VENous Ulcer Study V

Exploring barriers and facilitators to compression therapy for people with venous leg ulcers

Workshop May 24th 2021

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Introduction

- Presentation
- Short break
- Group discussion
- Feedback

Pop questions into the chat and I will try and pick them up during the talk or at the end.

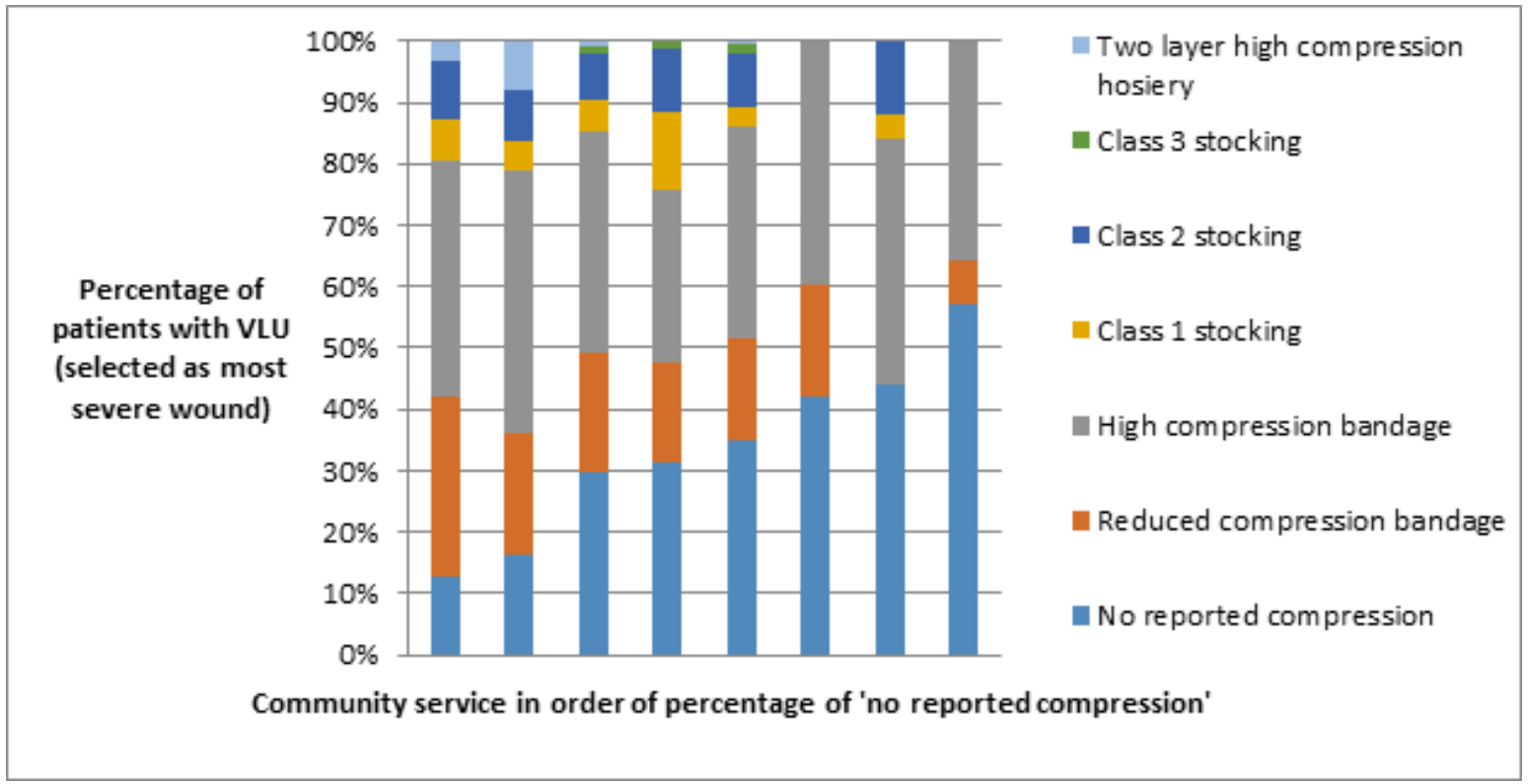
What is this research project?

