

# FUTURE OF VENOUS DISEASE:

GROWING PROBLEMS, SHRINKING WORKFORCE



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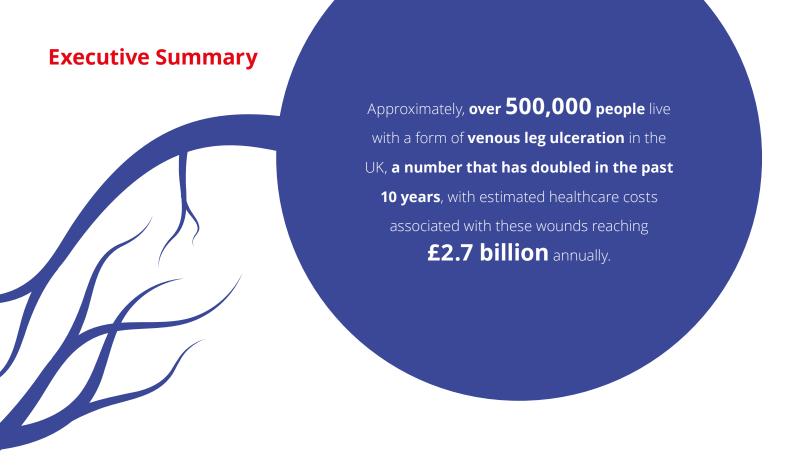
# **Acknowledgements**

The VVAPPG, it's Chair, Officers, and Secretariat are grateful to the Working Group of Experts who provided guidance on the development and drafting of this report. We are particularly grateful to the Mid-Yorkshire Hospitals NHS Trust, who provided the case study for best practice for the report. A full list of contributors and the members of the Working Group of Experts can be found below.

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Venous leg ulcers (VLU) are persistent wounds of the leg, caused by an underlying circulatory issue in the veins.

Unlike most wounds, venous leg ulcers can be hard to heal and extremely painful. People with venous leg ulcers require extensive NHS support to facilitate the healing process.

VLUs cause severe patient distress and are prone to becoming infected if not managed well. In extreme cases, the wound can become so large that bone and tendon are exposed. Failure to address the underlying venous disease causing the ulcer can lead to wound recurrence.

Despite the scale of the problem being well known, and guidance being in place to ensure prompt treatment for VLUs, patients still face challenges in receiving treatment. Venous disease is often deprioritised in the context of many other conflicting health challenges. This is in part due to a shrinking workforce and inconsistent commissioning of services.

This report has highlighted the challenges in treating the number of patients with VLUs, and sets out recommendations for Government, NHS England, and local commissioners to ensure that patients receive appropriate care at the right time, in the right place.

In delivering these changes, the NHS could save significant amounts of money and patients would benefit from earlier interventions and better outcomes.

# **Recommendations**



## **FOR GOVERNMENT**

- 1 Develop a vascular workforce plan in the upcoming Workforce Strategy for Health and Care, with a funded implementation plan.
- 2 Ensure national adoption and implementation of the recommendations of the National Wound Care Strategy Programme.
- Increase the number of training places for vascular surgeons to 30-40 from current levels.



#### **FOR THE NHS**

- ANHS Workforce, Training and Education (formerly Health Education England (HEE)) to deliver venous disease education programmes across primary, community, and secondary care in England, including utilising existing education resources such as eLearning for Health and National Wound Care Strategy Programme for preregistration programmes, and within the existing qualified workforce.
- Increase the training available to non-medics to support in the diagnosis and treatment of venous patients, including vascular nurses and vascular technicians.



## FOR LOCAL COMMISSIONERS

- Ensure commissioning policies are aligned to NWCSP Lower Limb Recommendations, which incorporate NICE guideline CG168 and the SIGN Clinical Guideline.
- 7 Ensure local NHS Providers prioritise staff and resources to assessing and treating venous disease.

