Leg Ulcer Best Practice Bundle

Version 1

Table of Contents

Executive Summary

The Leg Ulcer Best Practice Bundle provides detailed information for providers and commissioners to improve healing rates and reduce the recurrence of leg ulcers. It brings together five evidence-based elements of care (Figure 1), which significantly improve healing rates, reduce recurrence rates, reduce limb loss, improve patient experience, and reduce the use of NHS resources and costs.

The five elements of the Leg Ulcer Best Practice Bundle are:

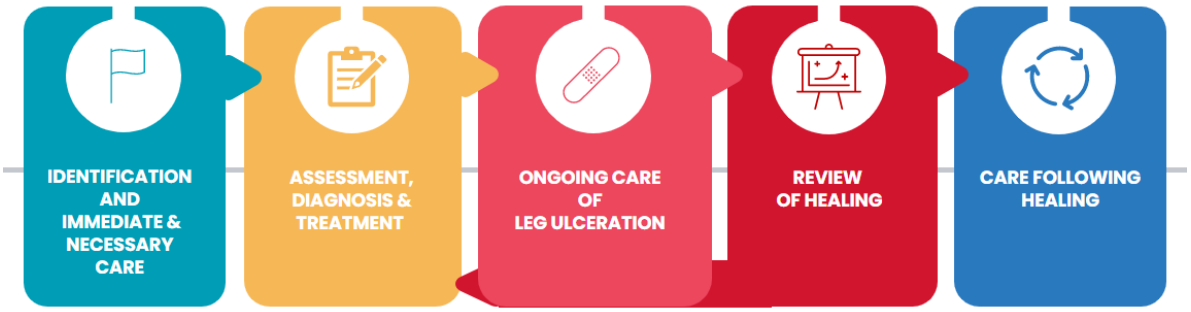


Figure 1: the five elements of the Leg Ulcer Best Practice Bundle.

Element 1: Identification and immediate and necessary care

People presenting with leg ulcers require screening for 'red flag' symptoms/conditions, the provision of immediate and necessary care and onward referral for a comprehensive assessment.

This element ensures people with leg ulcers are seen by appropriate clinical teams in a timely manner and reduce the known variation in access and care.

Local pathways will need to be established to ensure those with red flag symptoms/conditions receive timely and appropriate escalation to the relevant clinical specialist/specialty (e.g., GP, vascular, dermatology, etc.). Those without red flag symptoms/conditions require referral to dedicated leg ulcer service(s) for an assessment within 14 days.

This element also sets out the immediate and necessary care to be provided in parallel with necessary onward referrals, including the application of mild graduated compression in the absence of red flag symptoms/conditions.

Element 2: Assessment, diagnosis, and treatment

Complete a comprehensive assessment within 14 days of initial presentation, diagnose and identify the causes of non-healing and develop and initiate a treatment plan designed to address those causes.

This element focuses on establishing/improving dedicated leg ulcer services, staffed with clinicians with the appropriate knowledge, skills, equipment and time to deliver leg ulcer care.

It ensures that people with leg ulcers receive a documented comprehensive assessment, diagnosis and treatment plan within 14 days of initial presentation.

For those with suspected venous leg ulceration and an adequate arterial supply, strong compression therapy should be offered.

Personalised care is an important feature of this element: discussing the underlying cause(s) of leg ulceration, providing information, exploring treatment options/preferences and supported self-management, where it is appropriate.

Partnership working will be required to establish or enhance direct onward referral pathways from dedicated leg ulcer services to the relevant clinical specialities (e.g., vascular, dermatology, etc.) without the need to refer via a GP.

Element 3: Ongoing care of leg ulceration

At each dressing change, continue to screen for 'red flag' symptoms/conditions, consider the effectiveness of the treatment plan and escalate any concerns.

This element ensures ongoing care for individuals with leg ulcers in accordance with the agreed treatment plan. For those with venous leg ulcers, this will include the application of strong compression therapy.

There is focus on improving the knowledge and skills of the workforce providing ongoing care for people with leg ulcers.

This element also ensures that individuals with red flag symptoms/conditions or a deteriorating leg ulcer are escalated to the appropriate team in a timely manner.

Element 4: Review of healing

Periodically review healing by completing an ulcer assessment, reviewing the effectiveness of the treatment plan, and escalating any deterioration or delays in healing in accordance with local pathways.

This element ensures that people with leg ulcers are offered a review of ulcer progress at 4 weekly intervals by dedicated leg ulcer service(s).

For those with a leg ulcer that remains unhealed at 12 weeks, a comprehensive review will be required.

Element 5: Care following healing

Provide appropriate care, according to the underlying cause of ulceration, to reduce the risk of recurrence.

This element focuses on care following healing of leg ulcer(s) and reducing the risk of recurrence.

For those with continued venous hypertension, this will include offering ongoing compression therapy (hosiery).

Partnership working will be required to establish feedback mechanisms to ensure that people who have had the underlying cause of their wound investigated and resolved by specialist services can be discharged from the dedicated service (e.g., those who have undergone venous intervention, which has successfully resolved venous hypertension).

Foreword

Introduction

Unwarranted variation in leg ulcer care in England offers major opportunities to improve healing rates and thus reduce patient suffering, spend on inappropriate and ineffective treatments and the amount of clinical time spent on care.

A leg ulcer is defined as an ulcer that originates on or above the malleolus and below the knee that remains unhealed for more than 2 weeks. It is estimated that between 0.039 -0.48% of the population have a leg ulcer[1] placing significant burden on NHS services.

Most leg ulceration occurs due to venous insufficiency for which there is robust evidence to support the use of compression therapy[2] and endovenous surgery[3] as first-line therapies to promote healing and prevent recurrence. Other causes of leg ulceration include peripheral arterial disease with or without venous disorders[3].

Commissioning equitable and accessible services for leg ulceration would reduce unwarranted variation of care, increase the use of evidence-based care and discourage the over-use of therapies for which there is insufficient evidence, resulting in higher healing rates and lower recurrence rates[4].

Purpose

This best practice bundle has been developed by the National Wound Care Strategy Programme (NWCSP); an NHS England (NHSE) commissioned programme. It has been informed by evidence-based practice, learning from the NWCSP First Tranche Implementation Sites (FImpS) and Health Innovation Network's Transforming Wound Care Programme, and through consultation with the NWCSP stakeholder groups. The purpose of the Leg Ulcer Best Practice Bundle is to outline interventions that are fundamental to making a clinical difference for people with leg ulcers in terms of:

- Improving healing rates.
- Reducing reoccurrence rates.
- Reducing the burden of leg ulcer care.

It defines the key elements of care that promote rapid diagnosis and fast access to appropriate therapeutic interventions, with swift escalation of treatment or service provision for those requiring more complex care.

The best practice bundle offers a framework for the development of local delivery plans that includes consideration of:

- Relevant research evidence to inform care.
- Configuration of services and deployment of workforce.
- Workforce education.
- Measures to inform quality improvement.

It is intended to complement the wider NWCSP Leg Ulcer Recommendations[5] and support providers, as part of an Integrated Care System (ICS) at a Place-based level, to implement change that will have most impact. Elements of the bundle should not be implemented in isolation but considered as a series of important elements and interventions to improve leg ulcer care. Providers should implement best practice care whenever possible, including by following relevant NICE guidance and CQUIN frameworks, etc.

Governance and Oversight

The NHSE commissioned NWCSP Lower Limb Investment Case[4] outlines that by implementing the NWCSP Leg Ulcer Recommendations, which are the bedrock of the Leg Ulcer Best Practice Bundle, the following outcomes will be achieved:

- *Reduction in leg ulcer prevalence.*
- *Reduce inequalities in leg ulcer care*
- *Reduction in community nursing and primary care staff time, releasing time to care.*
- *Annual saving on the cost of leg ulcer care.*

Providers at a Place-based level, within each ICB, will be responsible for ensuring the Leg Ulcer Best Practice Bundle is fully implemented by March 2027.

Providers at a Place-based level will be tasked to ensure local oversight to:

1. Track and demonstrate implementation of the Leg Ulcer Best Practice Bundle for the Trust Boards and ICBs. Full implementation of the Leg Ulcer Best Practice Bundle means completing all interventions for all five elements. Compliance will therefore be expressed as a percentage of completed interventions for each element, and across all elements.
2. Holding 6 monthly quality improvement discussions with the ICB. These provider-commissioner discussions should include, at a minimum:
    - Details of element specific improvement work being undertaken including evidence of generating and using the process and outcome metrics for each element.
    - Progress against locally agreed improvement aims.
    - Evidence of sustained improvement where high levels of reliability have already been achieved.
    - Regular review of local themes and trends regarding potential issues in each of the five elements.
    - Sharing of examples and evidence of continuous learning by individual trusts with their local ICB and neighbouring Trusts.

Providers will be required to submit deadline-based submissions of data to the NHS England Model Health System Team for the purposes of assurance, trajectory monitoring and peer review with surrounding providers. NHS England will review Model Health System data on a 6 monthly basis to assess national progress in implementation.

Organisational Roles and Responsibilities

Successful implementation of NHSE Leg Ulcer Best Practice Bundle requires providers, PCNs and commissioners, to collaborate successfully.

The following organisational responsibilities will apply:

- **Providers** at a Place-based level are responsible for implementing the Leg Ulcer Best Practice Bundle, including:
    - Reviewing their services in collaboration with an appointed lead specialist in wound care (e.g., Lead Tissue Viability Nurse, Vascular Nurse Specialist, etc.).
    - Ensuring programme management and informatics/Electronic Patient Record (EPR) support is provided to support successful implementation of the Leg Ulcer Best Practice Bundle and operational changes needed.
    - Baselining current practice and current performance, developing an improvement trajectory, and reporting on implementation with their ICB on a 6 monthly basis.