We were awarded funding from the National Institute for Health Research (Research for Patient Benefit Scheme) to explore **the views and experiences of staff and patients on compression use in people with venous leg ulcers**

Why did we do this research?

- Venous leg ulcers are common
- People with open wounds like leg ulcers cite being healed as an important outcome; also important for health services.
- Compression therapy is an effective treatment but there is variation in optimal uptake

- A large survey undertaken across Greater Manchester and East Lancashire indicated variation in the use of compression use for people with venous leg ulcers.



Gray TA, Rhodes S, Atkinson RA*, et al* Opportunities for better value wound care: a multiservice, cross-sectional survey of complex wounds and their care in a UK community population *BMJ Open* 2018;**8:**e019440. doi: 10.1136/bmjopen-2017-019440

- This graph shows the % of people with at least one venous leg ulcer receiving different types of compression at a single point in time. The data are taken from eight locales in Greater Manchester and East Lancashire.

- Documented use of compression was highly variable
- In some areas, over 40% of people with a venous leg ulcer might not have been using compression (i.e. documented that they were **not** in compression, or no evidence of compression use provided)
- It is recognised that compression use is complex with barriers in terms of assessment, access and patient adherence
- We want to explore perspectives of compression use by patients and staff
- The ultimate aim is to bring about patient and staff benefits

Aim and objectives of the work

To determine the patient, staff and service-level barriers and facilitators to the delivery of compression therapy for people with venous leg ulcers, in order to develop intervention(s) to improve compression delivery and adherence.