# Introduction from the Chair



The NHS is faced with many pressures across all parts of the country, and within many parts of the system – the vascular community is no different.

Patients are waiting longer for treatment than they should, and often the system does not have the resources and personnel in place to ensure they are treated at the right time, in the right place. This can lead to worse outcomes, and increased costs for the NHS – particularly as patients are left to develop more sever lower limb wounds.

However, investing in the workforce will help to tackle some of these challenges in the short, medium, and long-term. This includes increasing the number of training places in vascular surgery to around 30-40 per annum; ensuring adequate ongoing training and education of the workforce; and the consistent implementation of national guidance for patients.

Outcomes will also be supported through the adoption of recommendations from national programmes such as the National Wound Care Strategy Programme, who have worked tirelessly to deliver frameworks to support better outcomes for patients.

The VVAPPG has been supported in the development of this report by experts from within the vascular and venous communities, and we are immensely grateful to them for taking the time to provide insights and reflections on how to best-serve their communities. I hope that this report, and its recommendations will be used by Government, the NHS, and ICSs to help improve outcomes.

It is vital that the growing problem of a shrinking workforce is addressed immediately. The VVAPPG will continue to push for better outcomes, and engage with the system to deliver insights, influence, and impact.

I look forward to working with you all to ensure the delivery of these recommendations in the months ahead.

Jim Shannon MP

Chair, VVAPPG

# **Those Left Behind**

## What is a venous leg ulcer?

A venous leg ulcer (VLU) is a non-healing wound in the lower legs, caused by circulatory problems in the veins. The underlying cause of a VLU is venous incompetence, or venous insufficiency, which refers to the pooling of blood in the veins in the legs, causing increased pressure and strain on the walls of the veins. The increased pressure, or venous hypertension, causes swelling, pain, and varicose veins, which are often misinterpreted as a cosmetic issue.

When left untreated, venous hypertension causes discolouration and damage in the skin in the lower leg, making it vulnerable to breaking down. Therefore, any trauma, even bumping your leg against the supermarket trolley, can cause the pressure in the veins to break the skin, causing a wound. In some cases, the pressure can build to the point where the skin will break spontaneously, causing a wound to appear without the need of any trauma.

When the wound appears, the body tries to heal it, however the underlying problem of poor circulation hinders the healing process, resulting in a VLU. Consequently, VLUs require healthcare intervention to support healing, avoid or treat infection, and treat the underlying venous issue. Without intervention, the wound will fail to heal and likely worsen, causing extreme pain and considerably impacting one's quality of life. VLUs often take many months to heal. In some extreme causes the wound may grow large enough, bone and tendons are exposed.

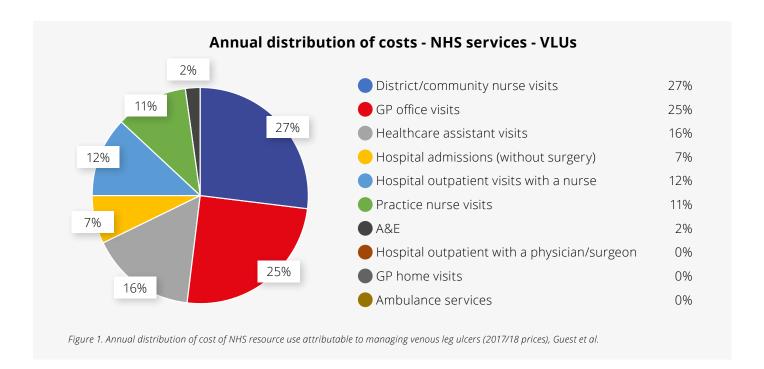
VLUs have a considerable impact not only on patients but also the NHS more broadly. Estimated figures show that:

- Annually, 560,000 people live with a VLU. This is the equivalent to 1 in 100 adults in the UK.
- Between 2012/13 and 2017/18, the number of people living with VLUs has **doubled**.
- Approximately 361,000 lower limb ulcers are uncharacterised, many of which could be caused by an underlying venous issue.
- Patients with VLUs have a markedly shortened life expectancy.
- VLUs significantly reduce the quality of life of patients and carers.