- Submitting data nationally relating to key impact measures for each element to the Model Health System.
- Ensuring the dedicated leg ulcer service workforce should be trained, supported, clinically led and managed by specialist services (e.g., tissue viability for integrated, community and/or acute settings, or vascular services for acute settings). This is to ensure the provision of evidenced based care, appropriate oversight and a process of sustained quality improvement through having a robust governance structure at Place-based level.

- **ICBs** are responsible for agreeing a local improvement trajectory with providers, and overseeing, supporting, and challenging local delivery. Where there is unresolved clinical debate about a pathway, providers may wish to agree a variation to an element of the care bundle with their ICB.

Continuous improvement

There should be emphasis on learning and continuous improvement in leg ulcer care. Implementation of the bundle elements will require a comprehensive evaluation of each organisation's existing processes and pathways and, as such, an understanding of where improvements can be made.

Learning from the NWCSP FImpS has demonstrated that small cycles of improvement are most effective. For example, starting with addressing the needs of the ambulatory population via a small number of clinics, before expanding or attempting to tackle the wider population at once (i.e., Plan, Do, Study, Act cycles). The NHS England Quality, Service Improvement and Redesign (QSIR) tools[6] will assist providers in this process and providers are encouraged to use to local quality improvement team support, where available.

Providers at a Place-based level will be expected to look at their performance against the impact measures for any given element in relation to other providers or comparable peers with a view to understanding where improvement may be required. Suggested areas for improvement are provided within each element, but these are not meant to be exhaustive.

There is an expectation that as well as reporting on the organisation's performance within each element, there will be continuous learning and improvement work within each. This will include learning from excellence, compliments, complaints, incidents, patient feedback and staff feedback.

Important principles to be applied when implementing the Leg Ulcer Best Practice Bundle

The following principles apply when implementing the Leg Ulcer Best Practice Bundle:

Develop dedicated leg ulcer services - staffed by practitioners with the appropriate equipment, time, knowledge and skills.

Dedicated leg ulcer services are key to successful implementation of the Leg Ulcer Best Practice Bundle. The NWCSP national business case[7] demonstrates the potential impact of changing the model of care provision to allow more people to receive equitable care in dedicated lower limb services - a net present value of £14.6bn and a benefit cost ratio of 9.8 over 30 years. There is also expected to be £6.8bn of non-cash releasing savings (efficiencies) from an estimated 23% reduction in clinical time spent on lower limb ulcer care. This will increase staff capacity to undertake the preventative health care of the ageing population and support moving more care into the community over the coming years.

The assessment of people with leg ulcers, review of healing and care following healing (bundle elements 2, 4 and 5) should be undertaken not only by practitioners working within a dedicated service who are able to develop and maintain their skills, but with the necessary equipment and protected time to deliver quality care. Attempting to deliver these elements of care against other demands of a generalist service and a lack of access to the right equipment leads to unnecessary delays in assessments and treatment[8]. This in turn results in delayed ulcer healing and increased recurrence rates, adding to the burden of wound care for both care providers and people with leg wounds.

Figure 2: Recommendations on the time required to provide leg ulcer care.

Figure 2 shows the NWCSP recommendation on the appropriate time to provide leg ulcer care, based on learning from the NWCSP FImpS. It does not replace clinical judgement and decision making in relation to the needs of the individual.

There should be flexibility in how organisations organise the workforce and arrange 'skill mix' to deliver dedicated leg ulcer services. Care provided within these services may or may not be delivered directly by specialist practitioners (e.g., tissue viability nurse specialist, leg ulcer nurse specialist),

depending on local circumstance, existing services available, population need, and the element of the bundle being delivered. Areas may wish to consider rotation of generalist colleagues in the clinic setting from other areas of practice to enhance knowledge and skills or develop competency so that they can deliver ongoing leg ulcer care, as an example. However, the dedicated leg ulcer service workforce should be trained, supported, clinically led and managed by specialist services (e.g., tissue viability for integrated, community and/or acute settings, or vascular services for acute settings). This also offers an opportunity for succession planning for specialist services.

Clinical pathways for people with leg ulcers should be designed across all settings and include all relevant providers of care.

People with leg ulcers may present and need access to care from a range of providers across the health and care provider landscape. An ICSs approach is required to ensure that pathways cover all health and care settings as part of a person's journey. This should include local treatment pathways, pathways into dedicated services and those for onward referral to specialities such as vascular, dermatology and lymphoedema services.

All providers should engage in wider networks to understand current pathways and contribute to the development of revised ones. Elements of best practice should not be implemented locally in isolation and providers should consider what implications or opportunities implementing the bundle presents for ways of working.

Providers at a Place-based level will need to ensure that it can meet the needs of ambulatory patients, homebound patients, and inpatients. For the purposes of this document, “ambulatory” covers those individuals that can attend a clinic-based setting. “Homebound” refers to care provision in any setting which is the patients’ home, including residential settings, care homes, prison services, etc. The “in-patient” setting refers to any bedded setting such as acute hospitals, community hospitals and mental health settings, etc.

For efficiency, wherever possible, community provided leg ulcer care should be delivered in a clinic setting. This will need to include consideration of location, access and transport. Learning from the FImpS has shown that it is important to those with leg ulcers to be seen by a practitioner who is skilled in leg ulcer care, in a timely manner, with treatment started as soon as possible[9]. This meant being prepared to travel to a clinic setting, even if they would normally be considered “housebound”[10]. Involving and understanding the views and needs of the population will help inform the co-production and design of dedicated leg ulcer services.

Providers should understand the breadth of the multi-professional workforce involved in leg ulcer care and develop a workforce plan to ensure appropriate levels of knowledge and skill.

Providers of health care should be able to demonstrate that all practitioners who may come across or care for those with leg ulcers have a level of capability that is aligned with the level of responsibility for their job role and workplace setting for each element of the best practice bundle (Figure 3).

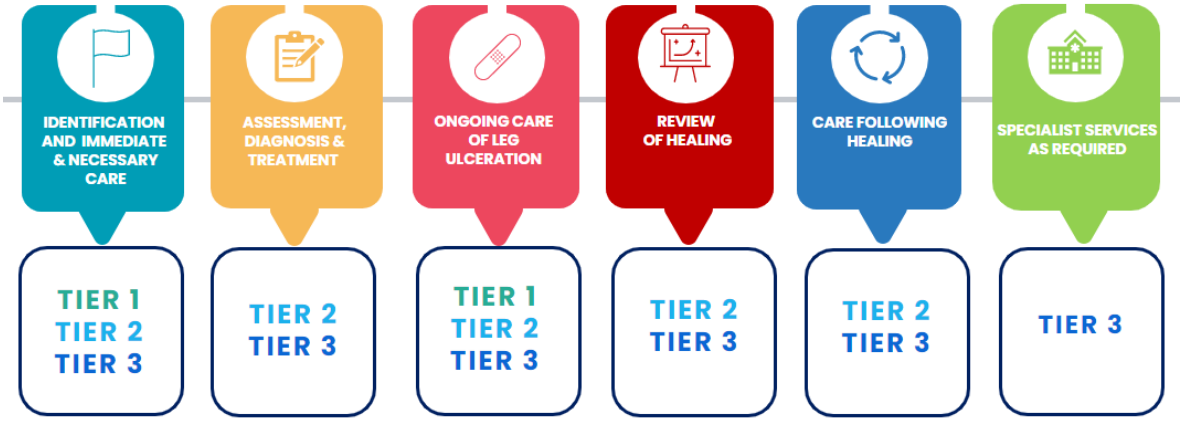


Figure 3: capabilities of the workforce for Leg Ulcer Best Practice Bundle elements and specialist services, mapped to the tiers of the National Wound Care Workforce Framework for England.

A review of the needs of the workforce, such as via a Training/Learning Needs Analysis, should be conducted in accordance with local procedures and in collaboration with an appointed lead specialist in wound care. This will usually be the Tissue Viability Service Lead, or equivalent person responsible for local wound care education programmes. Levels of capability should align with the tiers of the National Wound Care Workforce Framework for England[11] (figure 4) and be achieved through access to NHS provided high quality education and training. Ensuring the capability of practitioners working in dedicated leg ulcer services should be prioritised.

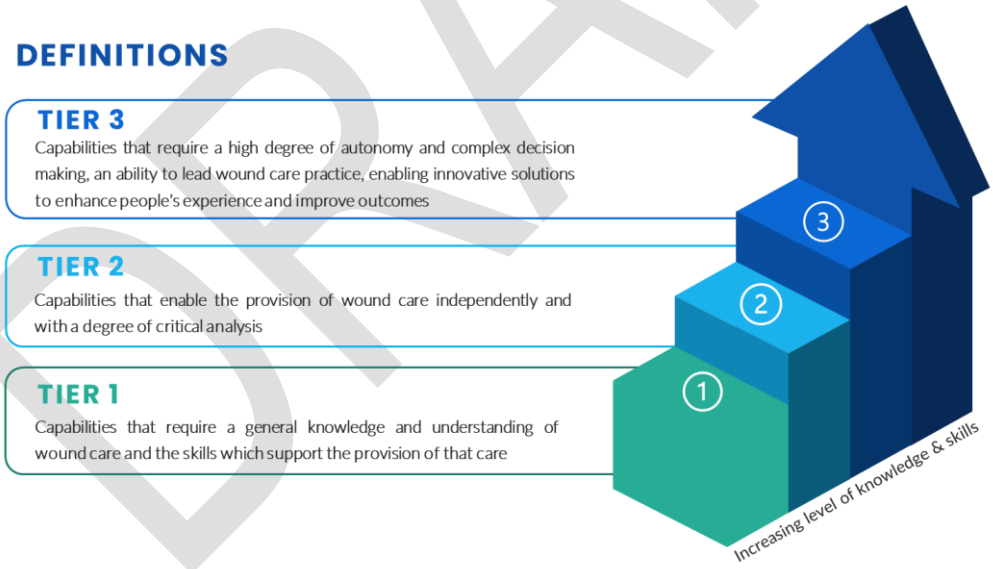


Figure 4: National Wound Care Core Capabilities Framework for England – definitions of tiers.