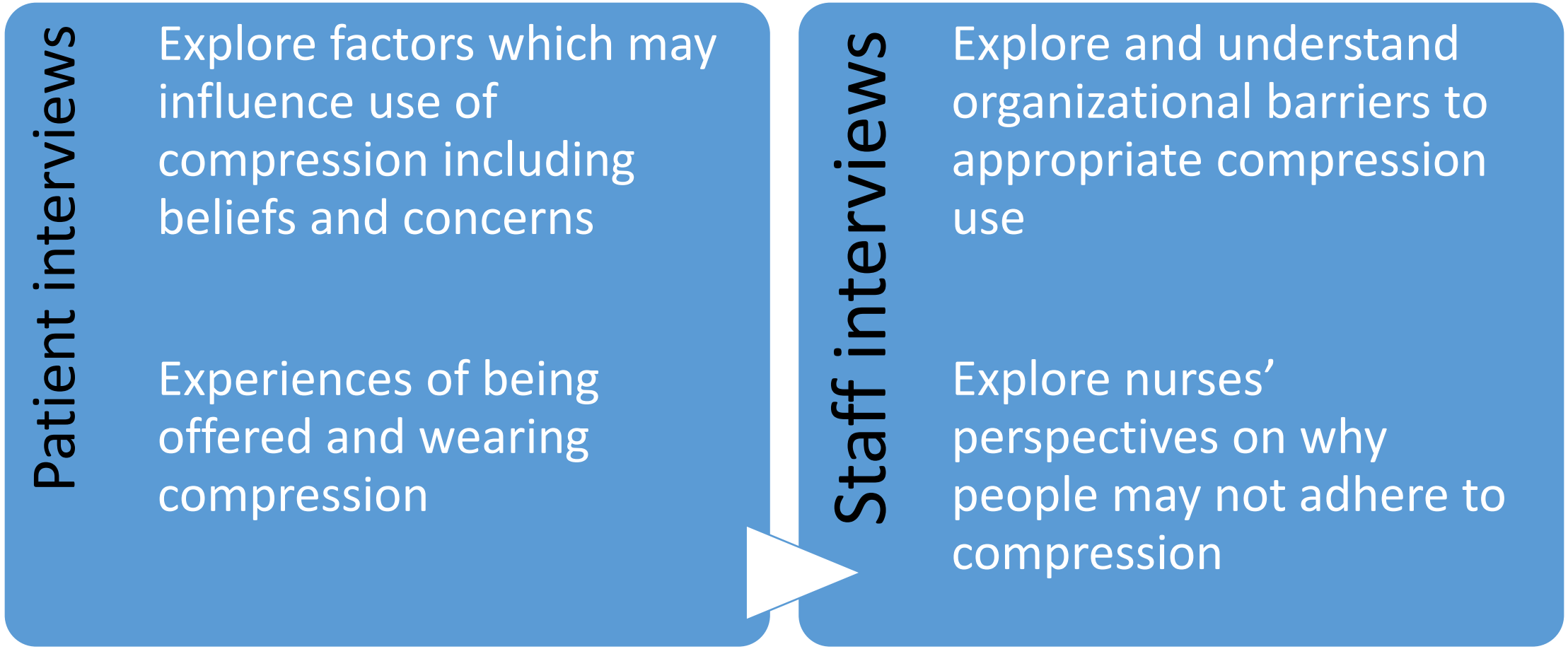
Workpackage 1: Patient perspectives

- Explore factors which may influence use of compression including beliefs and concerns
- To explore patients' experiences of compression therapy for venous leg ulcers.

Workpackage 2: Practitioner perspectives

- To explore and understand organisational barriers and facilitators to greater use of appropriate compression in people with venous leg ulcers.

Overview of qualitative data collection



How data were collected: Staff

Semi-structured interviews with 15 qualified nurses who provide hands-on care for people with venous leg ulcers within participating clinical services.

Recruited from:

