who should carry out the audit.

Review the environment

Reviewing the environment involves finding out more about the people who will be affected by the proposed changes. For example, is everyone receptive to the guideline and willing to use it in practice? Does anyone need extra education or training to be able to provide care as recommended?

Review of the environment also involves finding out what systems and structures there are in place within the organisation to support implementation of the guideline. There is a section within the national sentinel audit protocol, which you may find useful in addressing these issues.

Who will be influenced by the clinical guideline?
As well as the stakeholders involved in the co-ordinating group, there may be other individuals who need to be included and accounted for in your strategy and plan. Many people within or external to the organisation may influence the implementation process including funding organisations, health care professionals with their own ideas, community health councils and other patient representatives.

Little is known about how many people need to implement a guideline before its effectiveness in improving practice can be detected. The experience of one area in implementing clinical guidelines for leg ulcers, however, suggests that for a population of 40,000 one locality manager and 20 community nurses were able to effectively change practice.

Decide who should be involved in the implementation of the clinical guidelines
When should they get involved?
How much should they get involved?

Receptivity to the guideline. Knowing who will be affected by the clinical guideline and how they are likely to respond to its introduction should help you tailor the way in which the clinical guideline is implemented locally. It may also be helpful to think about how changes to clinical practice have been handled in the past. As well as helping you understand people's expectations, finding out about previous attempts at managing change (successes and failures) will help you select the most suitable methods for implementing the clinical guideline.

Find out what people think about the clinical guideline
What do health professionals know about the guideline recommendations?
Do patients have the same views as professionals?
What are the implications of any differences in views between professionals and patients?
How do you think the introduction of the change will be received?

It may be helpful to talk to clinical audit staff, information specialists, medical records staff, contract managers, local health commission/authority/board, quality management staff and so on when you evaluate clinical practice and review the environment. It could also be helpful to talk to people who have experience of working in project groups, staff responsible for the area of care training, development managers, and patients and carers.

Systems and structures

Conducting a review of the structures and systems of the organisation into which the clinical guideline will be introduced allows you to identify what aspects of that organisation will help you implement it and what aspects are likely to hamper you. Identifying these features enables you to take actions to overcome difficulties and to capitalise on any strengths. You will then be able to plan how to prepare the organisation and the people who work within it to implement the clinical guideline. For example, does the organisation have an efficient mechanism for communication between its employees or will you need to set up something new?

Identify the systems and structures you need to support implementation of the guideline

Reviewing the environment is a complex goal. However, there are a number of tools that can be used including the SWOT analysis and the Fishbone diagram – examples are included in Appendix 2.

Example 1 – the importance of initial assessment

The success of the guideline implementation project in Walsall has been greatly facilitated by investing in assessment of the needs of the local population and those of clinical practitioners. A guidelines steering group was set up with representatives from all clinical and management areas across the district. This helped ensure the service has a truly multi-disciplinary focus and encouraged ownership and commitment from all key players involved.

Guidelines have now been distributed to every clinical area in Walsall and are aimed at being a comprehensive educational resource on the prevention and management of leg ulceration. Educational pathways are now in progress to ensure recommendations are implemented and standards are met. Educational strategies include theoretical sessions and clinical placements to assess knowledge and competencies. Clinical placements include community leg ulcer clinics and vascular and dermatology clinics within the acute sector.

One of the aspects of the project that has been truly successful is the multi-disciplinary teamwork that has resulted from developing district clinical guidelines. Clinical care and referral pathways have been agreed and communication between nursing staff for complex patient referrals for relevant specialist/consultant advice has improved significantly.

It is envisaged that full implementation of the guidelines will result in a much better partnership between primary and secondary care and quality care provision for patients.

Donna Chaloner, Registered Specialist Practitioner (Tissue Viability)
Walsall Community Health Trust

Step 3: Prepare the people and the environment for guideline implementation

Preparing the people

There are two purposes in preparing people to implement a guideline. Firstly, to ensure that they are receptive to the clinical guideline and know how to use it and secondly, that they have the clinical skills and knowledge to carry out care as recommended in the guideline – this is absolutely crucial to your success in implementing the guideline.

Improving people's receptivity to the clinical guideline. Some of the people who will be affected by the clinical guideline will support its implementation and others may oppose it. Lots of people will probably be indifferent. Health care professionals and patients may react differently to the proposed changes. Some people may feel that the care provided is already the best possible, others may cling to outmoded practices, despite knowing that other practices are more effective. It is important to be aware of the views of all people who can possibly influence the implementation of the guideline in order to make plans to either capitalise on their support or to limit the amount to which they can sabotage your efforts.

Identify your supporters and the possible saboteurs

Block (1991) suggests that classifying people into one of four groups can be a useful way of assessing who is likely to be enthusiastic about introducing a clinical guideline and those who will be more reluctant. Block classifies people as bedfellows, allies, adversaries and opponents. The willingness of each group to change is summarised in Figure 2 and explained below.

Figure 2

High agreement with guidelines	Bedfellows	Allies
Low agreement with guidelines	Adversaries	Opponents
	Low trust	***High trust***

Allies are people with influence who both support your implementation agenda, and in whom you have high trust. On the positive side, you can mobilise them to support your aims, but on the negative side they will not necessarily challenge your view and help to create new perspectives. These people are similar to those described as

'opinion leaders' or 'product champions' and they can be found at any level within the organisation. A defining characteristic is their influence and credibility rather than their status or rank.

Opponents are those people with influence in whom you have great trust, but who do not necessarily share your aims. These individuals are useful because they provide a sounding board for your ideas and plans, and they can be counted on not to block your aims unfairly or without notice. However, if you do not deal with opponents openly, the trust you share may be eroded and they may become adversaries.

Bedfellows are those people with influence whom you are not able to trust fully. This is probably because you do not know them very well, or because in the past your dealings with them have been at arm's length. They do, however, share some of your aims. These individuals are useful because they can be included in the implementation of the guideline by inviting their involvement, seeking their opinions, and by developing appropriate working relationships in which they feel able to trust your aims.

Adversaries are those people with influence whom you feel unable to trust and who do not share your commitment to guidelines.

Fence-sitters are those people with influence who neither agree nor disagree with your aims and in whom you consequently feel little trust. Block (1991) characterises these as the archetypal bureaucrat, the person who always plays safe and takes refuge in the rules. On the positive side, they generally encourage review and debate but are reluctant to commit themselves. To counter this, Block suggests asking what they need for them to offer their support.

Plan activities to overcome negative attitudes to clinical guidelines

Here are some suggestions about how negative attitudes to clinical guidelines can be tackled:

- explain what clinical guidelines are AND what they are not
- explain the implications of the guideline, how the organisation is contributing to its successful implementation, and what is expected of staff
- demonstrate why a clinical guideline is needed, what its benefits are and how it can improve care
- be honest about the advantages and disadvantages of the clinical guideline
- find out the myths and legends surrounding clinical guidelines, and clarify the ways in which they threaten professionals and patients, then off-set these with their advantages
- agree to review the use of the clinical guideline and its impact on care and working practices after a set period.

A key factor in improving people's receptivity to a clinical guideline is to make sure that everyone is aware of its existence, what it involves and its benefits. It is helpful for people to be given the chance to think about and comment on plans for implementing the guideline before any changes take place in practice.

This two way communication allows health care professionals to advise the co-ordinating group of anything to do with the patients they work with, in their environment or related to their skills and knowledge which might influence the implementation of the guideline.

It will also help share ideas about how difficulties in implementation can be overcome and to encourage one another.

To make sure that everyone is aware of the clinical guideline and what its recommendations mean for practice it is important that it is widely disseminated. A common reason why clinical guidelines are not used is that the intended audience has never heard of them (Gupta et al., 1997; Tunis et al., 1994). Dissemination and consultation will be promoted by an effective communication strategy. Appendix 3 provides you with an example of a check-list that you can use to identify everyone who should receive a copy of the clinical guideline. In addition, there may be other people who should know that the guideline is being implemented. It is useful to also list the members of this second group to ensure that no one is forgotten.

Devise a communication strategy to support implementation of the clinical guideline

Change or add to systems and structures to enable effective organisation-wide communication

Communicate plans to implement the clinical guideline to everyone affected

A communication strategy needs to take account of the following:

- People
  - all those who are influenced by the clinical guideline
  - all those who will use it in practice
  - the 'gatekeepers' through which information is channelled (e.g. - to get information to staff nurses, do you need to go through ward managers?)

- What makes information about the guideline more accessible for different individuals or groups?
  - vary the media of presentation rather than only using paper formats e.g. use visual representation of the guideline or audit results
  - use different settings e.g. presentations, meetings, educational, administrative, hand-over meetings, ward rounds, social situations
  - use information technology
  - use incentives that highlight and 'sell' the guideline
  - use different methods for different individuals and groups
  - promote the credibility and rigour of the clinical guideline

- Evaluation
  - how will you know that everyone who needs to hear about the clinical guideline has done so?
  - how can you collate and feedback ideas about implementing the guideline?

A wide range of methods has been used to disseminate information within health service settings. It may be helpful to think of the stakeholders you previously identified as different 'audiences' for information.

Each audience may respond differently to the dissemination methods used. Your dissemination strategy may, therefore, need to vary for each one (i.e. – making a presentation to one group and sending a newsletter to another). Strategies may also vary by whether the target audience is a group of allies, adversaries, bedfellows or opponents.