The treatment costs associated with delivering care for those diagnosed with VLUs is around £2.7 billion per year. The mean annual cost per patient varies depending on the healing process of the VLU. The annual cost of a healed wound is £2,036, compared to an unhealed wound which is £7,886. This difference is over three times higher, highlighting the economic burden of untreated VLUs on the NHS.

In many cases, VLUs require vascular surgery. Although vascular surgery is cost effective and promotes healing, it remains an expensive option for the NHS. Even without surgery, there are significant costs, particularly for community nurses in managing wounds in the community.





VLUs can be reduced, treated, and healed. The underlying venous issue can be addressed, and the risk of recurrence can be prevented. There is robust clinical evidence to demonstrate that assessment and treatment is good for the patient, the NHS, and the taxpayer.<sup>1,2</sup>

The National Institute for Health and Care Excellence (NICE) is responsible for providing guidance for health and social care practitioners based on an independent, rigorous evidence assessment. It makes sure to balance the best care against delivering good value for money.

NICE Clinical Guideline CG168, highlights the need for a patient to be referred to a vascular service if a VLU below the knee has not healed within two weeks.<sup>3</sup> It also makes treatment recommendations, however implementation barriers have hindered patient access to assessment and treatment. In summary, we know what works, and NICE has recognised the value of treating venous disease. The challenge sits with supporting service implementation and delivery.

# **Key Takeaways**

- VLUs affect 1 in 100 people in the UK.
- Over the past decade, the number of people living with VLUs has doubled.
- Over 300,000 lower limb wounds are undiagnosed, many of which are suspected to be VLUs.
- The costs associated with delivering care for those diagnosed and able to access treatment to VLUs reaches £2,7 billion per year.
- The cost of a non-healing VLU are three times higher than a healed VLU.
- Vascular surgery for VLUs, heals ulcers, prevents recurrence, and saves money.
- VLUs shorten the life expectancy of patients.

# Challenges in locally implementing evidence-based best practice.

Alun Davies, Consultant Vascular Surgeon, Imperial College London.

The theoretical and the practical are often worlds apart. I have spent much of my professional career, as an academic and a healthcare practitioner, helping improve our understanding of venous disease, shaping national recommendations, as well as spending much of my time delivering treatment.

I have witnessed the difficulties that come with implementing national recommendations locally. Several issues come into play, but innovation at service level often demands support for effective implementation to take place. Support is scarce in the NHS and in its absence, innovation suffers.

One key element to consider if we are to tackle the issue of VLUs is ensuring national programmes such as the National Wound Care Strategy Programme, are powered to deliver such support at scale. These programmes seek to address variation in care and outcomes, better organise resources, and provide a necessary data and information environment to support longer-term quality improvement.

I would encourage NHS leaders to continue to support these programmes, as they provide a necessary lifeline in helping mitigate growing pressures, deliver better health outcomes for patients, and build a more sustainable NHS for all.

# **Sustainability of Venous Services**

Manjit Gohel, Consultant Vascular Surgeon and Venous Lead, Addenbrooke's Hospital, Cambridge

There are great opportunities to improve the landscape of venous disease. Over the past decade, our understanding of what is required to improve the health of these patients has grown enormously. Treatment options are not only clinically effective but are cost-effective (and even cost-saving), delivering immense benefits to patients, the wider health system, and the taxpayer.

Progress over the past four years has seen incremental change take place, but only in a few areas of the country. In some cases, the improvements made have been dwarfed by uncharted growth in demand, undoubtedly exacerbated by the COVID-19 pandemic.

The scale of the issue requires coordinated nation-wide momentum, support, and political goodwill. Excellent community care-led programmes, such as the National Wound Care Strategy should receive continuous support. Complimentary to their objectives, the glaring need for vascular surgeons and supporting disciplines to be backed is essential for any semblance of a working service to remain.