Manchester University NHS Foundation Trust

The Mid Yorkshire Hospitals NHS Trust

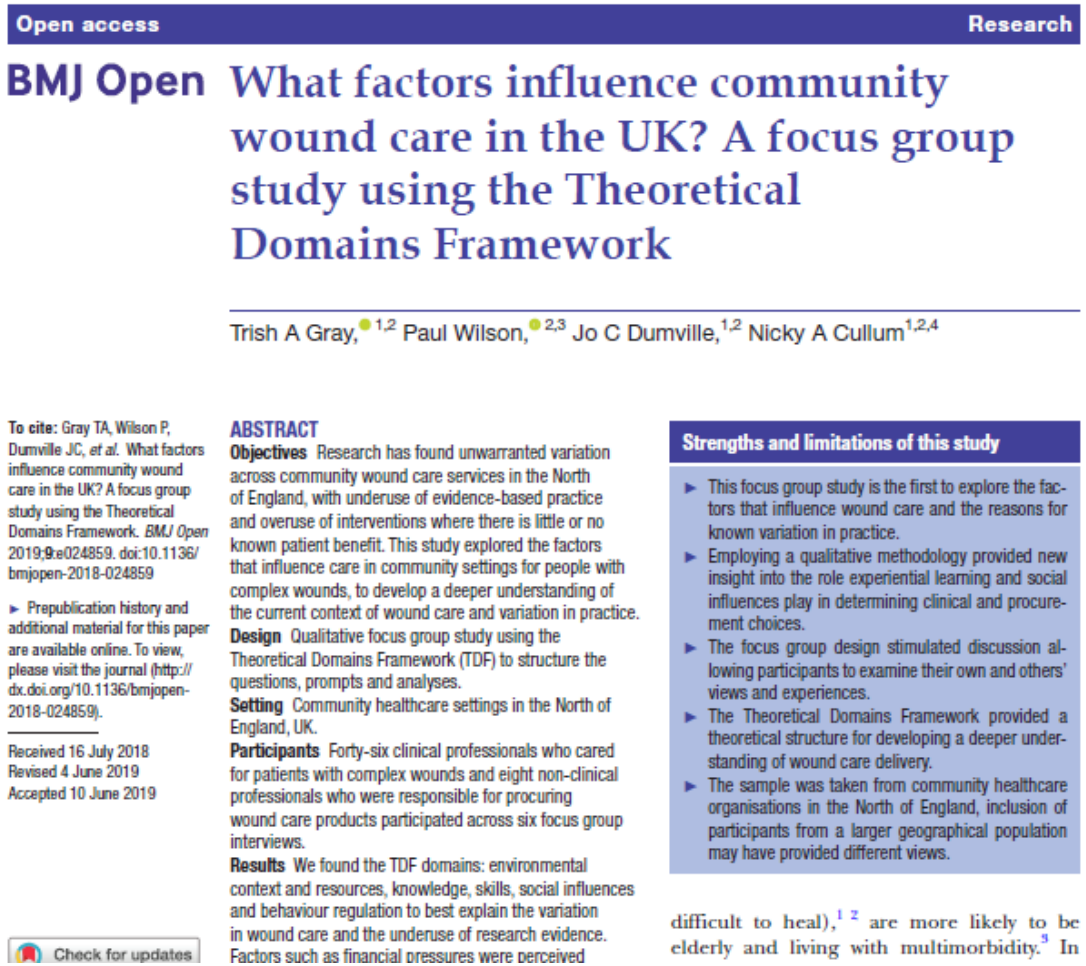
Pennine Acute Hospitals NHS Trust

Topic guide included items on views and experiences of barriers and facilitators to compression use: informed by the Theoretical Domains Framework

The Theoretical Domains Framework (TDF)

- Framework developed, via consensus, from several existing theories and related constructs relevant to behavioural change
- Developed to support implementation research by **identifying influences** on health professional **behaviours** in terms of implementing desirable practices.
- The framework considers potential cognitive, environmental and social influences on practice
- 14 domains

Previous work in Manchester



Open access Research

BMJ Open

What factors influence community wound care in the UK? A focus group study using the Theoretical Domains Framework

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ABSTRACT

Objectives Research has found unwarranted variation across community wound care services in the North of England, with underuse of evidence-based practice and overuse of interventions where there is little or no known patient benefit. This study explored the factors that influence care in community settings for people with complex wounds, to develop a deeper understanding of the current context of wound care and variation in practice.

Design Qualitative focus group study using the Theoretical Domains Framework (TDF) to structure the questions, prompts and analyses.

Setting Community healthcare settings in the North of England, UK.

Participants Forty-six clinical professionals who cared for patients with complex wounds and eight non-clinical professionals who were responsible for procuring wound care products participated across six focus group interviews.

Results We found the TDF domains: environmental context and resources, knowledge, skills, social influences and behaviour regulation to best explain the variation in wound care and the underuse of research evidence. Factors such as financial pressures were perceived

Strengths and limitations of this study

- This focus group study is the first to explore the factors that influence wound care and the reasons for known variation in practice.
- Employing a qualitative methodology provided new insight into the role experiential learning and social influences play in determining clinical and procurement choices.
- The focus group design stimulated discussion allowing participants to examine their own and others' views and experiences.
- The Theoretical Domains Framework provided a theoretical structure for developing a deeper understanding of wound care delivery.
- The sample was taken from community healthcare organisations in the North of England, inclusion of participants from a larger geographical population may have provided different views.

difficult to heal),[1 2] are more likely to be elderly and living with multimorbidity.[3] In

Check for updates

- Workforce pressures and diminishing resources
- Perceived lack of formal wound care education and key role of other influencers (e.g. colleagues and company reps) alongside experiential learning
- Training offered but difficult in attending, frequent cancellations.
- Variation in procurement