Ensure professionals have the skills and knowledge to make changes to clinical care

The clinical management of venous leg ulcers is usually provided by district nurses, tissue viability specialist nurses, leg ulcer clinical nurse specialists, some practice nurses with a special interest in leg ulcers and some provider unit outpatient nurses with specialist skills. The assessment and management of venous leg ulcers is specialised work, requiring in-depth knowledge about causes of leg ulcers, and assessment of patients with leg ulcers, including Doppler assessment and compression bandaging techniques.

Example 2 – Structures for two way communication; a tissue viability link nurse system

District Nurses and Registered General Nurses working in the Nottingham Community Trust, have the opportunity to undertake either the ENB N18 Management of Patients with Leg Ulcers, or the ENB N49 Tissue Viability courses, as part of their professional development. Following completion of these courses, it is agreed and supported by management, that they will commence the role to Tissue Viability Link Nurse. All Link Nurses are expected to act as a resource for tissue viability advice within their Primary Care Group, to other District Nursing Teams. Their role also involves assisting with the current in-service training programme, and co-ordinating a Community Leg Ulcer Clinic.

Monthly meetings are organised to support all Link Nurses in their role. Each meeting lasts approximately two hours and a variety of speakers are invited each time, to update and increase knowledge on all aspects of tissue viability. These meetings also allow time for discussion and reflection, enabling ideas and experiences to be exchanged. They are also an ideal opportunity for the Tissue Viability Nurses to disseminate information and obtain feedback about the tissue viability services.

All patients attending Community Leg Ulcer Clinics in Nottingham (there are currently 14) are now assessed by a Link Nurse. We believe that this promotes quality of care, offering patients the opportunity to be assessed by a nurse who has undertaken further training and has specialist knowledge. This system also enables Link Nurses to consolidate their learning from either the ENB N18 or N49 courses. Setting up 12 Leg Ulcer Clinics in a year was a difficult task, however, each Link Nurse has been able to advise, support and teach other Link Nurses, how best to undertake this. Having peer support and sharing ideas has been extremely useful. The clinic setting has become a useful teaching area, for both trained staff and student nurses, to learn from Link Nurses about assessment techniques and the most appropriate management strategies for patients with leg ulcers.

There are currently 28 Link Nurses and a waiting list for others to commence the ENB courses. The Tissue Viability Nurses see Link Nurses as an essential part of their team. The support and raised awareness they bring to the service is invaluable. This ultimately improves patient outcomes.

Wendy Hodgkin, Tissue Viability Nurse
Nottingham Community Health NHS Trust

For the guideline to be successfully implemented the nurses and general practitioners in the team need to have the knowledge and skills to implement the guideline recommendations.

Do the nurses need to know more about how to carry out the clinical care described in the guideline e.g.– Doppler measurement and compression bandaging?
How can you ensure they have the clinical skills and knowledge that they need to implement the guideline?
Provide an agreed education programme to ensure professionals have the skills and knowledge they need to implement the guideline
Set up a system for clinical supervision to ensure clinical practice is in accordance with guideline recommendations

You may wish to liaise with a local education provider to obtain clinical training on the assessment and management of venous leg ulcers for the district nurses and general practitioners in your team. A number of areas have educational initiatives to improve the clinical care of patients with venous leg ulcers. Examples of local initiatives, including the Oxfordshire Leg Ulcer Strategy, and work in Hertfordshire, Reading and Birmingham can be accessed through the contact names provided in Appendix 4. Such examples can give you good ideas about educating and supporting nurses to assess and manage venous leg ulcers in line with the guideline recommendations.

Prepare patients

Patients must be involved in planning how the clinical guideline will be used to make sure that their preferences and views are to be included in the decision-making process. Involving patients can also ensure that they understand the reasons for the care they received and their contribution to its success. For example, a patient may be more willing to wear a compression bandage for extended periods of time if he or she understands the reasons why that type of bandage is used.

How can patients be prepared to wear compression bandages?
Do nurses have the skills and knowledge to explain compression therapy to the patients – how can they be developed?
Prepare nurses to educate patients about the benefits of compression therapy
Prepare patient information leaflets about the clinical guideline

The patient version of the clinical practice guideline forms a part of the set *Quality Improvement in the management of venous leg ulcers*. You may choose to adopt this publication or adapt it to suit the needs of your community.

Example 3 – Skills and knowledge; a leg ulcer education programme

Surrey Hampshire Borders NHS Trust currently includes seven Primary Care Groups, 66 District Nursing Teams working out of 100 bases, five community hospitals and a Mental health team within a 700 square mile geographical area. As the Tissue Viability Adviser, dissemination of new guidelines and education across the Trust is part of my responsibility. In order to achieve this, a leg ulcer forum has been formed which includes representatives from Practice Nurses and District nurses from each of the seven Primary Care Groups and community hospitals. The forum meets monthly to consider new initiatives. At each meeting a speaker from multidisciplinary teams or marketing companies is invited to update the forum members on current initiatives. The forum members are invited to attend a two day in-house educational update yearly. It is expected that in the future each Primary Care Team will have an ENB N18 trained nurse, from the forum.

Education and follow up training for the management and prevention of leg ulceration has been structured across the trust. One day leg ulcer assessment and leg ulcer management sessions with a follow up Doppler and Bandage 'pick and mix' workshop, are offered to all trained staff, including District nursing, community hospital staff, back to nursing and twilight nursing services. Three one and half hour 'In Surgery' training sessions, for practice and district nurses, are also offered. These include, leg ulcer management, Doppler ultrasound, compression bandaging and dressings update.

In order that relevant members of the trust staff are kept up to date with Tissue Viability issues, a newsletter is sent three times a year, directly to every nursing base. Managers and relevant multidisciplinary professionals allied to medicine are also sent a copy of the newsletter.

Mary Eagle, Tissue Viability Adviser
Surrey Hampshire Borders NHS Trust

Example 4 – Agreeing contracts of care with patients

Some patients find wearing compression bandage therapy and compression hosiery difficult to accept. One method I have found which aids compliance, is to draw up an agreed contract of care with the patient. Documented in the care plan under interventions, statements regarding management of the patient with an ulcer includes a section in which the patient agrees care. This is documented and the patient reads this. I have found by documenting action required of the patient, the patient will agree and form an ownership of their own care management. This has led to improved compliance from a more informed patient.

Mary Eagle – Tissue Viability Adviser,
Surrey Hampshire Borders NHS Trust

The preparation of written materials for use by patients is a skilled task. It can be helpful to look at information leaflets that other groups have prepared. In appendix 5 you will find:

- Sources of guidance about developing patient information
- Contact details of people who have successfully produced patient information on the management of leg ulcers.

Prepare the environment

To implement many clinical guidelines, structures and systems have to be changed. For example, pathology test order forms, outpatient clinic appointment letters or computer systems may have to be altered. Systems may have to be created, for example the inclusion of reminders in patients' notes or teaching sessions for clinical staff. The structures and systems you already reviewed and set up to support the implementation of the clinical guideline will help identify what else is needed.

Do you need to create new systems and structures to implement the guideline?
Who do you need to involve in creating them?
Do you have the resources you need, in particular a leg ulcer assessment form?

A number of resources may also be required to enable the clinical guideline to be implemented. Such resources include:

- leg ulcer assessment forms (see Appendix 6)
- Doppler ultrasound to screen for vascular disease
- compression bandaging
- orthopaedic wool
- specialist hosiery and other aids

The team will need to decide which type of bandages and orthopaedic wool they wish to use.

Step 4: Decide which implementation techniques to use to promote use of the clinical guideline in practice

This section outlines a range of techniques, which have been used to implement changes in practice in health care settings. Research findings show that it is important to use a variety of implementation methods and to integrate them with a strategy for change (NHS Centre for Reviews and Dissemination [CRD], 1999; Dunning et al., 1997; Grimshaw & Russell, 1993; Thomas et al., 1998).

Traditionally, education and training have been used to change the behaviour and practices of health care professionals, to inform and convince people about the need to change and to ensure that there is consistency in care provided. However, knowledge and information by themselves are not enough to persuade people to change their behaviour (Freemantle et al., 1997). Instead other methods and techniques also need to be used including: education, social influence, facilitation, audit sanctions, marketing and reminders.

Appendix 7 provides a brief overview of studies, which examine the effectiveness of methods to disseminate and implement guidelines. You may find this information helpful in selecting the methods you will use in your implementation strategy. Various factors such as the target audience, the educational influence and practical considerations for each implementation technique are outlined in Appendix 8. In addition, projects such as that conducted by PACE and the Southern Birmingham Community Health NHS Trust (Dealey

et al., 1997) have specifically examined the implementation of clinical guidelines for the management of venous leg ulcers. Details about these projects are provided in Appendix 9.

Education and training. To implement the clinical guideline it is important to provide education and training to everyone within an organisation so that they understand:

- the benefits of clinical guidelines
- how and why they are developed
- what is needed to implement guidelines, in this case the venous leg ulcer guideline
- the content of the guideline and how it applies to them
- what they are being asked to do with the guideline
- how they can use the guideline
- how they can monitor its use and ensure that patient care improves.

Education may also be required in particular clinical skills relevant to the guidelines which staff may need to develop. It is more likely to be effective when it is tailored to the needs of the individuals concerned and opportunities for small group discussion are provided. Education is also more likely to be effective if it is combined with another activity, for example, audit and feedback.