A focus on increasing training posts, creating a sustainable support environment that empowers each surgeon to deliver for their patients, as well as added support to deliver venous-specific education is required.



# **The Challenges**

There are three immediate challenges for the effective treatment of VLUs across the UK: ensuring sufficient workforce numbers with appropriate knowledge and skills; supporting the workforce through appropriate education and training; and the implementation of necessary commissioning practices.

#### Workforce

The NHS is facing unprecedented workforce challenges due to a lack of staff and pressures from the backlog in elective care. Despite the best efforts of those in the system, these challenges are impacting how many patients can receive surgical interventions and care in the community must be addressed.

A major issue impacting patient care is the limited number of vascular surgeons, vascular specialist nurses, vascular scientists, interventional radiologists, 'healthcare of the elderly physicians', and data support staff. Increasing training across the workforce would prioritise venous disease across the healthcare system, increasing uptake in the vascular workforce.

## **Community Nursing**

Community nurses, alongside general practice clinicians, are often the first healthcare professionals that patients with VLUs engage with. Community nurses work in every region of the UK, providing care across several settings. They play a significant role in managing the symptoms of venous disease such as leg ulcers and delivering preventative care. However, leg ulcer care, despite being a large proportion of their workload, often receives little attention and investment, despite being crucial to delivering benefits across the wider healthcare system. For example, well-organised evidence-based leg ulcer care reduces demand on GPs and secondary care services, including A&E.

Approximately 50% of community nursing time is spent managing wound care and around 70%<sup>4</sup> of wounds are VLUs, highlighting the prevalence of VLU care across the community nursing. Consequently, community nursing leaders have raised concerns around unsustainable growing demand for care, and the pressure points impacting the sector. There is a need for better joining up of primary care and secondary care to manage caseloads and capacity. For example, GPs need dedicated leg ulcer services to which they can refer, and those services need agreed pathways of care so they can refer quickly and appropriately to vascular surgical services.



"Workloads are far exceeding the capacity of services. From the qualitative data we have collected over the last seven years, there appears to have been a shift towards District Nursing teams acting as a failsafe for other NHS and social care services, rather than as District Nursing service per se. Patients are being referred to District Nursing simply because other services are short staffed or are not offered as a 24/7 service. District Nursing services rarely refuse patients or close a caseload, leading to unremitting demand and this is a high-risk strategy."

#### **Alison Leary MBE**

Chair of Healthcare & Workforce Modelling at London South Bank University

The Queen's Nursing Institute - New Workforce Standards for District Nursing Launched. Available at: <a href="https://qni.org.uk/news-and-events/news/new-workforce-standards-for-district-nursing-launched">https://qni.org.uk/news-and-events/news/new-workforce-standards-for-district-nursing-launched</a>. Accessed January 2023.

# **Vascular Surgeons**

Vascular Surgeons are crucial in addressing extreme cases of VLUs. Data from the National Vascular Registry (NVR) shows that vascular surgeons conduct over 12,000 surgeries on legs to help prevent lower limb amputations. Furthermore, while surgeries performed to address VLUs are not currently recorded by the NVR, there is an understanding that approximately 20,000 procedures take place each year.

The challenge is that there are not enough vascular surgeons in the UK. Ten years ago, vascular surgery was enshrined as a speciality in the UK, and 30-40 trainee posts were made available to vascular surgery every year. Currently, system leaders are only granted around half of this, effectively running at a deficit for the last decade.

In addition, the responsibilities and duties that vascular surgeons have undertaken have grown beyond the scope of expectations understood a decade ago. The main reason being a growing body of patients requiring support, impacted by an ageing population, and increased incidence of diabetes, as well as novel techniques, and technologies that have made vascular services valuable to a wider pool of patients.