Implementing relevant NICE guidance.

ICS/ICBs are under an obligation in public law to have regard for NICE guidance and to provide clear reasons for any general policy that does not follow NICE guidance.

Providers and commissioners are encouraged to implement NICE guidance relating to varicose veins: diagnosis and management[12], peripheral arterial disease: diagnosis and management[13] and

automated ankle brachial pressure index measurement devices to detect peripheral arterial disease in people with leg ulcers[14].

Promoting equity and equality in service provision.

The NWCSP commissioned Health Impact Assessment[15] defines the potential health impact of redesigning leg ulcer services for patients, the workforce and wider system (both positive and negative). It includes recommendations on elements to consider.

Leg ulcers are more common in older people[16], women[17], those from lower socio-economic backgrounds[18], the homeless[19] and those with addictions and substance misuse problems[20]. Healing rates are lower and recurrence rates higher in more deprived areas[21]. This emphasises the need for a continued focus to address these inequalities when implementing the best practice bundle. Services should reflect the needs of different groups, with support increasing as health inequalities increase. This requires use of quantitative and qualitative data on the local population and their health needs, along with co-production, to inform pathways and processes during implementation.

Services also need to respond to each person's unique health and social situation – so that care is safe and personal for all. Continuous improvement activity related to each element of the care bundle will routinely require consideration of access, experience, and outcomes in relation to protected characteristics and other variables influencing inequalities, such as factors related to deprivation. Pathways and processes should be changed, or additional supportive activity carried out, to address any inequity or inequalities identified.

An Equality and Quality Impact Assessment (EQIA) should be completed when significant changes are made to services.

Supported self-management should be encouraged for those people willing and able to undertake some aspects of their leg ulcer care.

Supported self-management is part of the NHS Long Term Plan[22] commitment to make personalised care the norm. It refers to the ways that health and care services encourage, support and empower people to manage their ongoing physical and mental health conditions themselves[23].

The most common causes of leg ulceration, venous and arterial insufficiency, are often long-term chronic conditions that will require ongoing monitoring and care. Shared decision-making between the practitioner and individual, as part of personalised care planning and support, will ensure that people are empowered to undertake aspects of their leg ulcer care, where they are willing and able.

Incorporating a social approach into leg ulcer care.

Supported self-management models can be supported by a social approach for better health and wellbeing. For example, regular group sessions with peer volunteers and access to clinical staff to provide advice, guidance and care as required. These sessions also offer the opportunity to undertake wider health promotion and personalised care through using health and wellbeing coaches, social prescribing link workers and care co-ordinators[24].

Delivering best practice leg ulcer care and palliative care.

For many people with an illness that cannot be cured, best practice leg ulcer care will be an important part of a holistic approach to palliative care. However, for people in the last few weeks or days of life, all elements or interventions of the Leg Ulcer Best Practice Bundle may not be appropriate (e.g., onward referral to dedicated leg ulcer or vascular services). Healing may also not be the focus of care, whereby the priority is to maintain comfort and manage any distressing symptoms for the individual. Therefore, the best practice bundle needs to be applied using clinical judgement and based on the needs of the individual.

Optimising digital technology to support good clinical documentation which results in quality data collection.

The burden of data collection for those providing leg ulcer care should be kept to a minimum. It should be secondary to good quality clinical documentation which supports the continuity of care for patients with leg ulcers.

Providers across the ICS should work towards conformance with the DAPB4086 Wound Care Information Standard Notice[25], designed to assist recording consistent clinical information to support patient care and improve the quality of services. It defines the information needed to support the assessment, treatment and management of people with leg ulcers. This can be recorded by health and care professionals, or the person themselves, and should be made available to different providers to ensure the continuity of care. Providers are expected to be compliant with this standard by September 2025.

Quality clinical documentation is best achieved if it is captured at the point of care delivery, with reliance on retrospective data entry minimised. To support this, the implementation and/or improvement of digital systems should be considered (i.e. Electronic Patient Records [EPRs], Wound Management Digital Systems [WMDS]). These should support the flow of clinical care delivery (e.g., assessment, treatment, ongoing care, etc.) and the location in which the care is delivered (e.g., clinic setting, patient's place of residence). This will require joint working between clinicians and EPR managers/WMDS suppliers to configure templates/input screen that support local workflows. They should also provide functionality to support the DAPB4086 Wound Care Information Standard Notice, the capture and sharing of wound images[26] and the review/management of caseloads. The NWCSP Wound Management Digital Systems Functional Overview[27] sets out the key capabilities which should be used when procuring or configuring digital systems.

Providers will be required to ensure that digital systems are designed and configured in a way that meets the needs of flowing data to other systems (e.g. EPR to ICS Shared Care Record, EPR to national datasets). This will require the allocation of the appropriate resources so that clinicians, EPR system managers Business Intelligence colleagues and data flow colleagues can work collaboratively.

Practitioners will require support and training to understand changes relating to digital system and how they impact on workflow to adopt them in practice. This can be delivered in conjunction with practical clinical skills training.

Using data to improve data.

Historically, EPRs have not been configured to match wound care workflows, with templates that are time consuming to complete and not generally available at the point of care resulting in the need for retrospective data entry. In addition, data has not been collected in standardised and coded way. The combination of these issues is poor data completion and quality. As a result, the caseload and activity related to leg ulcers has been hidden even at Provider level. The optimisation of digital technology, as described above, will begin to address these issues by providing more consistent and complete which will nevertheless require internal processes of review and validation before they can be accepted as being truly meaningful.

It takes time to produce reliable, consistent, and meaningful data. This is where the concept of “use it to improve it” is useful. Clinicians should work with local Business Intelligence teams to develop analytical reports, ideally monthly basis to review EPR/WMDS reported activity to identify discrepancies and gaps versus clinical expectations. Potential contributors to poor data quality, that may be useful to consider, may include; ways of working, digital systems configuration, reporting system design and user adoption and uptake. Clinicians and Business Intelligence teams should work together investigate and resolve causes in an iterative manner. Over time, the quality and availability of leg ulcer data will increase. It will become more consistent, accurate, comprehensive and clinicians will feel confident that the data accurately represents services being provided.

With this increased quality and availability of leg ulcer data, Providers will be confident to share leg ulcer data at System, Regional and National level. This might include ICS Shared Care Records, Federated Data Platforms and Community Service Datasets and the Model Health System to identify opportunities for improvements. This will require the allocation of the appropriate resources so that clinicians, EPR system managers, Business Intelligence colleagues and data flow colleagues can work collaboratively. This will result in the development of a more complete picture of the prevalence, assessment, treatment and healing rates of patients with leg ulcers within the Model Health System[28].

Element 1: Identification and immediate and necessary care

Element description	
People presenting with leg wounds require screening for 'red flag' symptoms/conditions, the provision of immediate and necessary care and onward referral for a comprehensive assessment.	
Interventions	**Rationale**
1.1 All health care practitioners who may come across people with leg ulceration should receive training and education to achieve Tier 1 level knowledge and skills.	*To enable health and care practitioners to identify people presenting with leg ulcers and provide immediate and necessary care.*
1.2 All people presenting with suspected acute limb threatening ischaemia should be **immediately** referred to vascular services[29].	*To identify people requiring immediate attention from vascular services to reduce the risk of rapid deterioration or serious harm.*
1.3 All people presenting with suspected chronic limb threatening ischaemia (CTLI) should be referred the same day to vascular services[15].	*To identify people requiring immediate attention from vascular services to reduce the risk of rapid deterioration or serious harm.*
1.4 All people presenting with leg ulcer(s) should be offered a referral to a dedicated leg ulcer service at first presentation.	*Early assessment by clinicians with appropriate capabilities increases healing rates, promotes patients' quality of life and reduces NHS treatment costs.*

Implementation

Key success factors for the effective implementation of this element and its interventions include:

Adequate training of the workforce

'Immediate and necessary care' for leg ulcers can be delivered by health care practitioners with Tier 1 level capability or above. This is the minimum level of skill and knowledge required for practitioners with wound care responsibilities as part of their job role. Therefore, all relevant members of the healthcare workforce who may come across a person with a wound should be trained to complete the activities under this element. This includes being able to identify red flag symptoms/conditions, escalate in accordance with local pathways, offer a referral to a dedicated leg ulcer service and, where appropriate, apply mild graduated compression.

The NWCSP, in partnership with NHSE's Workforce, Training and Education Directorate (formerly Health Education England), has developed a suite of free-to-access online education resources which will help contribute to knowledge development for this element. Please see the Wound Care

Education for the Health and Care Workforce programme[30]. Incorporating these into local wound care education programmes should done in conjunction with an appointed lead specialist in wound care.

Organisations should also ensure that members of their workforce have the relevant practical skills to deliver this element. Practitioners undertaking these skills need sufficient opportunities to practice them to develop and maintain competence. The decision as to whether a provider organisation wishes to assess the competence of its clinical workforce should be made at local level using documentation that allows for local preferences.

Refer to the National Wound Care Workforce Framework for England[11].

Use of skill mix

A multidisciplinary approach should be utilised to share the workload. For example, immediate and necessary care can be delivered by a community nurse, practice nurse, ward-based nurse, or allied health professional with the appropriate training if it is relevant to their job role and workplace setting.