Domain	Definition	Examples of wound care and wound product procurement behaviours
Knowledge	An awareness of the existence of something.	Knowledge of wound types, wound aetiology, risk factors, wound product types. Wound knowledge is influenced by education, experience and research.
Skills	An ability or proficiency acquired through practice.	Ability to complete a comprehensive wound assessment, specific assessments such as Ankle Brachial Pressure Index, apply compression bandages/ stockings, manage procurement processes effectively.
Social/Professional role and identity	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting.	Carrying out a clinical or procurement role according to job description, communicating and working appropriately and effectively with other clinical or non-clinical professionals.
Beliefs about capabilities	Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use.	Confidently making the right decisions about care for patients with complex wounds, confidence in negotiating skills for product procurement.
Optimism	The confidence that things will happen for the best or that desired goals will be attained.	Confidence that care provided will cure/manage wounds effectively, confident that most cost-effective products can be purchased.
Beliefs about consequences	Acceptance of the truth, reality or validity about outcomes of a behaviour in a given situation.	Having realistic views about patient adherence to treatment plans and healing rates for complex wounds.
Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus.	Support of colleagues, team work, wound care provided has produced the desired goal, research evidence that interventions work.
Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way.	To practice according to a care plan, national and international guidelines.
Goals	Mental representations of outcomes or end states that an individual wants to achieve.	Setting goals for wound healing, improving patient adherence, achieving competence for a new skill.
Memory, attention and decision processes	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives.	Ability to remember wound care information, dressing specifications, considering the wide choice, making decisions based on evidence.
Environmental context and resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behaviour.	Organisational structures, procedures and processes, workload pressures, staff shortages, funding constraints, service cuts, procurement processes, product cost, product availability.
Social influences	Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours.	Decisions influences by personal, colleagues' patients, pharmaceutical industry preferences, team work and shared care, understanding patients' needs, negotiating product cost.
Emotion	A complex reaction pattern, involving experiential, behavioural and psychological elements, by which individual attempts to deal with a personally significant matter or event.	Coping with wounds that do not heal, managing challenging wounds, dealing with emotions related to patient morbidity and mortality.
Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions.	Formulary to guide/monitorprescribing and procurement choices, audits of practice and procedures.

How data were collected: Patients

Semi structured interviews with 25 adults who have had at least one leg ulcer diagnosed as being predominantly of venous aetiology and had recently been under the care of the participating clinical services

Recruited from:

Manchester University NHS Foundation Trust

The Mid Yorkshire Hospitals NHS Trust

Pennine Acute Hospitals NHS Trust

Topic guide included items on people's experience of ulceration, their treatment and care and how they used and experienced compression.

Data analyses

- Inductive analysis of all interviews (staff and patients)
- Themes from staff data mapped onto Theoretical Domains Framework (TDF)
- Triangulated staff and **patient data** to gain multiple perspectives on issues raised
- Present barriers noted to compression use and possible facilitators suggested by interviewees.

Training

Access to training was raised: whilst a minority noted availability a majority noted issues with time to attend training. Made worse in COVID.

On-going need for training (because of staff turnover) noted.

Target health professionals: not just community nurses

Yearly leg ulcer training by TVS noted as very good

One-to-one and online training were mentioned as possible formats

Inductions and other support by company reps was noted as useful

Knowledge *e.g. knowledge of wound types, wound aetiology, risk factors, treatment options*

Compression

All staff and most patients aware that compression is the treatment of choice:

Some patients thought old fashioned and may not be necessary for them and some concerned it might exacerbate varicose veins or dry skin

Staff noted some lack of skills re initial assessments for VLU, including the conduct of a Doppler: potentially due to knowledge and/or skills issues

Staff noted lack of skills in applying and monitoring compression bandaging

Staff noted importance of access to practical training: **for example at leg ulcer clinics** for community nurses based in home care teams

Cascading the right training from specialists to generalists

Skills: ability or proficiency acquired through practice e.g. completing assessment, applying bandages

Some discussion in patient interviews of variation in compression application skills (of nurses). A frequently mentioned issue was compression bandages falling down. This ranged from a minor irritation to a more serious problem for patients.

Some interviewees described being given contact details for their district nurses that could enable them to get back into compression more quickly if their bandages fell down.

Aetiology and care

Staff noted difficulty in explaining wound aetiology and compression therapy to patients.

There were variations in patients' perceived understanding of the underlying cause of their ulcer and that they have a long-term condition.

Some patients reported that health care staff had not talked very much about what may have caused their VLU.

Belief about consequences: Having realistic views about patient adherence to treatment plans and healing rates for complex wounds.

Goals

Setting goals for wound healing, improving patient adherence, achieving competence for a new skill.

Provision of information

Variation in availability, quality and utility of written information given to patients by staff

Most patients said that they had not received any written information. Of those who had, some had not looked at it at all

Healing

Staff noted difficulty in explaining timeframes around healing

Patients desired to know how long their ulcer would last. Some patients reported staff seeming unclear about this when asked.