Education alone may be sufficient to achieve guideline implementation with those you have identified as being your keen supporters, but is unlikely to achieve guideline implementation with other groups. As we all know, people react differently to change.

Devise and agree an education programme for the health professionals you work with
What would the aims of an educational initiative be?
What type of education is likely to be most effective?
How would the education be delivered? By whom? When?
What other techniques can be used alongside education?

An alternative strategy is to use techniques that work by using social influence (Mittman et al., 1992). Social influence techniques include clinical leadership, opinion leaders, product champions, peer support, clinical audit, and feedback and rewards.

Clinical leadership. Much of the literature on guideline implementation, as well as that on quality improvement, stresses the need for gaining the support of influential and/or senior figures for any changes proposed. The need for senior support is the case even where the development and implementation activity is managed as a 'bottom-up' process. To enlist the support of key people you need to identify the obvious leaders within your organisation including locality managers, clinical directors, general practitioners, practice managers and chief executives. These people can then be targeted with information.

Example 5 – Guidelines education

Local guidelines have been developed across seven trusts which include the unification of documentation between the hospitals and communities in those trusts. Leg ulceration assessment and reassessment forms have been developed. The forms are suitable for both the hospital and community setting.

Also included in the guidelines is staff education, with a teaching element incorporated. Each member of the steering group has been provided with a computer floppy disc containing:

- the format of the guidelines
- layout for overhead projection sheets for teaching, enabling the member of implement workshops in order to formalise the distribution of the guidelines throughout the trusts
- aims of an in-service training programme
- objectives of such a programme
- suggested training content, ranging from anatomy and physiology through to creating a leg ulcer service.

In this way, all seven trusts are delivering standardised information. The guidelines are non prescriptive and can be adapted to meet specific local need. They also include local resource names and national specialist courses which are currently available.

Mary Eagle – Tissue Viability Adviser,
Surrey Hampshire Borders NHS Trust

Adapted from an article published in the Journal of Clinical Excellence, Eagle, M. and Knott, P. (1999) Venous Leg Ulceration: guidelines and audit. A health authority initiative, *Journal of Clinical Excellence*, vol 1, no. 2, pp65-69

Which senior or managerial people should agree the implementation of the guideline?
How can you enlist their support?
How can you demonstrate to others in the organisation that you have the support of the senior and managerial people for the proposed changes?

Facilitation. To enable the multi-professional group to work together it can be helpful to draw on the skills of a trained facilitator (Morrell and Harvey, 1999). The term facilitation is used to describe a process of helping, guiding and enabling. In the context of implementing guidelines, the role of the facilitator is to guide the project group through the steps and to enable the group to work effectively together to that end. The facilitator should be specifically trained for the role with knowledge of quality improvement, project management and group processes. The person chosen for the role may belong to the clinical team concerned with the topic or come from elsewhere.

Opinion leaders. Opinion leaders are influential, respected individuals who are experts in their chosen field (Lomas et al., 1988; Rogers, 1995). When compared to their peers, opinion leaders tend to have a higher social status, are more innovative and tend to be the centre of an interpersonal network. Opinion leaders encourage others to use new information by using it themselves, thus setting an example and creating new implicit or explicit social norms. Opinion leaders are highly visible and are accessible to others because of their extensive interpersonal networks. This enables their influence to travel beyond their immediate clinical team.

Who else has influence over the opinions of the health professionals and patients you work with?

Product champions. Some individuals literally 'champion' a product and 'sell' it to their colleagues (Stocking, 1985). The amount of time that the product champions put into supporting an innovation is directly related to how well it is implemented.

Identify the opinion leaders and product champions in your clinical team and/or organisation

Once you have identified who the opinion leaders and product champions are in your team and organisation, think about how to enlist their help in implementing the clinical guideline. What is it about the clinical guideline that will appeal to them?

- might it save money?
- might it reduce the chances of litigation?
- does it relate to targets set by commissioners or the health authority?
- does it address a personal interest?
- is it a guideline recommended by a royal college or other professional organisation?
- is it recommended by patients?

How can support for the clinical guideline be obtained from opinion leaders and product champions?

What activities can they undertake for/with you to promote acceptance and use of the guideline?

Peer support. People commonly learn and formulate new opinions through discussion with their peers and are influenced by opinion leaders within the organisation (Mittman et al., 1992). For example, nurses may want to talk to others in their group about the implications of the guideline to help them decide whether to use it. They will ask each other questions such as:

- is the guideline valid?
- does it apply to the work we do and the patients we see?
- will it improve practice or may it have a harmful effect?

These conversations often happen in social situations, for example, whilst in the car park or in the staff canteen, and often have a great influence on people's decision-making. It has been argued that this social influence may be the biggest factor in whether a new initiative is implemented. Providing opportunities for discussion is, therefore, likely to have a beneficial effect on the adoption of the guideline. Discussion can be incorporated into education sessions, team meetings and presentations.

Identify activities and events that you can use to promote the guideline
How can you capitalise on social situations to get your messages to professionals and patients?
How can you make formal situations more enjoyable and memorable?

Feedback and reward. Management theorists and psychologists describe how important it is for us to achieve and for others to recognise our achievements. Achievement and recognition motivate us and give us the confidence to continue to perform well and to develop further, to try new things and to perform even better. A key part of an implementation strategy is reward and celebration.

How can your achievements be recognised and rewarded?

Positive results from clinical audit demonstrate achievements. There may be opportunities to celebrate these at routine team meetings, to tell others about the achievements through the organisation's internal communications systems, or at one-off events. Internal or external rewards or accreditation schemes can also be used. Recognising and rewarding success not only motivates those already involved in implementing a guideline, but it also acts as a marketing device for those who remain sceptical. Benchmarking may provide a useful structure for this process (Ellis and Morris, 1997). This is described in step 6.

As well as social influence techniques, there are also a number of other practical steps that you can take to improve implementation of the clinical guideline. These include the use of recording systems and care pathways.

Recording systems. Incorporating the recommendations of a clinical guideline into the systems you use to record clinical information can be a powerful way of reminding yourselves to adhere to the guideline. Recording systems can also be helpful in promoting a systematic approach to clinical care and the recording of information.

Can any of your assessment or patient record forms be redesigned in line with guideline recommendations?

Integrated care pathways. Integrated care pathways (ICPs) present a plan for the clinical management of patients with a particular condition that specifies the optimum course of events to happen within a set time-scale. They are developed by local multi-professional teams and may be based on or include recommendations from clinical guidelines. Variations from the pathway are documented and the reasons for the variations analysed. Avoidable variations from the pathway can then be addressed and changes made to the pathway if necessary.

Having reviewed the range of techniques that you can use to encourage people to use the clinical guideline in practice, you now need to decide which ones will be most useful in your locality.

Decide which combination of techniques is most suitable for implementing the clinical guideline where you work.

To help you decide which techniques to use, review the answers to the questions asked in the previous sections. This information gives you insight into the people who will be implementing the guideline and the environment in which they are working. As well as helping you plan how best to prepare professionals, patients and the environment for guideline implementation, the information also helps you identify which techniques will be most effective. Using the information that you have about your locality think about:

- which implementation techniques are most attractive?
- which are most feasible?
- what are the resource implications of each idea?
- are some ideas more suitable for some of the groups of people you work with than others?
- are some ideas more suitable for different stages of the work?
- how effective (based on the knowledge you have gained whilst working through this guide) do you think the different techniques will be?

You will probably want to use different techniques at different stages in the process of implementing the guideline. For example, in the early stages, techniques that promote people's awareness of the guideline will be most useful. Later, you will need to use techniques that encourage and maintain guideline use. Whatever techniques you decide to use, success is more likely if you mix and match them according to the group, or groups, into which you are introducing the guidelines.

Jot down your ideas about implementation.

- have you identified everyone who will be affected by the guideline?
- have you used a range of different techniques for each group?
- have you chosen techniques according to how ready the group members are to implement the guideline?
- have you chosen techniques that suit the different backgrounds and preferred learning styles of all your target groups, e.g. – patients, nurses ?
- have you included a technique which addresses education and information provision?
- have you included a technique which makes use of social influences?
- have you considered the different techniques you will use over time?
- have you considered and addressed the practical implications of the techniques you have identified?
- have you considered the cost implications of each technique?
- are all the techniques realistic and achievable?

Step 5: Pulling it all together – devise an action plan for improvement

The answers to the questions posed during this guide provide you with the information that you need to devise a strategy for improving care locally. The final parts of developing the strategy are organising the information into a set of sequential actions, allocating each action to a named individual (or individuals) and setting targets and deadlines for each activity – that is turning your strategy into manageable activities in the form of an action plan.

An action plan needs careful consideration. For each issue identified you will need to consider:

- ***the appropriate course of action*** – having identified the priorities for action these need to be clearly documented and broken down into steps if necessary
- ***a named person responsible for the action*** – it is important that the group identifies a named individual/s to be responsible for leading or co-ordinating each of the actions specified. Most of the clinical audit group will have responsibility for some aspect of the plan depending on their particular skills and the group that they represent. Agree how that named person will be supported and by whom.
- ***the time-scale for action*** – the group need to determine how long they need to implement each of the actions identified. This depends on the nature of the problem and the type of action required. ***Short-term actions*** are those which can be remedied almost immediately, in less than 6 weeks. ***Medium-term*** actions require a longer period of up to six months to implement, while ***long-term actions*** are those which will take over six months to achieve.
- ***contingency plans*** – what problems might you encounter? How will you deal with problems should they arise?