Commissioning and establishing clear clinical pathways:

Local pathways will need to be established to ensure timely and appropriate escalation of any of the NWCSP red flag symptoms/conditions to the relevant clinical specialist/specialty (e.g., GP, vascular, dermatology, etc.).

Vascular networks should have a written clinical pathway for the management of acute limb ischaemia, which should include bypass of local emergency departments by the ambulance service, to avoid treatment delays[14].

People with suspected CLTI should be referred the same day for assessment[14] in accordance with locally developed pathways, to reduce the delays in investigation and revascularisation as per the CQUIN08 - achievement of revascularisation standards for lower limb ischaemia[31]. The NWCSP Peripheral Arterial Disease / Chronic Limb-Threatening Ischaemia Assessment and Referral Form[32] has been developed to assist with appropriate and timely referrals to vascular services and enable vascular teams to triage effectively. This form can be adapted locally.

Dedicated leg ulcer services will need to be commissioned to ensure all people with leg ulcers are offered access to a comprehensive assessment within 14 days of initial presentation to a health care practitioner. Direct referral pathways into dedicated leg ulcer services should allow access from all potential referrers across the health and care system (Figure 5). Expanding direct access and self-referrals empowers patients to take control of their healthcare, streamlines access to services and reduces unnecessary burden on primary care and other community care services.

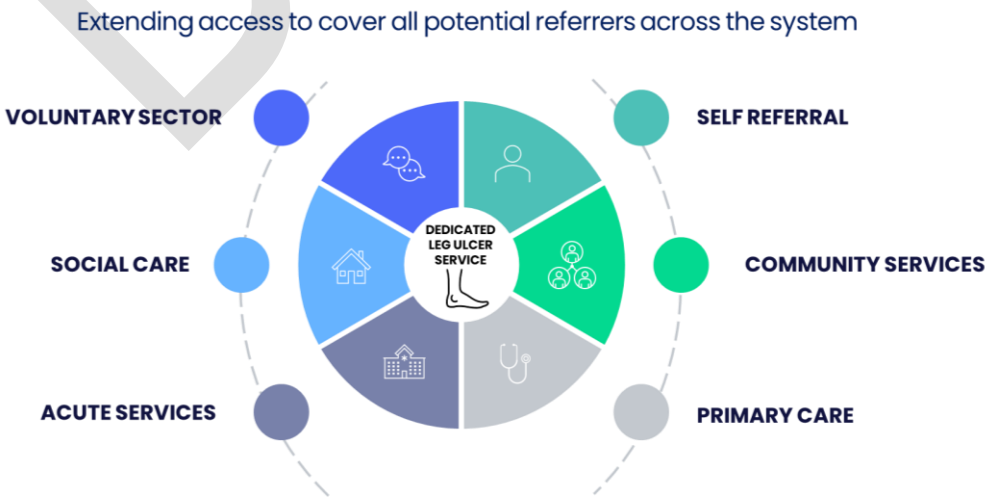


Figure 5: sources of referral to dedicated leg ulcer services.

Organising access to wound care products:

All health care practitioners providing immediate and necessary care should have access to appropriate wound care products to deliver care (e.g., a simple, low adherent dressing, mild graduated compression, etc.). This should be in accordance with local treatment pathways and formularies, with consideration for the appropriate routes of supply and distribution[33] across all relevant settings. Providers and commissioners will need to understand budget flows and associated budget management for routes of supply and distribution, aligning this across sectors in the pathway to support the most efficient product provision.

Optimising digital technology to support good clinical documentation which results in quality data collection:

Changes may be needed to EPR templates/WMDS configurations in primary care, secondary care, community services and mental health services that support a health care professional to record the initial presentation of a person with a leg ulcer. These templates should meet the requirements of the DAPB4086 Wound Care Information Standard Notice[25] and should include the outcome of the screening for red flag symptoms/conditions and, where applicable, the application of mild-graduated compression.

Digital systems should be configured to support referrals to the dedicated leg ulcer service and/or specialist services (including eRS) to avoid unnecessary delays.

Supporting Resources:

Supporting resources for this element can be found in Appendix 1.

Further information, resources and links are also available from the National Wound Care Strategy Programme website/NHSE website.

Impact Metrics

Process indicators	Outcome indicators
i. Numbers/percentage of staff completing NWCSP/HEE Tier 1 online resources. i. Demonstrate an agreed referral pathway to a dedicated leg ulcer service.	

Continuous Learning

1. Service providers must examine their metrics in relation to the interventions to identify trends and themes and ensure continued/maintained improvement. Themes identified should inform improvement plans.

2. Individual service providers must examine their metrics in relation to similar service providers to understand variation and inform potential improvements via the Model Health System.

3. Service providers are encouraged to focus improvement in the following areas:
   a) Regular review (a minimum of 6 monthly) of numbers of staff by type and area of work completing NWCSP Tier 1 online resources.
   b) Effective identification of the NWCSP red flag symptoms/conditions for escalation to the relevant clinical specialist/speciality.
   c) Working in partnership with vascular services to establish and regularly review timely referral pathways for suspected acute and chronic limb threatening ischaemia.
   d) Working with partners across the integrated care system to develop effective clinical pathway(s) for assessment by a dedicated leg ulcer service.
   e) Sharing and regularly promoting the pathway(s) into the dedicated leg ulcer service with all potential referrers across the system (health and care providers).

Element 2: Assessment, diagnosis and treatment

Element description	
Complete a comprehensive assessment within 14 days of initial presentation, diagnose and identify the causes of non-healing and develop and initiate a treatment plan designed to address those causes.	
Interventions	**Rationale**
2.1 All practitioners working in dedicated leg ulcer services should receive training and education to achieve a minimum of Tier 2 level knowledge and skills.	*To enable health and care practitioners working within dedicated leg ulcer services to assess, diagnose and treat people presenting with leg wounds.*
2.2 All people with leg ulcer(s) should receive a comprehensive assessment as defined by the NWCSP Leg Ulcer Recommendations, by a dedicated leg ulcer service, within 14 days of initial presentation to a health care practitioner[5].	*Early assessment by clinicians with appropriate capabilities increases healing rates, promotes patients' quality of life, and reduces NHS treatment costs.*
2.3 People presenting with suspected venous or arterial disease should be referred to vascular services for assessment and treatment[3,34,35] and provided with verbal and written information about the cause(s) of their wound[5].	*Appropriate care of the underlying causes of leg ulceration improves healing and recurrence rates, impacting positively on patients' quality of life and reducing NHS treatment costs.*
2.4 All people with suspected venous disease and adequate arterial supply should be offered strong compression therapy[2] and provided with verbal and written information about the benefits of compression[5] using the NWCSP resource or equivalent.	*Strong compression therapy is the evidence-informed therapeutic dose for promoting healing of venous leg ulcers.*
2.5 All people should be provided with the opportunity for supported self-management in line with the individual's capacity, capability and wishes.	*The NHS actively promotes supported self-management where appropriate.*
2.6 All people with leg ulceration should receive a documented treatment plan, which addresses any causes of non-healing and optimises the management of any contributing or suspected disease[5].	*Accurate data and information is essential to minimise unwarranted variation in care and to inform quality improvement of services.*

Implementation

Key success factors for effective implementation of this element and its interventions include:

Dedicated leg ulcer service(s):

It will need to be ensured that dedicated services are commissioned to meet the needs of ambulatory, homebound and inpatient populations. For example, providing care in clinic settings, in the patient's home* or on hospital wards.

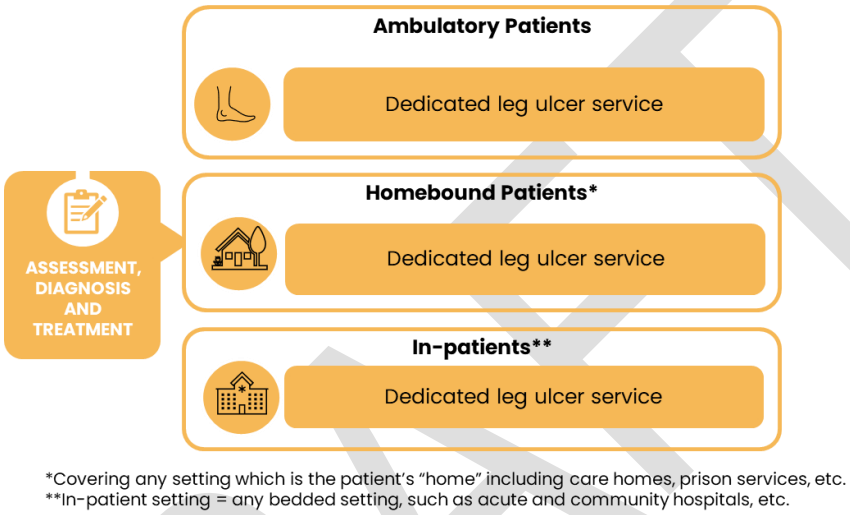


Figure 6: Leg ulcer assessment, diagnosis and treatment delivery models.

Dedicated services may be organised separately (e.g., acute based and community-based services), rather than one dedicated service responsible for covering all settings, unless the Trust is integrated, and one service would be sufficient for the population served.

Ensuring adequate time to care:

Health care practitioners working within dedicated leg ulcer services must have sufficient time and capacity to carry out the comprehensive assessment in accordance with the NWCSP Leg Ulcer Recommendations within 14 days. A timeframe of 90 minutes is recommended to enable this regardless of the setting. This recommendation does not replace clinical judgement and decision making in relation to the needs of the individual. For example, skill mix, number of practitioners present, and if the person requires assessment of one or both legs may impact the required assessment time.