However, it is not just vascular surgeons that are required. Results from a recent organisational audit paint a stark picture of a vascular ecosystem in dire need of support. <sup>4</sup> Vascular specialist nurses, vascular scientists, interventional radiologists, 'healthcare of the elderly physicians', and data support staff are all in short supply. Additionally, a lack of facilities is also a significant concern, for example, hybrid operating theatres or interventional radiology suites.

Due to the limited numbers of vascular specialists in the UK, conditions are prioritised, this can have a worrying impact on the VLU patient's wellbeing, as well as the cost associated with lack of access to treatment and poor healing rates.<sup>6</sup>

Support is required to help chart a sustainable roadmap for secondary care vascular services. Any plan should consider current and projected demand for services, and a comprehensive retention and recruitment support package. From a vascular surgical perspective, increasing UK training numbers to the 40 National Training Number (NTNs) per annum is vital.

Crucially, any strategy should consider the wider ecosystem of support, i.e., staff and infrastructure, required for prompt delivery of both urgent life-and-limb-threatening conditions, as well as long-term chronic health issues such as VLUs.

# A vascular breaking point

Rachel Bell, Jonathan Boyle, and Andrew Garnham of The Vascular Society for Great Britain and Ireland

Venous disease is a massive problem within the UK population and vascular surgery has a lot to contribute. There are inequities around the ability of patients to access these services and get high quality care for their leg wounds. This document seeks to bring together a structured multidisciplinary approach across the primary and secondary care sectors. To do this we know that we will have to expand the workforce of vascular surgeons offering timely venous intervention as part of our multidisciplinary workforce. This will not only help our colleagues in the community get patient's ulcers healed early, allowing them to concentrate time on other complex patients, but also relieve the burden of these wounds for our patients

## **Education and Training**

A growing understanding of venous disease holds the key to unlocking many of the opportunities to alleviate the pressures discussed. Increased training and a better understanding of VLUs, will enhance practice, improve healing, recurrence, and health outcomes, reducing long-term demand for services.

Good practice can rarely be replicated as local successes are usually down to enthusiastic local champions rather than system drivers. Thus, there is a need for a national plan to deliver venous disease education programmes across primary, community, and secondary care in England.

#### **Healthcare Professionals**

Healthcare professional across primary, community, and secondary care require support to improve their understanding of the latest research and guidance of venous disease. Consistent support and investment in upskilling training across the healthcare system is key to quality improvement and quality patient care.

It is vital that all healthcare professionals have sufficient knowledge of VLUs, for there to be greater capacity in treatment. E-learning resources such as the one from the National Wound Care Strategy Programme (NWCSP), is suitable for all healthcare professionals, from primary, community and secondary care. Any upskilling strategy should build on resources such as these to tackle the education of the workforce.

#### **General Public**

There is a need for increased understanding of venous disease from the general public as its symptoms and presentation are hard to recognise. Improvements in the general understanding of venous diseases will help accelerate patient presentation to the health service in time to help mitigate the risk of complications.

Several organisations work to engage with the general public and raise awareness of these conditions. Legs Matter is a national campaign that seeks to engage with healthcare professionals and wider society to inform and empower stakeholders.<sup>7</sup> The Lindsay Leg Club Foundation is another great example of a charity devoted to supporting the wellbeing of people with leg-related health issues.<sup>8</sup>

The National Wound Care Strategy Programme (NWCSP) is currently in the process of developing a series of resources made by patients for patients. The first of the series is an easy-to-read infographic that breaks down the importance of compression for the treatment and prevention of VLUs.

Government and system leaders should consider what steps they could take to support these organisations and disseminate their work.

#### **Education**

Supporting the workforce through appropriate education and training.

# **Upskilling a Nation**

Una Adderley, Director, National Wound Care Strategy Programme

Too often, venous leg ulcer care is seen as the sole responsibility of the community nurse caring for that patient and, possibly the vascular surgical team. While those clinicians obviously need appropriate levels of knowledge and skills, other health and care professionals also need to know enough so they too can play their part in care. Insufficient knowledge about VLU in the broader clinical workforce explains why so many patients do not receive quick and accurate diagnosis and appropriate ongoing care.