A comprehensive action plan is shown in appendix 10 followed by a worked example. You may of course have your own approach to project planning which you would rather use. To ensure that your action plan will be effective check it against the following criteria:

What are you trying to achieve?
Is the timetable realistic?
Have you communicated your plans to everyone involved in implementing the guideline?
Have you found someone to co-ordinate the work?
Who will ensure that the work has been done?
How will all those affected by the work be kept informed?
Who will monitor variance from the action plan?

Example 6 – Action planning

The results of the initial audit highlighted a number of areas that Barnsley could improve upon. At that time Barnsley did not have a standard assessment tool for leg ulcer management and this fact alone led to a large variation in practice. The audit also highlighted other resource issues such as insufficient Doppler ultrasounds available for use within the community. There were no standard protocols in use and district nurses lacked the assessment skills which in itself identified a training need.

Following the audit results a comprehensive report was produced that identified the areas for change in order to produce improvement in the management of leg ulcers. A proposed action plan was prepared including resource costs, the need to develop an assessment tool and staff training needs.

- It was agreed to adopt the national clinical practice guidelines for venous leg ulcer management as a standard protocol for the whole district.
- It was identified that some training needs could be met both internally and externally. A number of district nurses have now completed the N18 leg ulcer management course and a research based in-house teaching package on leg ulcer management has been delivered and cascaded out to nurses of all grades through the trust.
- A leg ulcer assessment tool was developed based around the national guidelines. It has been trialed and is now used district wide in Barnsley for all leg wounds of more than six weeks duration.
- Doppler ultrasounds have been purchased and are available to all district nursing teams.

Involvement in the national audit project has enabled effective comparisons with other sites which in turn identified the urgency of the need to implement protocols, training and resources to enable us to work to the national guidelines.

The whole process has proved to be a very useful tool in determining current need and practice standards. It has enabled appropriate use of resources and Barnsley is currently in the process of completing a second audit which hopefully will provide information and demonstrate the benefits of the audit process.

Margaret Kitchen
Barnsley Community and Priority Services NHS Trust

Step 6: Evaluating your progress

The ongoing task is to re-audit and to see whether care has improved in comparison with your previous results. Clinical audit is a continuous process and you will need to continue to measure practice against the audit criteria at regular intervals. You may choose to monitor care more frequently to track your progress as care is improved.

As a part of your clinical audit programme you may wish to consider internal benchmarking (Ellis and Morris, 1997). Quality improvement occurs by comparison between teams, and sharing how results were achieved. Internal benchmarking may provide a useful first step to benchmarking between trusts. In this way, once district nursing teams and leg ulcer clinics have collected their data, results would be shared internally, across the trust. A particular leg ulcer clinic may score highly on one criterion, for example physical assessment and clinical history at first visit. The staff might then take on a role of sharing their practice and supporting others within the trust. Those with high scores could then share their practice with district or regional groups. A network of those within similar settings, such as clinics and community, could be formed to share best practice and support development.

It is vital that you establish a programme of regular clinical audit in order to maintain the high standards you achieve. As staff change and other issues compete for people's attention, it is easy lose the momentum necessary to sustain clinical excellence.

- Re-audit
- Feed back the results to health professionals and patients
- Celebrate
- Consider internal benchmarking
- Identify further improvements to care
- Devise a new action plan
- Plan a programme of regular clinical audit

Example 7 – A programme of regular re-audit; continuing the development of care to patients

Our service was set up in 1994 under the guidance of Prof Christine Moffatt and the Charing Cross Team. We are a community based service with strong links with the local hospital and the vascular consultant and we have a system of local Leg Ulcer Clinics using research based treatment for all types of ulcers, already complying with the majority of the clinical guidelines. As part of the contract for our initial funding (for two years by LIZ (London Initiative Zone) money) we had to carry out detailed clinical audit, measuring healing rates for venous ulcers at 12 weeks of treatment, overall changes in costs (including dressings and bandages, nursing time, travelling time) and quality of life issues, comparing with the situation before the introduction of the standardised regime. The initial audit was facilitated and analysed by the Centre for Research and Implementation of Clinical Practice at Charing Cross and measured quality of life by using the Nottingham Health Profile. The results of the audit were that we achieved over 70 per cent of venous ulcers healing within 12 weeks, that our overall costs were reduced from £27 per week to £19 per week per patient and the there were huge improvements in the quality of life for patients, in terms of pain, anxiety and interference with daily life as well as social isolation.

Our funding is now part of the district nursing budget and periodically we carry out our own clinical audit, simplified to enable us to analyse the data for ourselves and we continue to monitor quality of life issues. At their first visit to a Leg Ulcer Clinic for assessment we ask patients to grade pain and anxiety levels with a simple 3 point scale, we also ask whether the ulcer interferes with a) their ability to take care of themselves or their homes, b) their work or hobbies c) their family or social life. At 12 weeks we repeat these questions and also ask them to complete a patient satisfaction survey about their understanding of and feelings about their treatment, clinic facilities and staff attitudes. We are still finding that the quality of life of the majority of patients improves over the 12 week period, that pain and anxiety levels drop dramatically and that many patients are more able to carry on independent and social lives.

We also find that the social aspects of the Leg Ulcer Clinics can't be over-emphasised – this is particularly true for the less mobile patients. We provide ambulance transport for those who can't get to clinics independently and for some patients this is their only outing of the week. The opportunity to meet others who share their problems, in a friendly atmosphere is a real morale boost. Some enjoy the company and cups of tea so much that they are disappointed when their ulcers heal and they only come back for three monthly check-ups.

Marian Jarvis, Administrator, Waltham Forest Leg Ulcer Service

Summary

Step 1: Decide who will lead and co-ordinate the work

- Identify the stakeholders
- Set up a group of stakeholder representatives to lead implementation of the guideline
- Identify a facilitator
- Clarify and agree the roles and contributions of all group members
- Agree the purpose of the clinical guideline

Step 2: Determine where you are now

- Measure current clinical practice
- Decide who should be involved in the implementation of the clinical guidelines
  - When should they get involved?
  - How much should they get involved?
- Find out what people think about the clinical guideline
  - What do health professionals know about the guideline recommendations?
  - How do you think the introduction of the change will be received?
- Do patients have the same views as professionals?
  - What are the implications of any differences in views between professionals and patients?
- Identify the systems and structures you need to support implementation of the guideline

Step 3: Prepare the people and the environment for guideline implementation

- Identify your supporters and possible saboteurs
- Plan activities to overcome negative attitudes to clinical guidelines
- Devise a communication strategy to support implementation of the clinical guideline
  - Change or add to systems and structures to enable effective organisation-wide communication
  - Communicate plans to implement the clinical guideline to everyone affected
- Do the nurses need to know more about how to carry out the clinical care described in the guideline e.g. – Doppler measurement, compression bandaging?
  - How can you ensure they have the clinical skills and knowledge that they need to implement the guideline?
  - Agree standards of education
  - Agree methods for supervision of practice
  - Provide education to ensure professionals have the skills and knowledge they need to implement the guideline
- How can patients be prepared to wear compression bandages?
  - Do nurses have the skills and knowledge to explain compression therapy to the patients – how can they be developed?
  - Prepare nurses to educate patients about the benefits of compression therapy
  - Prepare patient information leaflets about the clinical guideline
- Do you need to create new systems and structures to implement the guideline?
  - Who do you need to involve in creating them?
  - Do you have the resources you need, e.g. – documentation such as leg ulcer assessment forms?

Step 4: Decide which implementation techniques to use to promote use of the clinical guideline in practice

Agree an education programme for all involved professionals

What would the aims of an educational initiative be?

What type of education is likely to be most effective?

How would the education be delivered? By whom? When?

What other techniques can be used alongside education?

▼

Which senior or managerial people should agree the implementation of the guideline?

How can you enlist their support?

How can you demonstrate to others in the organisation that you have the support of the senior and managerial people for the proposed changes?

▼

Who else has influence over the opinions of the health professionals and patients you work with?

▼

Identify the opinion leaders and product champions in your clinical team and/or organisation

▼

How can support for the clinical guideline be obtained from opinion leaders and product champions?

What activities can they undertake for/with you to promote acceptance and use of the guideline?

▼

Identify activities and events that you can use to promote the guideline

How can you capitalise on social situations to get your messages to professionals and patients?

How can you make formal situations more enjoyable and memorable?

▼

How can your achievements be recognised and rewarded?

▼

Try to devise a patient record form that can be used to remind professionals to implement the guideline recommendations

▼

Decide which combination of implementation techniques is most suitable for implementing the clinical guideline where you work.

Step 5: Pulling it all together – devise an action plan for improvement

What are you trying to achieve?

Is the timetable realistic?

Have you communicated your plans to everyone involved in implementing the guideline?

Have you found someone to co-ordinate the work?

Who will ensure that the work has been done?

How will all those affected by the work be kept informed?

Who will monitor variance from the action plan?