Ensuring appropriate knowledge and skills:

Health care practitioners working in dedicated leg ulcer services require a minimum of Tier 2 level capability, knowledge, and skill. This is the minimum level of skill and knowledge that is required for practitioners assessing, diagnosing, and developing treatment plans for people with wounds as part of their job role.

The NWCSP, in partnership with NHSE's Workforce, Training and Education Directorate (formerly Health Education England), has developed a suite of free to access online education resources which

will be helpful in contributing to knowledge development for this element. Please see the Wound Care Education for the Health and Care Workforce programme[30].

Organisations should also ensure that members of their workforce have the relevant practical skills to deliver this element. This should include undertaking a leg ulcer assessment (including the use of handheld Doppler to measure ankle brachial pressure index) to accurately diagnose the underlying cause(s) of ulceration and devise an appropriate care plan. Practitioners undertaking these skills need sufficient opportunities to practice them to develop and maintain competence. The decision as to whether a provider organisation wishes to assess the competence of its clinical workforce should be made at local level using documentation that allows for local preferences.

Refer to the National Wound Care Workforce Framework for England[11].

Establishing clear clinical pathways:

Partnership working will be required between dedicated leg ulcer services and vascular services to ensure timely and appropriate referrals for the assessment of venous and peripheral arterial disease. The NWCSP Peripheral Arterial Disease / Chronic Limb-Threatening Ischaemia Assessment and Referral Form[32] and Venous Disease - Assessment and Referral Form[36] have been developed to assist with appropriate and timely referrals and enable vascular teams to triage effectively. The forms may be adapted locally.

Direct referral pathways should be established or enhanced from dedicated leg ulcer services to specialist services without the need to refer via a GP. Expanding direct access streamlines access to services and reduces unnecessary burden on Primary Care. The NHS e-Referral Service[37] (e-RS) should be considered. Those planning to use e-RS for the first time, or for existing users wanting to maximise the service can find information, guidance and case studies via the NHS Digital e-Referral resources[37].

Advice and guidance[38] via e-RS allows a clinician to seek advice from another, providing digital communication between two clinicians: the “requesting” clinician and the provider of a service, the “responding” clinician. Providers are encouraged to consider using advice and guidance as it supports the NHS long term plan to use digital technology to redesign clinical pathways and reduce unnecessary hospital referrals and has shown to be an effective way of aligning dedicated leg ulcer services and vascular services. More information can be accessed via Advice and guidance toolkit for the NHS e-Referral Service (e-RS)[38].

To manage vascular referrals, providers should also consider alternative approaches, such as community vascular nurse led diagnostic and treatment clinics, which offer an opportunity to reduce waiting times[39]. The Society of Vascular Nurses have developed a guide for establishing a nurse-delivered venous intervention service[39]. Vascular nurse specialists can independently deliver clinics based on their clinical competencies and experience[15]. Nurse-delivered services have been successfully implemented in the NHS across a range of specialties – providing reduced waiting times, improved continuity of care and significant cost-savings, whilst maintaining safe, high-quality services[21].

Organising access to wound care products:

All health care practitioners working within dedicated leg ulcer services care should have access to appropriate wound care products and equipment to deliver care within this element. This includes handheld manual doppler equipment for peripheral vascular assessment, dressing products and compression therapy in accordance with local pathways and formularies.

For community vascular nurse led diagnostic and treatment clinics additional equipment, such as portable diagnostic equipment will need to be considered.

Providers and commissioners will need to consider the appropriate routes of supply and distribution for the dedicated service(s) by understanding budget flows, aligning this across the sectors in the pathway to support the most efficient product provision.

Supported self-management:

Supported self-management should be encouraged for those people willing and able to undertake aspects of their ongoing leg ulcer care. This includes relatives and carers, where appropriate.

See the NWCSP Supported Self-Management Resources[40].

Optimising digital technology to support good clinical documentation which results in quality data collection:

Leg ulcer and wound management EPR templates and/or WMDS configurations will need to be reviewed so that they meet the DAPB4086 Wound Care Information Standard Notice[25]. They should support the comprehensive assessment of the patient and their wound(s), the plan for their treatment and any plan for supported self-management. EPRs and/or WMDSs will need to be configured to support the routine collection and coding of a clinical finding and/or diagnosis of a leg ulcer and a coded procedure for the comprehensive assessment.

Where e-RS and Advice and Guidance are implemented, digital systems will need to be configured to support the process between providers.

Supporting Resources:

Supporting resources for this element can be found in Appendix 2.

Further information, resources and links are also available from the National Wound Care Strategy Programme website/NHSE website.

Impact Metrics

Process indicators	Outcome indicators
i. Numbers/percentage of staff completing NWCSP/HEE Tier 2 online resources. ii. Proportion of patients with a leg wound receiving a full comprehensive assessment within 28 days of initial presentation.	i. Proportion of patients with a lower leg wound receiving initial full comprehensive assessment within 14 days of initial presentation. ii. Proportion of adult patients with a lower leg wound and an adequate arterial supply, where no aetiology other than venous insufficiency is suspected treated with strong compression. iii. Proportion of patients participating in supported self-management.

Continuous Learning

1. Dedicated leg ulcer service providers must examine their metrics in relation to the interventions to identify trends and themes and ensure continued/maintained improvement. Themes identified should inform improvement plans.

2. Dedicated leg ulcer service providers must examine their metrics in relation to similar service providers to understand variation and inform potential improvements using national benchmark data via the Model Health System.

3. Service providers are encouraged to focus improvement in the following areas:
    a) Regular review (a minimum of 6 monthly) of numbers of staff within dedicated leg ulcer service that have completed the NWCSP Tier 2 online resources.
    b) Increasing the provision of training and support to the dedicated leg ulcer service workforce to ensure capability in assessing, diagnosing, and treating leg wounds.
    c) Ensuring there is capacity within the dedicated leg ulcer service(s) to support population need for comprehensive assessment within 14 days.
    d) Developing or improving a transport offer, to enable more people to attend a clinic setting, where possible.
    e) Partnership working between dedicated leg ulcer services and vascular services to ensure timely and appropriate vascular assessments for both venous and peripheral arterial disease.
    f) Increasing uptake of supported self-management.
    g) Ensuring the treatment plan is documented and accessible by all those who will be providing ongoing care.
    h) Determining and addressing any barriers to engagement with dedicated or specialist services, or compliance with treatment interventions from both the provider/pathway and service-user perspective.

4. Providers will report on outcome indicators at their Board and at ICB level and share challenges which need to be resolved.

Element 3: Ongoing care of leg ulceration

Element description	
At each dressing change, continue to screen for 'red flag' symptoms/conditions, consider the effectiveness of the treatment plan and escalate any concerns.	
Interventions	**Rationale**
3.1 All health care practitioners providing ongoing care of leg ulceration should receive training and education to achieve a minimum of Tier 1 level knowledge and skills.	*To enable health and care practitioners to provide ongoing care to people with leg wounds.*
3.2 All people should receive ongoing care of their leg ulcer that is in accordance with the documented treatment plan from the dedicated leg ulcer service.	*To minimise unwarranted variation to the agreed treatment plan.*

Implementation

Key success factors for effective implementation of this element and its interventions include:

Organising the workforce and skill mix to deliver ongoing care of leg ulceration:

There should be flexibility in how organisations organise the workforce and arrange 'skill mix' to ensure ongoing leg ulcer care can be provided to meet the needs of ambulatory, homebound and inpatient populations. This may or may not be delivered by the dedicated leg ulcer service depending on local circumstance, existing services and capacity available, geographical area and population need. For example, the ongoing care may be delivered by community nursing teams, healthcare support workers, practice nurses, ward nurses, mental health teams, learning disability nurses and social care colleagues, etc., who implement the treatment plan set by the dedicated service.

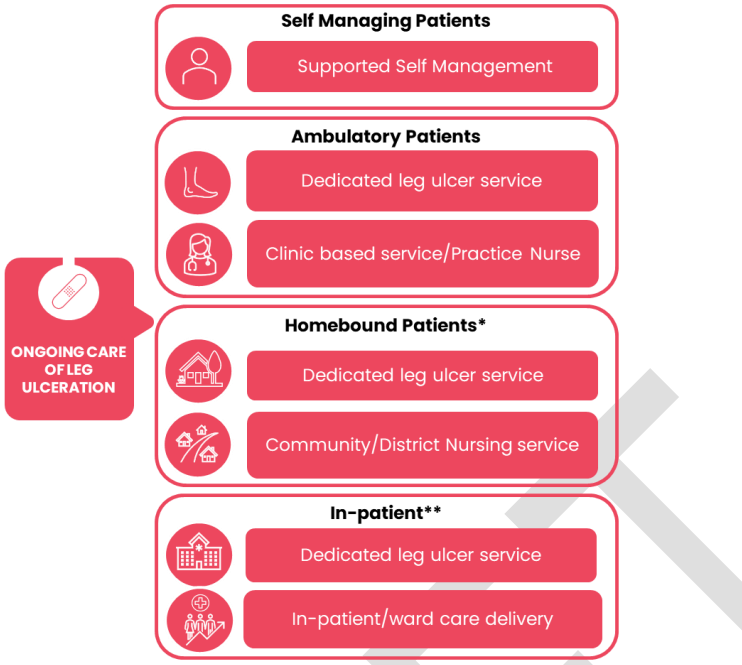


Figure 7: Ongoing care of leg ulceration delivery models.

Ensuring adequate time to care:

Health care practitioners must have sufficient time to carry out the activities required by this element. Therefore, a timeframe of 20-30 minutes per leg is recommended to enable this, regardless of the setting. This recommendation does not replace clinical judgement and decision making in relation to the needs of the individual. For example, skill mix, number of practitioners present, and if the person requires assessment of one or both legs may impact the required assessment time.