Patients could be surprised at how long ulcers took to heal and/or the varied trajectory of healing

Adherent patients (to compression) may believe their ulcers would last for longer and they felt they had less control over their wound.

Other issues

Patients noted difficulties getting clothes and particularly footwear over bandages and experiencing pain caused by compression bandaging

Lack of commissioned leg ulcer service a barrier to optimised care

Delays in initial leg and wound assessment

Leg ulcer clinics may be inaccessible to patients:
Non-housebound patients with limited mobility reported being required to attend clinics which are difficult to access

Lack of available electronic patient records

Environmental context and resources: Organisational structures, procedures and processes, staff shortages, funding constraints, service cuts.

Variations in prescribing practice
If nurses can't prescribe, can incur delays.
Patients sometimes report being unable to adhere due to delays in receiving products

Geographical variations in formularies

Lack of continuity of care
Different staff attend patients; staff may not have an overview of the patient's care/knowledge of history/reasoning behind previous clinical decisions and treatments

Patients concerned by a lack of continuity of care in terms of the staff who attend them, especially within Community Nursing.

Inconsistency of treatment was mentioned in relation to staff lacking knowledge about the ulcer history

Lack of joined-up care services e.g. Unnecessary/duplicate referrals and in-patients not receiving appropriate treatment.
Some patients admitted stated their compression was removed whilst in hospital

TDF domains

Com-b components	Intervention functions								
	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical capability					■				■
Psychological capability	■				■				■
Physical opportunity						■	■		■
Social Opportunity						■	■	■	■
Automatic motivation		■	■	■			■	■	■
Reflective motivation	■	■	■	■					

Possible intervention activities (linked knowledge and skills)	Issues to consider	Areas highlighted to consider
Enabling staff to attend education and training **Enhanced education and training content if required**	• Knowledge requirements vs skills and related activities • Frequency (to deal with staff turnover) • Time for staff to attend (mandatory) • Location and format of training • Scope of training • Wider target audience	• Ulcer assessment including undertaking Doppler • Compression products and relevant evidence (also ease of application) • Discussing compression with service users • Compression application and monitoring • Wounds with challenging healing trajectories • Potential techniques to support patients e.g. motivational interviewing

Possible intervention functions	Issues to consider	Areas highlighted to consider
Environmental restructuring	• Geographical location and accessibility of services • Learning from other services • Role of commissioners • Need for data for wider use to support service change	• Specific assessment clinics and MDT services • Commissioned leg ulcer services; capacity/planning to support • Telephone helpline/easy to access contacts • Consistent formularies and reduce prescribing barriers • Share best local practices • Ensuring consistency of care across staff and settings

Possible intervention functions (Linked to knowledge, belief in consequences and goals)	Issues to consider	Areas highlighted to consider
Enabling staff to support patient education	• Current material available • Need to support patients and staff • Overview and more detailed provision	• Getting patients on board • Written provision about venous leg ulcers, their cause, prognosis and use of compression • Other formats

Areas to cover	Possible resource content
Long-term condition, wound as a symptom	The cause of venous leg ulceration
The healing process and how long it takes	The likely time to healing and what might impact on this
Using compression to make healing faster	Treatments that you will be offered
Highlight that compression is supported by research and is a current treatment	What is compression and how can it help venous leg ulcers heal more quickly (mechanism and how it works) not recent research
Making an informed choice about compression	Compression options that include stockings and hosiery
Mechanism and treatment necessity	Link to underlying issues, the need for compression to be an on-going treatment for prevention
Contact options to enhance adherence	What to do if your compression treatment becomes loose or slips (include contact details)
Living with compression	Note possible pain and discomfort and suggest actions
	Bathing with compression
	Wearing clothes and shoes with compression
Continuity	Area to write questions to ask nurse

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What might happen to my venous leg ulcer?

Health professionals will work with you to care for your venous leg ulcer and try to heal it. Some people experience one or more of the issues below when they have an ulcer, but not everyone will be affected.