Step 6: Evaluating your progress

Re-audit

▼

Feed back results to health professionals and patients

Celebrate

▼

Identify next improvements

Devise new action plan

▼

Consider internal benchmarking

Establish a programme of regular clinical audit

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Appendix 1

Further reading

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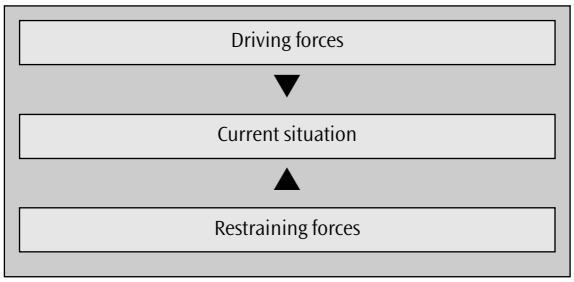
Appendix 2
Methods for Reviewing the Readiness of the Environment (Health Professionals, Patients, Systems and Structures) to Implement the Clinical Guideline

Brainstorming is used to free up people's thinking and to help them to think in new ways. A facilitator encourages people to explore an issue by saying whatever comes into their heads. Each point is recorded and no 'for and against' discussion or value judgements take place. When no more ideas are forthcoming, the facilitator helps the group to look at all those recorded and to engage in a 'for and against' debate. Eventually, ideas considered to be worth further exploration are prioritised, while others are deleted or saved for later consideration. Brainstorming is usually very lively and great fun.

Force field analysis is a technique to help people to look at the features of their work situation which either drive or restrain change. Driving forces are factors which cause instability and the need for change including staff changes, finances, and the openness to change. Restraining forces are those which promote stability and the maintenance of the status quo, including resistance to change. The facilitator writes 'Driving forces' at the top of a flipchart sheet of paper, 'Current Situation' in the middle and 'Restraining Forces' at the bottom. Group members are invited to brainstorm the driving and restraining forces which are put up on the flip chart.



The forces are then analysed by the group to determine the needs and priorities to be addressed in planning for change.

SWOT analysis is a similar technique to the force field analysis in that it is also a method for identifying promoters and opposers of change. In this case, four key dimensions are studied: strengths, weaknesses, opportunities and threats – hence SWOT analysis. A facilitator divides the board or flipchart paper into four squares and heads each square with one of the key headings, as illustrated below.

SWOT	
Strengths	**Weaknesses**
Opportunities	**Threats**

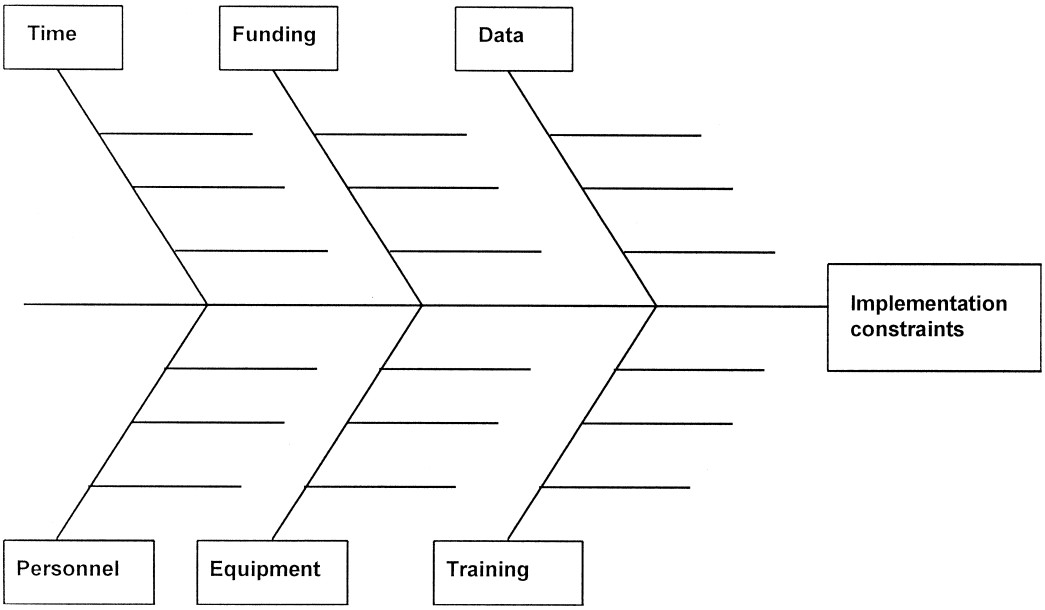
Group members then brainstorm under each of the headings, either in a large group, or by breaking into smaller sub-groups, depending on the numbers involved.

Nominal group technique helps a group to move towards a consensus decision. A facilitator invites each member of the group to put forward their views on the topic under discussion. 'Going round the group' is an effective way of making sure that everyone contributes. Each person's statement is written on the flipchart and discussion is kept to a minimum at this point. When all views have been recorded, each statement is discussed in turn. Only those statements with which everyone agrees are retained and the others are scrapped.

Snowballing is another way of reaching consensus and ensuring that even the most reticent group members contribute. A facilitator asks the group to divide into pairs and to discuss the topic for a timed period. The length of time for discussion will vary according to group size and how much time is available. The pair is asked to identify areas where they can reach agreement. The facilitator is the time-keeper and tells the pair to join with another, when the time is up. In fours, each pair shares with the other the consensus statements. All the statements are discussed for a timed period and those with which all four agree are retained. The process is repeated with the four joining up with another four, then eight with eight and so on, until the group has become one again. By this time, consensus statements will have been agreed by the whole group.

Fishbone diagram. A fishbone is designed to focus on the cause of a problem instead of the problem itself. The name 'fishbone' comes from the way the diagram looks. It is made up of a horizontal line (the spine) with a box at one end (the head) with the problem stated. Several angled lines come off the horizontal line forming the ribs of the fish. Each rib will have a probable cause of the problem listed at the end of the rib. Contributors to the cause are usually put on the small branches of the rib. Fishbone diagrams are most useful when you know that a specific area needs to be analysed but you are not sure which aspect of it is creating the problem.

Fishbone diagram



APPENDIX 3
Checklist: Disseminating the Clinical Guideline

Adapted from Palmer and Courtney, Clinical Guidelines Resource Pack Steering Group (in preparation). *Implementing national clinical guidelines – a resource pack*. London, Bailliere Tindall.

Do the following individuals or groups need to use or know about the guideline?	Need to use guideline	Need to know about guideline
	Tick Box (✓)	
District nurses		
Practice nurses		
General practitioners		
Auxillary nurses		
Trainee district nurses		
Service manager(s)		
Practice manager(s)		
GP students		
Pharmacists		
Occupational therapists		
Physiotherapists		
Clinical staff from other specialities		
Social workers		
Housing support workers		
Patients		
Carers of service users		
Local user advocacy / voluntary organisations		
Chief executive		
Training department staff		
Clinical (nursing, medical etc.) tutors		
Health and safety / occupational health staff		
Administrative and support staff		
Internal communications or public relations staff		
Library staff		
Clinical audit / quality improvement / risk management personnel		
Information systems staff		
Public health personnel		
Health authority staff		
Contracts department		
OTHER, PLEASE LIST:		

APPENDIX 4
Local Strategies for the Management of Leg Ulcers

A number of local groups have implemented clinical guidelines for the management of venous leg ulcers in practice. The local groups have extensive experience of devising educational strategies, communication strategies and the audit of care. Contact details are provided for four of them:

Hertfordshire
Lynne Rotchell, Clinical Nurse Specialist, Leg Ulcers
The Health Centre
Stanmore Road
Stevenage SG1 3QA
Telephone number: 01438 311531

Oxfordshire
Jill Brooks, Primary Care Development Nurse
Community Services Office
Nuffield Health Centre
Welch Way
Witney
Oxfordshire OX8 7HQ

Royal Berkshire and Battle NHS Trust
Chrissie Dunn
Senior Nurse, Practice Development
Battle Hospital
Reading
Berkshire RG3 1AG
Telephone: 0118-963-6508

Trish Powell, District Nurse 0118-959-6508

Southern Birmingham Community Health NHS Trust
Carol Dealey
Research Fellow
Nursing and Therapy Research Unit, Department of Nursing, Queen Elizabeth Hospital, QEMC, Birmingham B15 2TH.
0121-697-8377
Carol.Dealey@university-b.wmids.nhs.uk

In Scotland and Northern Ireland work has been underway for some time in developing the management of venous leg ulcers:

Northern Ireland
In October 1998 the CREST group launched the *Wound Management Guidelines for Northern Ireland*, which include guidelines on the management of venous leg ulcers. These have been widely distributed through a programme of educational events to clinical staff across the province. Further information can be obtained from the Eastern Health and Social Services Board on 01232 321313.

Scotland
The Scottish Intercollegiate Guidelines Network has published *A National Clinical Guideline on the Care of Patients with Chronic Leg Ulcer*, publication no.26. SIGN guidelines and reports are available free of charge within the NHS in Scotland. Elsewhere a charge of £7.50 applies. To order copies contact:
The SIGN secretariat
Royal College of Physicians
9 Queen Street
Edinburgh
EH2 1JQ
Tel 0131 225 7324

SIGN guidelines can also be downloaded from the SIGN website:
http://show.cee.hw.ac.uk/sign/home.htm

Appendix 5
Patient Information about Leg Ulcers

Patients need to have sufficient information about their leg ulcer and the treatment that they will receive to enable them to feel confident and able to contribute to the management of their ulcer. Producing information for patients is a skilled task. Listed below are some suggestions for what should be included in patient information from other people who have already developed evidence-based patient information.

The Hertfordshire Patient Information Checklist
From Hertfordshire Consensus Guidelines (1998) *The Management of Leg Ulcers*. West Hertfordshire Health Authority.