Adequate training of the workforce:

The ongoing care for leg ulceration can be completed by health care practitioners with Tier 1 level capability or above. This is the minimum level of skill and knowledge that is required for practitioners with wound care responsibilities as part of their job role. Therefore, where appropriate, all relevant members of the health care workforce should be trained to complete ongoing care of leg ulceration. This includes being able to provide wound/leg ulcer care, apply strong compression therapy (where appropriate) and recognise any signs of deterioration for escalation in accordance with local pathways.

The NWCSP, in partnership with NHSE's Workforce, Training and Education Directorate (formerly Health Education England), has developed a suite of free to access online education resources which will be helpful in contributing to knowledge development for this element. Please see the Wound Care Education for the Health and Care Workforce programme[30].

Organisations should ensure that members of their workforce have the relevant practical skills to deliver this element. People undertaking these skills need sufficient opportunities to practice them to develop and maintain competence. The decision as to whether a provider organisation wishes to assess the competence of its clinical workforce should be made at local level and use documentation to allow for local preferences. Refer to the National Wound Care Workforce Framework for England[11].

Effective delegation of healthcare activities to care workers, where appropriate, can mean more timely and flexible delivery of care, resulting in better continuity and person-centred care[41]. It can bring wider

benefits to the person with a wound, including greater choice and control and quality of life, providing more flexibility to suit their needs and lifestyle[28]. Providers will need to ensure processes are in place for the effective delegation of healthcare activities to complement standards for delegation set by regulatory bodies of health care practitioners.

Establishing clear clinical pathways:

Local pathways will need to be established or enhanced to ensure timely and appropriate escalation of any red flag symptoms/conditions to the relevant clinical specialist/specialty (e.g. GP, Vascular, Dermatology, etc.). Similarly, effective pathways will need to be established to ensure all people with deteriorating leg ulcers and without red flag symptoms/conditions are escalated for a reassessment by the dedicated leg ulcer service.

Organising access to wound care products:

All health care practitioners providing ongoing leg ulcer care should have access to appropriate wound care products to deliver care (e.g., a simple, low adherent dressing, strong compression, etc.). This should be in accordance with local pathways and formularies, with consideration for the appropriate routes of supply and distribution[15] across all relevant settings.

Providers and commissioners will need to consider the appropriate routes of supply and distribution for services providing ongoing care of leg ulceration by understanding budget flows, aligning this across the sectors in the pathway to support the most efficient product provision.

Optimising digital technology to support good clinical documentation which results in quality data collection:

To support the continuity of care for patients, EPRs and/or WMDSs should be configured to support practitioners to view the treatment plan set by the dedicated leg ulcer service and any contingency plans with routes of escalation so that they meet the DAPB4086 Wound Care Information Standard Notice[25]. The EPRs and/or WMDSs should support practitioners to document ongoing care provision at each visit, including dressings, and ongoing and/or repeat application of compression. Digital systems should be configured to allow any deviation from the treatment plan to be recorded with a rationale.

Supporting Resources:

Supporting resources for this element can be found in Appendix 3.

Further information, resources and links are also available from the National Wound Care Strategy Programme website/NHSE website.

Impact Metrics

Process indicators	Outcome indicators
i. Number of patients with venous leg ulcers in strong compression therapy at 2 and 4 weeks post initial assessment.	i. Proportion of patients with venous leg ulcers in strong compression.

Continuous Learning

1. Service providers are encouraged to focus improvement in the following areas:

a) Increasing the provision and training to the wider workforce involved in the provision of ongoing leg ulcer care, including the application of strong compression.
b) Determining and addressing any barriers to engagement or compliance with treatment interventions set by the dedicated leg ulcer service, from both the provider/pathway and service-user perspective.

Element 4: Review of healing

Element description	
Periodically review healing by completing an ulcer assessment, reviewing the effectiveness of the treatment plan and escalating any deterioration or delays in healing in accordance with local pathways.	
Interventions	
4.1 All people with leg ulcer(s) will receive a 4-weekly ulcer progress[5] review by a dedicated leg ulcer service.	*To identify unwarranted variation and lack of progress early to enable appropriate intervention.*
4.2 All people with leg ulcers that are not reducing in size, are deteriorating or remain unhealed at 12 weeks will have a comprehensive assessment completed[5] by the dedicated lower limb service and onwards referral to specialist services as required.	*To identify any changes in the underlying causes of leg ulceration or additional causes of non-healing.*

Implementation

Key success factors for effective implementation of this element and its interventions include:

Review of healing by dedicated leg ulcer service(s):

The review of healing for leg ulcers should be undertaken by dedicated leg ulcer services. Attempting to deliver this care against other demands of a generalist service often leads to delayed reviews or a failure to recognise deterioration.

There should be flexibility in how the review of healing takes place. The dedicated service may wish to review ulcer healing at 4 weeks via a face-to-face consultation, by reviewing the ulcer assessment undertaken by appropriate practitioners in the clinical records, via information and photography submitted by the patient to the service, or via virtual consultation.

The comprehensive review, which includes an assessment of arterial supply, will require a face-to-face consultation.

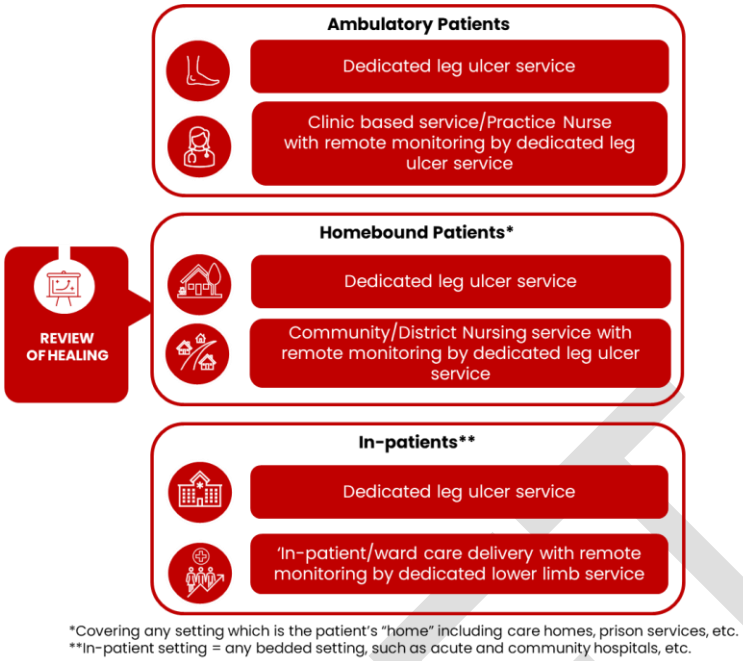


Figure 8: Review of healing delivery models.

Ensuring adequate time to care:

Health care practitioners working within dedicated leg ulcer services must have the time to carry out the activities required by this element. Therefore, a timeframe of 30-60 minutes is recommended to enable this, regardless of the setting. A time frame of 30 minutes may be adequate for a face-to-face ulcer progress review at 4 weeks, depending on if it is conducted face-to-face or virtually, as an example. 60 minutes will be more appropriate for a comprehensive assessment at 12 weeks if the ulcer remains unhealed. This recommendation does not replace clinical judgement and decision making in relation to the needs of the individual.

Ensuring appropriate knowledge and skills:

Health and care practitioners working in dedicated leg ulcer services require a minimum of Tier 2 level capability, knowledge and skill. This is the minimum level of skill and knowledge that is required for practitioners re-assessing/reviewing and amending treatment plans for people with wounds as part of their job role. Refer to the National Wound Care Workforce Framework for England[11] and the Wound Care Education for the Health and Care Workforce programme[30].

Establishing clear clinical pathways:

Local pathways will need to be established or enhanced to ensure timely and appropriate escalation of any of the NWCSP red flag symptoms/conditions to the relevant clinical specialist/specialty (e.g., GP, vascular, dermatology, etc.). Direct referral pathways should be established from dedicated leg ulcer services to specialist services without the need to refer via a GP.

Organising access to wound care products:

All health care practitioners working within dedicated leg ulcer services care should have access to appropriate wound care products and equipment to deliver care within this element. This includes handheld manual doppler equipment for ABPI and/or toe pressures, dressing products and compression therapy in accordance with local pathways and formularies. Commissioners and

providers will need to consider the appropriate routes of supply and distribution for the dedicated service(s) by understanding budget flows, aligning this across the sectors in the pathway to support the most efficient product provision.

Optimising digital technology to support good clinical documentation which results in quality data collection:

Leg ulcer and wound management EPR templates and/or WMDS configurations will need to be reviewed so that they meet the DAPB4086 Wound Care Information Standard Notice[25]. They should support the 4-weekly review of ulcer healing and the 12 weekly comprehensive assessment for those that remain unhealed. EPRs and/or WMDSs will need to be configured to support the routine collection and coding of the outcome of the review (healing status) and a coded procedure for the comprehensive re-assessment.

Supporting Resources:

Supporting resources for this element can be found in Appendix 4.

Further information, resources and links are also available from the National Wound Care Strategy Programme website/NHSE website.

Impact Metrics

Process indicators	Outcome indicators
i. Proportion of patients that received a 4 weekly ulcer review by the dedicated leg ulcer service. ii. Proportion of patients that received a 12 weekly review comprehensive assessment by the dedicated leg ulcer service.	i. Proportion of patients with venous leg ulcers that have healed by 12 weeks. ii. Proportion of patients with venous leg ulcers that have healed by 24 weeks. iii. Proportion of patients with venous leg ulcers that have healed by 52 weeks.

Continuous Learning

1. Providers must examine their metrics in relation to the interventions to identify trends and themes and ensure continued/maintained improvement. Themes identified should inform improvement plans.