Pain or discomfort

Venous leg ulcers can sometimes be painful or itchy. If your venous leg ulcer is causing you pain or is uncomfortably itchy you can ask your health professional what can be done to help with this. Scratching the skin around your ulcer can cause damage and may slow healing.

Venous leg ulcers being wet

Venous leg ulcers can produce fluid; sometimes called exudate. This fluid is normal but your nurse will try to protect the skin around your ulcer to stop the fluid damaging it and prevent leakage onto your clothes, bandages or stockings.

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blood is
your leg
times this
ce that a

How will my venous leg ulcer be treated?

Your nurse or other treating health professional m
think this is needed. They will check the skin arou
other ointment to protect it and treat dry skin.

You are also likely to have a test done using som
This is not an invasive test, so does not involve n
process is rather it is like having your blood press
The test is important as it helps assess the blood
are able to have compression therapy, which we

Wound dressings

Whether you have compression therapy or not, y
a wound dressing. The dressing helps to protect t
absorbs wound fluid. The choice of dressing usec
things like how much wound fluid there is and wh
Your health professional may try different dressin

Compression therapy

The main treatment for venous leg ulcer is compr
compression. Compression is a way of applying

Compression bandages

Your ulcer will usually be covered by a dressing and then compression bandages placed over the top by somebody who has received special training in how to apply them. The bandages are usually left on for about a week and then changed. Your bandages should be kept on day and night and you will be able to bathe and shower in them. We talk about how this can be done below.

Bandages can sometimes become loose. If this happens, let your health professional know so they can help you.

Compression hosiery

Compression hosiery or stockings normally have two layers. A smooth under-layer and a tighter over-layer. Some people can apply stockings themselves, often using something called an applicator to help. If you (or somebody who helps you) are able to remove and re-apply your compression, and your health professional agrees, you can remove these at night and reapply them in the morning.

Venous ablation

Recent research tells us that a minor operation on your leg veins called venous ablation could help to heal venous leg ulcers and prevent them in the future. This surgery involves blocking off damaged leg veins so blood flow is diverted through veins that are better able to return blood up the legs. This surgery needs to be done in hospital by a vascular surgeon. At the moment only some people with venous leg ulcers are having this surgery but this may increase over time.

When will my venous leg ulcer heal?

Nobody can tell you exactly when ***your*** veno
number of different things that influence how
imagine 100 people with a venous leg ulcer v
approximately 50 of their leg ulcers will have
will have healed by one year.

We know that most people's ulcers will heal i
likely to take some months. We also know th
quickly it heals.

What is wearing compression like?

Compression bandages and stockings both v
you have compression bandages or stocking
used to the tight feeling but it can be difficult
with time. The tightness of the bandages or s
needed to help the blood flow in your legs.

What should I do if my compression treatment feels too tight?

If your compression therapy feels very uncomfortable or painful and/or is causing your leg or foot to swell, change colour or change feeling (for example if it gives you pins and needles), you should contact your health professional immediately using the details in the contact section at the end of this booklet.

What should I do if my compression treatment feels too loose?

It is important that you contact a nurse to come and check your compression if it feels like it is not tight enough. Sometimes your compression may even slip down your leg. If this happens you may need to have your compression reapplied so it is important to use the contact details below to arrange this.

How long will I have to wear my compression for?

Ideally, you will wear your compression treatment until your ulcer is healed. The pressure applied by your compression treatment will improve the blood flow in your legs and increase the chances of your ulcer healing.

- We would like to explore your thoughts on these findings
- Convergence and divergence, where things resonate and where things are missing
- Learning from what people are doing in other areas that may help enable activity and remove barriers.
- Are there any obvious *quick wins?*
- Are there areas that are relevant across implementation sites?

1. *What are your views on the **barriers** to optimal compression use described in the presentation*

2. *How can we **enable** best practice for compression use at the patient, staff and organisational level?*

3. *Do you think the findings here are relevant to your NWCSP implementation work?*

- Other comments, feedback etc. also welcome

Acknowledgements

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- The research team including our patient representative:
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  - Alex Barker
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Disclaimer

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