The Hertfordshire consensus leg ulcer guideline provides a useful checklist for the information that should be provided to patients who have leg ulcers:

Initial information

Information about service provision
- Who provides the leg ulcer service e.g. District Nurses, Community Clinics, Practice Nurses
- How to obtain/access the service
- What to expect when first seen with a leg ulcer i.e. the initial assessment

Causes of leg ulcers
- Venous, basic explanation of what this means
- Other causes and the need for referral to other health care professionals in certain situations

Treatment
- Mention of a firm bandaging system

How the patient can help
- Exercise. May need to be tailored for individual patients. Suggested exercises:
  - Move toes up and down several times
  - Move ankles up and down and rotate (if possible) several times
  - Keeping knees straight, pull toes towards body several times
  - Bend and straighten knee and hold
  - Walk as much as possible and avoid prolonged standing
- Elevation (you may wish to include a picture) Ankles at least higher than the bottom. This can be accomplished as follows:
  - Using stool and pillows
  - Sitting on the bed with feet on a pillow
  - Elevation of foot by elevation of one end of bed or mattress
- Healthy diet, stopping smoking
- Skin care/toenails
  - Wash legs in warm water, soaking in a bucket is preferable
  - Emollient should be used in the water or applied to the skin after washing
  - Care for feet and toenails. Podiatry referral may be necessary
  - Avoid excessive heat and cold
- It is helpful to include the statement

'It is important to consult your doctor or nurse rather than treating yourself'

What to do if bandages are uncomfortable
Further information
- Telephone numbers
- Quality information in respect of complaints and compliments

Post healing information

The following statements are suggested for inclusion
- Nearly half a million people in the UK suffer with leg ulcers, your ulcer has now healed and you will want to do everything you can to keep it healed
- In this leaflet are a few guidelines to help you keep your legs healthy and help prevent your leg ulcer from recurring
- Keep this leaflet handy and it will help you enjoy life after your leg ulcer

Advice should be included in respect of the following:
- Wearing and renewal of compression hosiery, to include:
  - When laundering stockings follow instructions given by the manufacturer
  - Avoid drying on radiators or direct heat
  - Stockings should be renewed every 3-6 months
  - Application aids are available e.g. silk slipper, applicator frames
- Diet, health eating information. No smoking
- Exercise, suggested exercises:
  - Move toes up and down several times
  - Move ankles up and down and rotate (if possible) several times
  - Keeping knees straight, pull toes towards body several times
  - Bend and straighten knee and hold
  - Walk as much as possible and avoid prolonged standing
- Footwear
- Skin care/toenails
  - Wash legs in warm water, soaking in a bucket is preferable
  - Emollient should be used in the water or applied to the skin after washing
  - Care for feet and toenails. Podiatry referral may be necessary
  - Avoid excessive heat and cold
- Elevation (you may wish to include a picture).

Ankles at least higher than bottom. This can be accomplished as follows:
  - Using a stool and pillows
  - Sitting on a sofa with feet on one of the arms or on pillows
  - Resting on the bed with feet on a pillow
  - Elevation of foot by elevation of one end of bed or mattress
- What to do if you are worried or the ulcer comes back
- Contact telephone numbers

Examples of documentation already in use can be obtained from Lynne Rotchell, Clinical Nurse Specialist: Leg Ulcers, North Herts NHS Trust, The Health Centre, Stanmore Road, Stevenage, SG1 3QA

Patient Information from the Oxfordshire Leg Ulcer Strategy
From Brooks, J., et al. Primary Care Quality Forum (1997) *The Oxfordshire Leg Ulcer Strategy*. Oxfordshire Health Authority.

Patient information from the Berkshire Leg Ulcer Project
Royal Berks and Battle Hospitals and West Berkshire Priority Care – *Healthy Legs for Life: venous leg ulcers, information for patients*
(Contacts as page 35)

Additional information about producing patient information can be obtained from the following:
Buckland, S. and Gann, B. (1997) *Disseminating treatment outcomes information to consumers*. London: King's Fund.

Entwistle, V., Watt, I. and Herring, J. (1996) *Information about health care effectiveness*. London: King's Fund.

The Centre for Health Information Quality
Highcroft
Romsey Road
Winchester
Tel: 01962 872245
www.hfht.org\chiq

Appendix 6
Examples of Leg Ulcer Assessment Forms

Detailed assessment of the patient with a leg ulcer is important to ensure that the ulcer is managed correctly and changes in the condition of the ulcer noted. The clinical guideline makes recommendations about the assessment that should be carried out but it is also important that the results of the assessment are accurately recorded. It is crucial to agree a detailed form of assessment documentation. This may need to be developed locally. Local groups have made recommendations about what information should be included on an assessment form. Those for Hertfordshire and Oxfordshire are included below.

Hertfordshire

The Hertfordshire consensus guidelines recommend the inclusion of the following in the assessment form

Background information

- Name, address, date of birth, sex
- Next of kin
- Community Nurse with overall responsibility for the patient
- General Practitioner
- Source of referral

History

History of the present leg ulcer(s)

- How and when the ulcer started, the duration of the present ulcer
- Current treatment i.e. who is treating the ulcer, with what and how often
- Past history of injury to the leg, varicose veins, deep venous thrombosis or a family history of leg ulcers
- History and duration of any previous leg ulcers
- Pain

General medical condition

- Diabetes mellitus, rheumatoid arthritis
- Past history of stroke, angina or claudication
- Anaemia, renal disease

Other important information

- Smoking
- History of reactions to dressings or bandages
- Mobility
- Medication
- Nutritional status and diet

Examination

General condition

- Looks well/looks ill
- Pulse and blood pressure
- Weight e.g. underweight/average/overweight

Examination of the legs

- Condition of the legs:
  - Presence of oedema
  - Temperature
  - Skin condition
  - Presence or absence of nails or hair
  - Foot pulses present or absent
  - Ankle and calf circumference
- Examination of the ulcer:
  - Site of ulcer, mark on a suitable diagram
  - Size of ulcer, a tracing of the ulcer MUST be taken with measurements
  - Presence of absence of odour, slough, and/or exudate

Measurement of Doppler ABPI

- Ankle systolic pressure
- Brachial systolic pressure
- Ankle systolic/brachial systolic = Doppler ABPI

Other investigations

- Urinalysis
- FBC, ESR
- Urea, electrolytes and creatinine
- Blood glucose
- Wound swab ONLY if appropriate

Reassessment

- Needs to take place at 4-6 week intervals
- Retrace the ulcer(s)
- Document on-going management plan
- Comment about patient compliance
- Reassessment of Doppler ABPI at 12 weekly intervals

Patient Assessment Forms from The Oxfordshire Leg Ulcer Strategy

The next 8 pages are reproduced from the Oxfordshire Leg Ulcer Strategy. These 8 pages include forms for the assessment of patients' general health and their leg ulcers. Information and advice about using these forms should be sought from the Oxfordshire Primary Care Quality Forum via Jill Brooks, Primary Care Development Community Nurse, C/O Community Services Officer, Nuffield Health Centre, Welch Way, Witney, Oxfordshire, 0X8 7HQ

GENERAL HEALTH ASSESSMENT – FORM 1

PATIENT'S NAME & ADDRESS.....

..... D o B .....

PRESENT/PAST OCCUPATION OR HOBBIES .....

BLOOD TESTS (CONSIDER):

Blood Glucose .....Hb .....

Urea/Electrolytes.....Other Blood Tests .....

HEALTH STATUS:

Exercise/Mobility .....Osteo-Arthritis? Yes/No

Nutritional status .....

Sleeping Position: Legs above heart level / at heart level / below heart level

Blood Pressure with Stethoscope .....

Weight: Under Weight / Normal / Over Weight

Smoking Past/Present.....

MEDICATION.....

.....

RELEVANT MEDICAL HISTORY

	Left Leg	Right Leg		
Previous Leg Ulcer	❑	❑		
Staining	❑	❑	Intermittent Claudication	❑
Induration (Hard fibrous tissue)	❑	❑	Ischaemic Heart Disease	❑
Phlebitis	❑	❑	Stroke or Transient Ischaemic Attack	❑
DVT	❑	❑	Hypertension	❑
Varicose Veins	❑	❑	Diabetes	❑
Poor Ankle Movement	❑	❑	Rheumatoid Arthritis	❑
Fixed Ankle Joint	❑	❑		
Leg Injury or Leg Surgery	❑	❑		
Ankle Flare	❑	❑		

Other (Specify).....

Assessor's Name and Status.....Date.....

INITIAL LEG ULCER ASSESSMENT – FORM 2

Consider repeating three monthly, if compression used, if ABPI reduced or sooner if condition deteriorates

Systolic Brachial Pressure with Doppler Left Arm..... Systolic Brachial Pressure with Doppler Right Arm.....

Highest Systolic Brachial Pressure.....

Left Leg		Yes	No	Doppler Pressure (any 2 from a,b & c)
Pulse Palpated	a) Posterior Tibial	❑	❑	_____
	b) Dorsalis Pedis or Anterior Tibial	❑	❑	_____
	c) Peroneal	❑	❑	_____
Patient laying flat? Yes / No				ABPI .....
Left Ankle circumference (cms) prior to getting out of bed/am				

Right Leg		Yes	No	Doppler Pressure (any 2 from a,b & c)
Pulse Palpated	a) Posterior Tibial	❑	❑	_____
	b) Dorsalis Pedis or Anterior Tibial	❑	❑	_____
	c) Peroneal	❑	❑	_____
Patient laying flat? Yes / No				ABPI .....
Right Ankle circumference (cms) prior to getting out of bed/am				

LOCATION OF ULCERS **(Indicate on diagram)**

Left Leg Front

Left Leg Inner Aspect

Right Leg Front

Right Leg Inner Aspect

Left Sole

Right Sole

Left Leg Back

Left Leg Outer Aspect

Right Leg Back

Right Leg Outer Aspect

Referred for Patch Testing? Yes: Give Date.....No (please circle)

Results of Patch Test – known allergens .....