2. Service providers must examine their outcomes in relation to similar service providers to understand variation and inform potential improvements using national benchmark data via the Model Health System.

3. Service providers are encouraged to focus improvement in the following areas:

    a) Ensuring there is capacity within the dedicated leg ulcer service(s) to support population need for a review of leg ulcer progress every 4 weeks.

b) Ensuring there is capacity within the dedicated leg ulcer service(s) to support population need for a comprehensive review of people with unhealed leg wounds at 12 weeks.
c) Increasing timely escalation of any concerns to the dedicated leg ulcer service, or other appropriate specialty, for review.

4. Providers will report on outcome indicators at their Board and at ICB level and share challenges which need to be resolved.

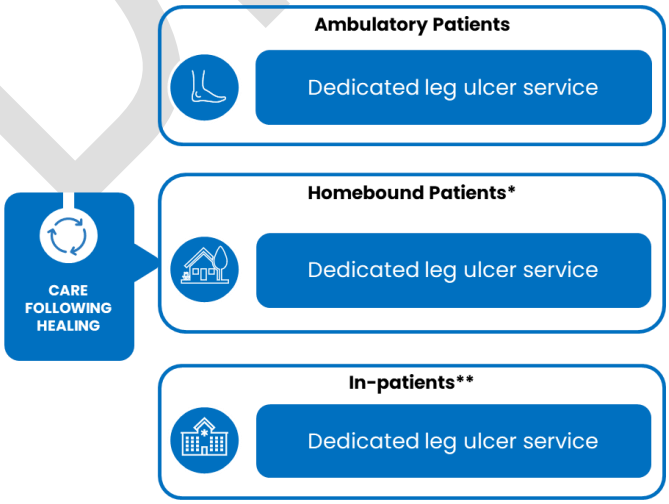
Element 5: Care following healing

Element description	
Provide appropriate care, according to the underlying cause of ulceration, to reduce the risk of recurrence.	
Interventions	**Rationale**
5.1 All people with ongoing venous hypertension will be offered a 6 monthly review by a dedicated leg ulcer service with reprovision of maintenance compression therapy[42].	*To reduce the risk of recurrence.*
5.2 All patients who have undergone venous intervention (e.g., endovenous ablation), which has successfully resolved venous hypertension, should be discharged with advice to seek medical advice should symptomatic varicose veins or the ulcer recur.	*To optimise use of clinical resources.*

Implementation

Key success factors for effective implementation of this element and its interventions include:

Care following healing by dedicated leg ulcer service(s):



*Covering any setting which is the patient's "home" including care homes, prison services, etc.
**In-patient setting = any bedded setting, such as acute and community hospitals, etc.

Figure 9: Care following healing delivery models.

Care following healing for people with venous leg ulcers should be undertaken by dedicated leg ulcer services. Attempting to deliver this care against other demands of a generalist service often leads to delayed reassessments, poor fitting hosiery and subsequently wound reoccurrence.

Endovenous ablation can eliminate the need for long-term compression in patients with purely superficial venous hypertension (i.e., structural venous disease), however, if there is some remaining functional venous disease (e.g., failure of calf muscle pump), compression may need to continue[43].

If, in the view of the vascular service, venous intervention (e.g., endovenous ablation) has successfully resolved venous hypertension, compression therapy may no longer required. Such individuals can therefore be discharged, but the patient should be advised to contact the dedicated leg ulcer service should symptoms or the ulcer recur.

Establishing clear clinical pathways and processes:

Vascular services should establish feedback mechanisms to dedicated leg ulcer services to ensure that all people who have had the underlying cause of their wound resolved can be discharged from the service.

For individuals with continued venous disease, processes should be put in place to ensure a 6 monthly review by a dedicated leg ulcer service is offered for replacement of compression garments and ongoing advice about prevention of recurrence. The use of recall systems/wait lists should be considered.

Patients should be advised to report any changes in lower limb symptoms, skin problems, or issues with compression therapy garments (e.g., hosiery) to the dedicated leg ulcer service for an appointment for a comprehensive assessment (i.e. patient-initiated follow-up [PIFU][44]).

Ensuring adequate time to care:

Health care practitioners working within dedicated leg ulcer services must have the time to carry out the activities required by this element. Therefore, a timeframe of 60 minutes is recommended to enable this regardless of the setting. This recommendation does not replace clinical judgement and decision making in relation to the needs of the individual. For example, skill mix, number of practitioners present, and if the person requires assessment of one or both legs may impact the required assessment time.

Ensuring appropriate knowledge and skills:

Health and care practitioners working in dedicated leg ulcer services require a minimum of Tier 2 level capability, knowledge and skill. This is the minimum level of skill and knowledge that is required for practitioners re-assessing/reviewing people with ongoing venous hypertension as part of their job role. Refer to the National Wound Care Workforce Framework for England[11] and the Wound Care Education for the Health and Care Workforce programme[30].

Organising access to wound care products:

All staff providing care following healing should have access to appropriate products and equipment to deliver care within this element. This includes handheld doppler equipment for peripheral vascular assessment and compression therapy products in accordance with local pathways and formularies. Commissioners and providers will need to consider the appropriate routes of supply and distribution across all settings.

Optimising digital technology to support good clinical documentation which results in quality data collection:

Leg ulcer and wound management EPR templates and/or WMDS configurations will need to be reviewed so that they meet the DAPB4086 Wound Care Information Standard Notice[25]. They should support recording of the 6-month review, the ongoing plan for treatment and any plan for supported self-management. EPR's and Shared Care Records will need to be configured to allow the recording and sharing of the date and outcome of endovenous ablation where appropriate and the potential to discharge from the dedicated leg ulcer service.

Supporting Resources:

Supporting resources for this element can be found in Appendix 5.

Further information, resources and links are also available from the National Wound Care Strategy Programme website/NHSE website.

Impact Metrics

Process indicators	Outcome indicators
ii. Proportion of patients with a healed venous leg ulcer and ongoing venous hypertension that received a 6-monthly review with the dedicated leg ulcer service.	i. Proportion of patients with a healed venous leg ulcer experiencing a recurrence within 52 weeks. ii. Proportion of patients with successful venous intervention (e.g., endovenous ablation) discharged from the dedicated leg ulcer service.

Continuous Learning

1. Providers must examine their metrics in relation to the interventions to identify trends and themes and ensure continued/maintained improvement. Themes identified should inform improvement plans.

2. Service providers must examine their outcomes in relation to similar service providers to understand variation and inform potential improvements using national benchmark data via the Model Health System.

3. Service providers are encouraged to focus improvement in the following areas:
   a) Ensuring there is capacity within the dedicated leg ulcer service(s) to support population need for a 6 monthly review following leg ulcer healing.
   b) Partnership working between dedicated leg ulcer services and vascular services to ensure a feedback mechanism is in place and inform future care required.
   c) Discharging/removing from the active caseload those individuals which no longer have a clinical need for ongoing compression therapy, with information on how to seek support if problems reoccur.

d) Determining and addressing any barriers to engagement or compliance with ongoing compression hosiery from both the provider/pathway and service-user perspective.

4. Providers will report on outcome indicators at their Board and at ICB level and share challenges which need to be resolved.

Appendices

Appendix 1

Supporting resources for Element 1:

- National Wound Care Workforce Framework for England
- Wound Care Education for the Health and Care Workforce programme.
- DAPB4086 Wound Care Information Standard Notice.

Appendix 2

Supporting resources for Element 2:

- National Wound Care Workforce Framework for England.
- Wound Care Education for the Health and Care Workforce programme.
- NWCSP Leg Ulcer Service Business Case Example Template.
- DAPB4086 Wound Care Information Standard Notice.
- NWCSP Peripheral Arterial Disease / Chronic Limb-Threatening Ischaemia Assessment and Referral Form.
- NWCSP Venous Disease - Assessment and Referral Form.
- NWCSP Patient Information Resources. https://www.nationalwoundcarestrategy.net/wound-care-patient-resources/

  NWCSP patient information/leaflets relevant to this element include:

  - Why compression is important for the treatment and prevention of venous leg ulcers (available in 13 languages)
  - Taking a photograph of your wound (available in 13 languages)
  - Why am I being referred to Vascular when I have a venous leg ulcer?
  - Why am I being referred to Vascular when I have an arterial leg ulcer?
  - Supported Self-Management – what does this mean? – Leg Ulcers
  - Signs and symptoms of infection
- NWCSP Supported Self-Management Resources
- NWCSP Case Studies. Topics include:
  - Establishing 'First Assessment Clinics' to improve lower limb wound care.

- Creating Leg Ulcer Nurse Specialist roles from unfilled community nursing vacancies to improve Leg Ulcer Service provision within Wye Valley.
- Conducting a patient survey to inform the co-design of a leg ulcer service.
- Improving wound care knowledge and skills in the workforce: mandating online wound care education.
- Designing an approach for supported self-management in wound care.
- Piloting nurse-led vascular diagnostic clinics in the community.
- Engaging and enabling staff to increase uptake of a Wound Management Digital System.

Appendix 3

Supporting resources for Element 3:

- National Wound Care Workforce Framework for England.
- Wound Care Education for the Health and Care Workforce programme.
- DAPB4086 Wound Care Information Standard Notice.
- Department of Health and Social Care and Skills for Health. 2023. Delegated healthcare activities: Guiding principles for health and social care in England.

Appendix 4

Supporting resources for Element 4:

- National Wound Care Workforce Framework for England.
- Wound Care Education for the Health and Care Workforce programme.
- DAPB4086 Wound Care Information Standard Notice.
- NWCSP patient information/leaflets relevant to this element include:
  - Taking a photograph of your wound (available in 13 languages).