The National Wound Care Strategy Programme (NWCSP), working in partnership with the former Health Education England team and Skills for Health, has published a capability framework to support those responsible for identifying the required wound care capabilities of their workforce.

Alongside this, the NWCSP, with the former Health Education England team and eLearning for Health, has developed a suite of free-to-access online education resources suitable for all health and care professionals working in all healthcare settings across the system. These resources are highly suitable for use in pre-registration and in-house clinical education programmes to help upskill the health and care professional workforce.

## **Commissioning practices**

NHS commissioners are tasked with planning, agreeing, and monitoring delivery of services. Commissioning responsibilities are split at local or national levels, depending on the scale of the population in need.<sup>9</sup>

Commissioners dictate which services are available, and to what degree they should be delivered (i.e., under which circumstances should care be available, and to how many people in any given NHS year). In the context of VLUs, responsibilities sit with local commissioners- until the recent adoption of Integrated Care Boards, this responsibility rested with Clinical Commissioning Groups.

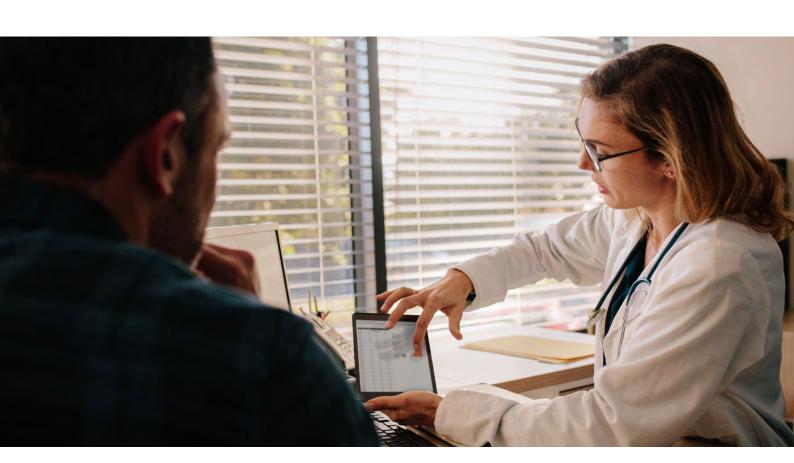
Commissioners hold a great degree of influence in who receives care in any region. A recent study shows that there is a lack of consistency in commissioning policies across geographies, leaving more than half of patients who should be offered treatment for VLUs unable to receive it. As a result, widespread geographical variation in access to services has been documented in England.<sup>10</sup>

Despite NICE guidance recommending prompt treatment in their clinical guideline (CG168), commissioner compliance has decreased in recent years, making access to treatment more difficult in specific areas of the country.<sup>11</sup> Only 29 per cent of commissioning policies were found compliant with NICE's CG168.<sup>12</sup>

The proportion of people that have been unable to access treatment has increased from 56 per cent to 63 per cent between 2017 and 2019.<sup>13</sup> The same study asserts that net health benefit losses over that period are estimated to be £164 million.<sup>14</sup>

This highlights an uncomfortable growing reality. Delays and restrictions in access to treatment, in direct contradiction to best practice guidelines, are commonplace across much of the country. This is exacerbated by commissioning policies that fail to meet NICE recommendations, causing avoidable harm and costs. Treating VLUs earlier ensures better outcomes, and saves money for the NHS, as the cost difference between a healed and an unhealed VLU over a year is three times higher (£2,036 versus £7,886).¹ Tens of millions of pounds could be saved if more of the population were treated appropriately.