Assessor's Name and Status.....Date.....

WOUND ASSESSMENT FORM FOR LEG ULCERS – FORM 3

TO BE CARRIED OUT AT EVALUATION DATE STATED ON CARE PLAN

Each leg should be assessed on a separate form, after cleansing. Where there are multiple ulcers of the same type, please assess the worst ulcer on each leg.

Leg: Left/Right (please circle)		DATE	DATE	DATE	DATE	DATE	DATE	DATE
ABPI (Doppler Reading)								
Wound Floor Condition (indicate % – total = 100%)	% Epithelization (Pink)							
	% Healthy Granulation (Red)							
	% Over Granulation							
	% Thick Slough (Yellow)							
	% Necrotic (Black/Grey)							
	Other (Specify)							
Dimensions	Tracings (tick if carried out)							
	Photographs (tick if carried out)							
	Max length x max breadth (mm)							
	Maximum depth (mm)							
Exudate	Amount (+,++,+++)							
Odour (Tick)	Yes							
	No							
Infection (Tick)	Suspected & Swab Sent							
	Results Received							
Wound Edges (Tick)	Flat							
	Rolled							
	Punched Out							
	Hard/fibrous							
	Other (Specify)							
Condition of Surrounding Skin (Tick)	Localised inflammation							
	Dry							
	Irritation/ Eczema							
	Hyperkeratosis (Thick Scales)							
	Cellulitis							
	Moist/Macerated							
Pain Score on a Scale 0 –10 (Patient's Perception)	Continuous							
	Intermittent (Comes and Goes)							
	At Specific Times : Walking							
	At Rest							
	At Dressing Change							
	Other (Specify)							
Oedema (Tick)	Foot only							
	Toe to Knee							
	Whole Leg							
	Other (Specify)							
Assessor's Signature								

LEG ULCER TREATMENT FORM

DATE	GOALS & COMMENTS	PRESCRIBED TREATMENT	SIGNATURE

VASCULAR (DOPPLER) ASSESSMENT

N.B. A DOPPLER ASSESSMENT SHOULD ALWAYS BE CARRIED OUT PRIOR TO THE APPLICATION OF COMPRESSION THERAPY

The Doppler Ultrasound detects the flow of blood in the blood vessels.

It consists of a transducer (probe) which is attached to an audio unit. The probe should be used in conjunction with a coupling gel which aids the transmission of ultrasound.

The probes recommended are:-

8 MHz for normal sized limbs
5 MHz for obese/oedematous limbs

Arteries

Healthy arteries have a strong pulsating sound usually consisting of three phases (tri-phasic) but sometimes only two phases can be heard (bi-phasic).

It is very important that practitioners recognise the normal pulsatile sound.

Veins

Veins do not pulsate and give a continuous 'whooshing' or 'roaring ' sound.

Arteries of the Foot – (See Diagram)

Two of the pulses and possibly three should be detected using the Doppler.

The two most frequently used arteries in Doppler assessment are:-

Posterior Tibial Artery
Usually found in the soft part mid-way on an imaginary line between the medial malleolus and the crest of the heel.

Dorsalis Pedis Artery
Found on the top of the foot in the soft spot between the hallus and the second toe.

12% of the population have a congenitally absent Doralis Pedis pulse (Barnhorst et al 1968).

Anterior Tibial Artery
Usually found on the crease line between the foot and the ankle. This is an extention of the Dorsalis Pedis.

Peroneal Artery
Usually found behind the lateral malleolus in the soft tissue or as indicated on diagram.

ANKLE BRACHIAL PRESSURE INDEX (ABPI)

The most consistent results are obtained by staff who use the technique regularly in ulcer and other vascular assessment (Douglas & Simpson 1995).

N.B. It is therefore strongly recommended that only staff who regularly use a Doppler and who have received initial training and regular updating should carry out this procedure.

- The patient should be **resting for 15-20 minutes, lying flat (or as flat as possible, with the legs as horizontal as possible) and relaxed.** A patient history may be taken during this time.
- Record the position of the patient.
- Place the sphygmomanometer cuff around the top of the arm. Palpate pulse and apply a blob of ultrasound gel. KY jelly is not recommended.

- Hold the Doppler probe between the fore finger and thumb at an angle of 45 degrees and place over the brachial pulse.
- Inflate the cuff until the Doppler sound disappears, slowly deflate cuff until the sound returns. This is the BRACHIAL SYSTOLIC PRESSURE. Check the reading in each arm twice leaving a time delay between each reading. Record the highest pressure reading.
- Palpate one of the arteries of the foot (usually the dorsalis pedis).

Place the sphygmomanometer cuff around the ankle above the malleoli. If an ulcer is present cover with a low adherent dressing with a sheet of polythene over the top.

- Inflate the cuff keeping the probe where a strong pulse can be heard. Once the pulse signal disappears gradually deflate the cuff until the sound returns. This is the ANKLE SYSTOLIC PRESSURE.
- Repeat the procedure using a different foot artery (usually the post tibial artery). Record the highest reading.

CALCULATION OF THE ANKLE BRACHIAL PRESSURE INDEX

Spuriously high Doppler readings are sometimes obtained in patients with diabetes and in patients with calcified arteries. It is important, therefore, that practitioners do not rely exclusively on Doppler readings but use them to confirm their observations (Ertl 1993).

Method

Divide the ankle pressure reading by the brachial pressure reading.

ABPI = Highest ankle systolic pressure
Highest brachial systolic pressure

e.g. Ankle = 100 divided by brachial 140 = ABPI of 0.71

INTERPRETATION OF ABPI

- Patients with an ABPI of 0.8 or greater may have compression bandaging or hosiery.
- Patients with an ABPI of 0.6 to 0.8 have moderate arterial disease. The General Assessment (Form 1), the Initial Assessment (Form 2) and the Wound Assessment (Form 3) should indicate whether the ulcer is clinically venous, in which case reduced compression may be used, or clinically non-venous, in which case the underlying causes need to be considered. Referral is an option especially for patients with diabetes (see flow chart).
- Patients with an ABPI of less than 0.6 have severe arterial disease. Immediate referral should be considered. Retention bandages only should be applied.

REPEATING THE DOPPLER ASSESSMENT

If compression is used it is recommended that the Doppler reading is repeated at three monthly intervals or sooner if clinical condition deteriorates. (Simon et al 94)

Appendix 7 Summary of Methods of Disseminating or Implementing Clinical Practice Guidelines

(Adapted with permission from Palmer C and Fenner J (1999) *Getting the message across*. London: Gaskell

Methods used to disseminate and / or implement clinical practice guidelines	Comments	Reference number (see end of Appendix 7 for reference details)
Audit and feedback	Often proved effective, both on clinical performance and, to some extent, on clinical outcomes Results not consistent over all studies Probably most effective when it is specific to individual patients, when presented directly after the activity, when feedback is individualised and continual	1 2 3
Education: group	Some effect achieved But effects are variable and improve when there is an opportunity for discussion between peers and/or respected colleagues Self-instruction materials and identifying individual gaps in performance also enhance effectiveness	1 2 3 4
Education: individual instruction	More effective than other educational interventions Effectiveness probably increases when visits by respected colleagues are included Research finds only modest effects on performance and benefits to patient outcome not yet established	1 2 4
Conferences	No research evidence currently available Likely to be most effective where opportunities for group discussion are provided	
Continuous quality improvement methods	No research evidence currently available methods likely to be useful	5 6
Financial incentives	Some financial incentives appear to influence practice, but not all Seems to be a trend of initial success which reverts to the original level over time	3 7 8

Methods used to disseminate and / or implement clinical practice guidelines	Comments	Reference number (see end of Appendix 7 for reference details)
	Evidence is insufficient to draw conclusions	8
Internet and on-line databases	No research evidence currently available	
Marketing and the use of opinion leaders	Marketing techniques, adopted from industry, are found to be effective (although very few studies undertaken to date) Sociological studies find local opinion leaders and product champions to be crucial	3 7 9
Patient-mediated interventions / pressure groups	Some studies find that the performance of clinicians is influenced by patient-mediated interventions but the research is currently inconclusive Local pressure groups, such as Community Health Councils, may be powerful 'change agents'	4 7 10 11 12
Policy / regulation	May be one of the most powerful methods of influencing behaviour but long term results are not yet conclusive Ways around regulations are inevitably found even though it may appear that they are being followed Regulation often results in low levels of commitment to change and surveillance is required	4 13
Reminder systems: computerised	Computerised medical records have supported the implementation of guidelines in some studies Computer-aided audit and expert computer systems are found to be valuable in some studies (although the numbers are too small to be conclusive)	2 3 4
Reminder systems: manual	Found to be effective in many, but not all, studies	1 3
Written materials	Several studies find that written materials have had little or no direct effect on practice May have an effect on 'awareness raising'	1 4 14

Methods used to disseminate and / or implement clinical practice guidelines	Comments	Reference number (see end of Appendix 7 for reference details)
Combined strategies e.g. education + audit feedback; audit feedback + reminders; education + reminders	Combined strategies are more effective than any one strategy alone	15 16 1