Appendix 5

Supporting resources for Element 5:

- National Wound Care Workforce Framework for England.
- Wound Care Education for the Health and Care Workforce programme.

- DAPB4086 Wound Care Information Standard Notice.

- NWCSP Patient Resources. https://www.nationalwoundcarestrategy.net/wound-care-patient-resources/

- NWCSP patient information/leaflets relevant to this element include:
    - Why compression is important for the treatment and prevention of venous leg ulcers (available in 13 languages)
    - Taking a photograph of your wound (available in 13 languages)
    - Supported Self-Management – what does this mean? – Leg Ulcers

- NHS England. Implementing patient-initiated follow-up: guidance for local health and care systems.

References

[1] Cullum N, Buckley H, Dumville J, Hall J, Lamb K, Madden M, et al. Wounds research for patient benefit: a 5-year programme of research. Programme Grants Appl Res 2016; 4 (13).

[2] Shi C, Dumville JC, Cullum N, Connaughton E, Norman G. Compression bandages or stockings versus no compression for treating venous leg ulcers. Cochrane Database of Systematic Reviews 2021, Issue 7. Art. No.: CD013397. DOI: 10.1002/14651858.CD013397.pub2. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013397.pub2/full.

[3] Gohel, M. S., Heatley, F., Liu, X., Bradbury R., Blubulia M.D et al 2018. A Randomized Trial of Early Endovenous Ablation in Venous Ulceration. New England Journal of Medicine,378, 2105- 2114. Available at: https://www.nejm.org/doi/full/10.1056/NEJMoa1801214

[4] National Wound Care Strategy Programme (NWCSP). 2021. Preventing and Improving Care of Chronic Lower Limb Wounds: Implementation Case. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/04/NWCSP-Implementing-the-Lower-Limb-Recommendations-15.12.20-1.pdf

[5] NWCSP. 2023. Leg Ulcer Recommendations. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2023/08/NWCSP-Leg-Ulcer-Recommendations-01.08.23.pdf

[6] NHS England. Quality, service improvement and redesign (QSIR) Tools. https://aqua.nhs.uk/QSIR/

[7] National Wound Care Strategy Programme (NWCSP). 2021. Preventing and Improving Care of Chronic Lower Limb Wounds: Implementation Case. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/04/NWCSP-Implementing-the-Lower-Limb-Recommendations-15.12.20-1.pdf

[8] Perry C, Atkinson RA, Griffiths J, Wilson PM, Lavallée JF, Mullings J, Cullum N, Dumville JC. What promotes or prevents greater use of appropriate compression in people with venous leg ulcers? A qualitative interview study with nurses in the north of England using the Theoretical Domains Framework. BMJ Open. 2022 Aug 1;12(8):e061834. doi: 10.1136/bmjopen-2022-061834. PMID: 35914912; PMCID: PMC9345063.

[9] NWCSP and Manchester University NHS Foundation Trust (MFT). 2021. Case study: conducting a patient survey to inform the codesign of a leg ulcer service. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2023/04/MCR-Case-Study-Summary-Final.pdf

[10] NWCSP and Wye Valley Trust (MFT). 2021. Case study: creating Lower Leg Ulcer Nurse Specialist (LUNS) roles from unfilled community nursing vacancies to improve Leg Ulcer Service provision within Wye Valley. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2023/04/Wye-Valley-Case-Study-Summary-Final.pdf

[11] National Wound Care Strategy Programme and Skills for Health. 2023. National Wound Care Workforce Framework. https://www.skillsforhealth.org.uk/wp-content/uploads/2023/10/Wound-Care-Workforce-Framework-FINAL-for-publication.pdf

[12] NICE. 2013. Varicose veins: diagnosis and management. https://www.nice.org.uk/guidance/cg168

[13] NICE. 2012. Peripheral arterial disease: diagnosis and management. https://www.nice.org.uk/guidance/cg147

[14] NICE. 2023. Automated ankle brachial pressure index measurement devices to detect peripheral arterial disease in people with leg ulcers. https://www.nice.org.uk/guidance/dg52

[15] Health Impact Assessment: National Wound Care Strategy Programme. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/11/20200909_NWCSP-HIA_final.pdf

[16] Darwin, E., Liu, G., Kirsner, R. S., & Lev-Tov, H. (2019). Examining risk factors and preventive treatments for first venous leg ulceration: A cohort study. Journal of the American Academy of Dermatology. https://doi.org/10.1016/j.jaad.2019.12.046

[17] O'Meara, S., Al-Kurdi, D., Ologun, Y., Ovington, L. G., James, M. M.-S., & Richardson, R. 2014. Antibiotics and antiseptics for venous leg ulcers. Cochrane Database of Systematic Reviews, 1. https://doi.org/10.1002/14651858.CD003557.pub5

[18] Petherick, E., 2010. Leg ulceration: An exploration of the role of socioeconomic factors in the epidemiology, access to health care and outcomes: The University of York, Department of Health Sciences. https://core.ac.uk/download/pdf/40026636.pdf

[19] Nanjo, A. et al., 2020. Prevalence, incidence, and outcomes across cardiovascular diseases in homeless individuals using national linked electronic health records. European Heart Journal, 41(41), p. 4011–4020. https://academic.oup.com/eurheartj/article/41/41/4011/5986607

[20] Malik, J. & Geraghty, J. 2021. Misunderstood and Overlooked: Piloting tissue viability wound care and nurse outreach with people experiencing homelessness and multiple disadvantage. London: Fulfilling Lives in Islington and Camden. Available from: https://www.shp.org.uk/Handlers/Download.ashx?IDMF=027437cb-b7c4-4221-a5b0-4c19549bdf3a

[21] Scottish Intercollegiate Guidelines Network. (2010). Management of chronic venous leg ulcers: A national clinical guideline. Scottish Intercollegiate Guidelines Network. https://www.sign.ac.uk/media/1058/sign120.pdf

[22] NHS England. NHS Long Term Plan. 2019. https://www.longtermplan.nhs.uk/

[23] NHS England. Supported Self-Management Summary Guide. https://www.england.nhs.uk/wp-content/uploads/2020/03/supported-self-management-summary-guide.pdf

[24] NHS England. Personalised Care. https://www.england.nhs.uk/personalisedcare/

[25] PRSB. Wound Care Information Standard. https://theprsb.org/standards/wound-care-standard/

[26] NWCSP Digital Images: Practical Recommendations for the use of Digital Images in Wound Care. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/09/Digital-Images-in-wound-care-17Sept21.pdf

[27] National Wound Care Strategy Programme. Wound Management Digital Systems Functional Overview. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/08/Wound-Management-Digital-Systems-18Aug21.pdf

[28] NHS England. The Model Health System. https://model.nhs.uk/

[29] Vascular Society. 2021. Provision of Services for People with Vascular Disease. https://www.vascularsociety.org.uk/_userfiles/pages/files/Resources/FINAL%20POVS.pdf

[30] eLearning for Health Care. Wound Care Education for the Health and Care Workforce programme. https://www.e-lfh.org.uk/programmes/wound-care-education-for-the-health-and-care-workforce/

[31] NHS England. 2023. Commissioning for Quality and Innovation (CQUIN) scheme for 2023/24. https://www.england.nhs.uk/wp-content/uploads/2022/12/CQUIN-scheme-for-2023-24-indicator-specifications-version-1.1.pdf

[32] National Wound Care Strategy Programme. 2023. Peripheral Arterial Disease / Chronic Limb-Threatening Ischaemia Assessment and Referral Form. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2022/12/PAD-CLTI-referral-eform-5Dec22.pdf

[33] NWCSP. 2022. A Review of the Routes of Supply and Distribution of Wound Management Products in England https://www.nationalwoundcarestrategy.net/wp-content/uploads/2022/10/A-Review-of-Routes-of-Supply-Distribution-of-Wound-Management-Products.pdf

[34] NICE. 2012 (updated 2020). Peripheral arterial disease: diagnosis and management. https://www.nice.org.uk/guidance/cg147/chapter/Recommendations

[35] NICE. 2013. Clinical guideline CG168: Varicose veins: diagnosis and management. https://www.nice.org.uk/guidance/cg168

[36] National Wound Care Strategy Programme. 2023. Venous Disease – Assessment and Referral Form. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2023/08/Venous-referral-eform-10Aug23a.pdf

[37] NHS England. NHS e-Referral Service (e-RS). https://www.england.nhs.uk/digitaltechnology/connecteddigitalsystems/nhs-e-referral-service/

[38] NHS England. Advice and Guidance. https://www.england.nhs.uk/elective-care-transformation/best-practice-solutions/advice-and-guidance/#:~:text=What%20is%20Advice%20and%20Guidance,IT%20platforms%20or%20email%20addresses

[39] Society of Vascular Nurses (SVN). 2023. A guide for establishing a nurse-delivered venous intervention service. https://assets.radcliffecardiology.com/s3fs-public/webinar/2023-04/SVN%20Guide%20WEB%20Singles.pdf

[40] National Wound Care Strategy Programme. Supported Self-Management Resource. https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/05/Shared-Care-for-Wounds-30.03.20.pdf

[41] Department of Health and Social Care and Skills for Health. 2023. Delegated healthcare activities: Guiding principles for health and social care in England. https://www.skillsforcare.org.uk/resources/documents/Developing-your-workforce/Care-topics/Delegated-healthcare-interventions/Delegated-healthcare-activities-Guiding-principles.pdf

[42] Nelson EA, Bell-Syer SEM. Compression for preventing recurrence of venous ulcers. Cochrane Database of Systematic Reviews. 2014. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002303.pub3/full

[43] Wound UK (2022) Holistic management of venous leg ulceration second edition. https://www.wounds-uk.com/resources/details/holistic-management-venous-leg-ulceration-second-edition