National and local leaders should encourage and support commissioning bodies to adjust their commissioning policies in line with best practice guidelines, including NICE's CG168



# **Case Study**

**The Mid Yorkshire NHS Trust** is a valuable example of a commissioning practice that understands the severity of VLUs. The Mid Yorkshire Trust noted several factors that restricted prompt treatment of VLUs, resulting in poor outcomes for patients.

These factors were: poor assessment and diagnosis; underuse of evidence-based practice; overuse of ineffective interventions; policy restrictions; and variation in the ability to refer patients. The Trust found that 12 weeks on from the initial presentation of the VLU, patients were only just receiving treatment by a specialist team, resulting in prolonged healing rates at 12 months.

The long process from initial presentation to treatment does not comply with the NICE CG168 guideline of prompt treatment of a VLU. Consequently, the Mid Yorkshire Trust saw an opportunity to improve patient outcomes.

The Trust developed the Leg Ulcer Champions training programme. The training programme sought to improve patient outcomes through better workforce education around VLUs, greater patient empowerment, and simple structural changes to streamline delivery of care.

Workforce education involved placing a greater emphasis on the importance of prompt VLU assessment and intervention to deliver timely diagnosis and treatment for patients. The programme also implemented self-care, highlighting the value of empowering patients to play a role in their care and recovery. The Trust implemented simple structural changes to remove barriers that brought about inherent delays for patients receiving the right care at the right time. All these reforms were implemented to design a pathway around the patient's journey, ensuring a high standard of individualised care.

By aligning treatment to best practice guidelines, the Trust saw a major increase in healing rates compared to the national average. Nationally 37% of VLUs healed at 12 months, whereas, in the Mid Yorkshire Trust 70% of VLUs healed at 12 weeks.

Additionally, through the introduction of self-care, not only did patients feel empowered, reducing the recurrence of VLUs, but it also cut costs and increased nurse capacity. The Trust saw a total saving of services reduce to 324 visits per month and 972 visits over 12 weeks. Increasing nursing capacity and allowing nurses to provide excellent, high-quality care that they are proud of, fostering the workforce to feel valued, aiding in retention problems in the sector.

Ultimately, the Mid Yorkshire NHS Trust provides a tangible example of sustainable treatment of VLUs, designed around quality care that produces timely outcomes. It is imperative that we change the culture around wound care, non-healing is not normal, the elimination of chronic leg ulcers should be the standard. The Mid Yorkshire NHS Trust demonstrates how simple, targeted reforms can improve patient outcomes, while creating a more sustainable workforce and NHS.

70%

OF VLUS

HEALED AT

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# **Recommendations**



## **FOR GOVERNMENT**

- 1 Develop a vascular workforce plan in the upcoming Workforce Strategy for Health and Care, with a funded implementation plan.
- 2 Ensure national adoption and implementation of the recommendations of the National Wound Care Strategy Programme.
- Increase the number of training places for vascular surgeons to 30-40 from current levels.



#### **FOR THE NHS**

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- Increase the training available to non-medics to support in the diagnosis and treatment of venous patients, including vascular nurses and vascular technicians.



## FOR LOCAL COMMISSIONERS

- Ensure commissioning policies are aligned to NWCSP Lower Limb Recommendations, which incorporate NICE guideline CG168 and the SIGN Clinical Guideline.
- 7 Ensure local NHS Providers prioritise staff and resources to assessing and treating venous disease.

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# About the VVAPPG

The All-Party Parliamentary Group on Vascular and Venous Disease was first formed in 2011 as a forum for MPs, Peers, clinicians, patients and industry representatives to discuss vascular and venous disease and related issues.

The group has four main purposes:

- 1. To raise awareness of vascular and venous disease and to encourage actions to promote a greater priority of their prevention and treatment;
- 2. To encourage research into the causes of vascular and venous disease;
- 3. To advance excellence and innovation in vascular and venous disease;
- 4. To inform parliamentarians of the work of medical professionals, and how they can be helped to provide better services to patients.

Healthcomms Consulting provides the Secretariat to the APPG.