References:

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Appendix 8 Dissemination/Implementation Strategies: Summary

(Reproduced with permission from Palmer C and Fenner J (1999) *Getting the message across*. London: Gaskell

Method	Target audience	Social influence	Educational influence	Practical considerations	Local resources required	Evidence of effectiveness
Educational approaches – conferences & lectures	Medium/large & usually diverse group	Low	Medium/high	Low	Low/medium	Variable effect – improved with small group discussions.
Educational approaches – individual	Small & local	High	High	High	High	More effective than other educational interventions.
Continuous Quality Improvement	Small & local	High	Medium/high	High	Medium/high	
Financial incentives	Large & diverse or local	Low	Low	Low	Low/medium/high	Some appear to influence practice – however, trend is to revert over time
Internet	Large & diverse	Low	Potentially high	Low (although potential to increase)	Low/medium	
Opinion leaders	Usually small	High	Low/medium/high	Medium	Low/medium	Found to be effective (although few studies)
Mass media	Large & diverse	Low	Low/Medium	Low	Low	
Patient-mediated interventions/patient education	Small & local	Low	Medium/high	Medium	Low	Few studies in this area look promising.
Pressure groups	Large & diverse	Low/Medium	Medium	Low	Low	
Policy/regulation	Large & diverse or local	Low	Low	Low	Low/medium/high	May be powerful – little current research
Reminder systems	Small & local	Low	Medium	High	Low/medium/high	Found to be effective in many studies
Written materials	Large & diverse	Low	Medium/high	Low	Low	Not found to be directly effective on practice; may have role in raising awareness

Table Key

Audience

Small	<30
Medium	31-500
Large	>500
Local	from one geographical area or team
Diverse	a large number of different organisations

Social influence

High	the intervention offers much opportunity for social influence e.g. discussion and debate with peers and/or respected colleagues
Medium	offers some opportunity for social influence
Low	very limited opportunity for social influence

Educational influence

High	a large volume of new information is conveyed
Medium	some new information is conveyed conveyed
Low	no new information conveyed

Practical considerations

High	addresses practical issues of
Medium	implementation specific to local
Low	environment addresses practical issues, but not specific to individual's local environment does not address practical issues

Resources required

High	> one week whole time equivalent (WTE) or capital
Medium	outlay <£1,000
Low	1-5 days WTE or £100 - £1,000 capital outlay <1 day WTE or <£100 capital outlay

Table Assumptions:

Guidelines being disseminated/implemented are high quality and from a credible body.

The audience for the information is local clinical teams.

The judgements have been made by the College Research Unit and may not necessarily be correct.

Appendix 9
PACE Project

Implementation of evidence based leg ulcer management in West Berkshire

PACE (Promoting Action on Clinical Effectiveness) was a two year programme of change management and organisational development across 16 UK sites. The aim of the programme was to support local projects to demonstrate the effective implementation of evidence-based practice. Within West Berkshire, one of these projects was established to improve the effectiveness of leg ulcer care and in particular to reduce the duration, variation and cost of treating leg ulcers.

Organisation of the project

The project used a multidisciplinary team approach. A project advisory group was convened and a project nurse was appointed to raise the profile of the project and initiate the work. A communication strategy was devised which involved all interested parties. Existing communication channels were used which included local newsletters, committees and groups. Information bulletins about the progress of the project were also circulated.

The project plan included conducting:

- Clinical audit
- Developing an assessment tool and protocol through a consensus process
- Economic analysis
- Education at 3 levels (specialist level, practitioner level through workshops and general awareness raising)
- Patient involvement and education

At the outset the project group saw that to be successful they would need:

- A co-ordinated multidisciplinary approach (across acute and community sectors)
- Use of high compression bandaging
- The talents and expertise of a tissue viability group

Immediate problems

- Resistance to change
- Health service managers and GPs not investing in the Doppler equipment and bandaging system
- No standardised referral system to vascular surgeons
- Limited communication and co-operation between hospital/community/provider units and commissioning agencies

Results

The project ran for approximately two years. The clinical audit demonstrated that graduated compression was a clinically effective treatment for leg ulcers: 81% leg ulcers had healed by more than 50% . The economic analysis showed that assessment and graduated compression could halve the treatment costs of leg ulcer care. Gaining patients' views and providing patient education was also an intrinsic part of the project.

Lessons learnt

- Keep on communicating. In this project they used existing channels e.g. newsletters.
- There is a need for evidence-based management – budget holders were refusing to sanction the purchase of supplies
- Lock into organisational priorities and develop co-operative working practice with all health care staff involved in the care of leg ulcer patients through networking
- Ensure that meetings are aimed at most likely times that health care providers can be available
- Education needs to use experiential learning with ongoing input from a respected colleague. There is also a need for local champions of evidence-based leg ulcer care.
- Keep reinforcing the change (for example through setting up a specialist nurse network, and making a video of leg ulcer management available).

Full reference: Dunn, C., Beegan, A., Morris, S., and Powell, T. (1998) *The Kings Fund PACE Project in West Berkshire: Improving the care of patients with leg ulcers*, Royal Berkshire and Battle Hospitals NHS Trust in conjunction with West Berkshire Priority Care Services.

APPENDIX 10

Aim	Method	Activities	By who	When	Practical needs	Aim achieved?	Who is responsible for evaluation?	When?

Variance from action plan:

If you were unable to follow the action plan, why? What will you do to get back on track? Do you need support (e.g. – from your service manager) to achieve your aims?

Action Plan of Strategies for Implementing a Clinical Practice Guideline:

Worked Example – Debra Martin, Leg Ulcer Audit Nurse, South Lincolnshire Healthcare NHS

AIM	METHOD	ACTIVITIES	WHO	WHEN	PRACTICAL NEEDS	AIM ACHIEVED	WHO WILL EVALUATE	WHEN
To ensure present leg ulcer pathways of care comply with present guidelines		Recommend Changes Information District Nurse teams	Leg ulcer Audit Nurse, Link Group Policy group Link Nurses	At monthly meeting At District Nurse team meetings		All district nursing teams will be using pathways of care appropriately	Leg Ulcer Audit Nurse, Tissue Viability Nurse	Six monthly audit of Pathways of care

AIM	METHOD	ACTIVITIES	WHO	WHEN	PRACTICAL NEEDS	AIM ACHIEVED	WHO WILL EVALUATE	WHEN
ABPI is undertaken at first assessment visit and repeated	Leg Ulcer Clinics	Education and information of clinical guidelines to District Nurses ENB N18 to all staff Clinics in each PCG area will assist with doppler assessment	Training Department, Tissue Viability Department Leg Ulcer Audit Nurse	Over next two years	Available dopplers Training venues Appointment times long enough for doppler assessment	An improvement of 60% of dopplers undertaken at first assessment	Leg Ulcer Audit Nurse, Tissue Viability Nurse	Evaluation in two years Pathways of care audit within six months of clinics being commenced

AIM	METHOD	ACTIVITIES	WHO	WHEN	PRACTICAL NEEDS	AIM ACHIEVED	WHO WILL EVALUATE	WHEN
To measure the size of the ulcer at first assessment and repeat 4 weekly	Inform District Nursing teams	Find out cost and supplier of wound mapping equipment. Inform nurse managers of their responsibility to supply equipment Inform District Nursing teams	Leg Ulcer Audit Nurse Leg Ulcer Audit Nurse Link Nurse	July 1999 August 1999 September 1999	Names of suppliers Budget	When audit of the pathways of care highlights and improvement of 70%	Leg Ulcer Audit Nurse	March 2000

AIM	METHOD	ACTIVITIES	WHO	WHEN	PRACTICAL NEEDS	AIM ACHIEVED	WHO WILL EVALUATE	WHEN
To improve the percentage of healing ulcers within 12 weeks	Leg Ulcer Clinics Leg ulcer pathways	Advertise clinics Community teams to refer all patients whose ulcers are static or deteriorating at a 6 week assessment Inform District Nursing teams	Tissue Viability Secretary Leg Ulcer Audit Nurse, all community nurses Leg Ulcer Audit Nurse, Link Nurses	One month prior to clinic opening Following 6 week assessment One month prior to opening		The aim will be achieved if the rate of ulcers healed has improved from 50% to 70%	Clinic co-ordinators and Leg Ulcer Audit Nurse	One year after opening of each clinic

AIM	METHOD	ACTIVITIES	WHO	WHEN	PRACTICAL NEEDS	AIM ACHIEVED	WHO WILL EVALUATE	WHEN
Ensure community staff are appropriately training in leg ulcer care	ENB N18 work shops, study days	Recommend to Community Nurse Managers 3 nurses from each PCG are sponsored to undertake ENB N18. Hold 4 study days per year on leg ulcer management	Leg Ulcer Audit Nurse, Training Consortium, Community Nurse Managers	Inform managers 3 months prior to them proposing training bids. Book venues for training on a yearly basis. Send reminders to all staff one month prior to study days/ workshops	Venues budget for lunch Teaching tools, doppler, bandages	Three nurses from each PCG will hold ENB N18 certificate All team members will demonstrate accurate skills in doppler measurement and compression bandaging	Leg Ulcer Audit Nurse	In 2 years At each study day/workshop

Notes

Notes

Notes

improving practice:
improving care

implementation
GUIDE

Royal College of Nursing

Smith+Nephew

Working with the RCN to disseminate good practice

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