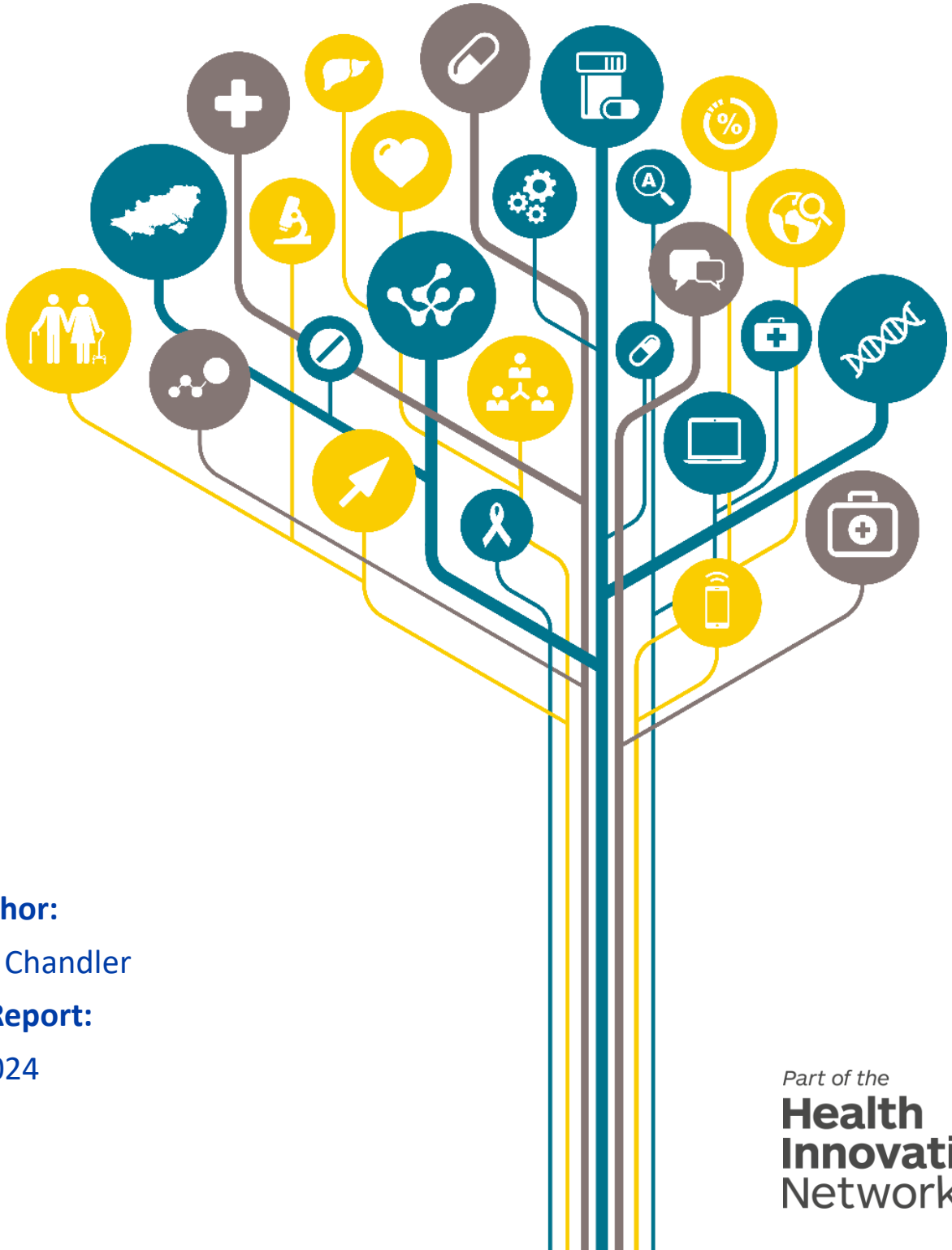
Health Innovation Wessex

The Transforming Wound Care Programme

Test and Evaluation Site case report
Lincolnshire Community Health Services NHS Trust
Skegness and Mablethorpe Integrated Community Team



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Disclaimer

This report presents the findings of an independent evaluation of Transforming Wound Care programme of which this case study forms a part. The independent evaluation was undertaken by Health Innovation Wessex (HIW). The findings of this independent evaluation are those of the author and do not necessarily represent the views of the Transforming Wound Care programme Team. Health Innovation Wessex was not involved in the roll out of the National Wound Care Strategy Programme Lower Limb Recommendations.

Declaration of Interest Statement

Health Innovation Wessex supports innovators to bring their innovations to the NHS as well as provide an evaluation service more broadly to our members and others. On occasion, we evaluate innovations that we have also supported. While these evaluations are independent, for transparency we disclose our dual role where applicable.

Acknowledgements

We would like to thank Test and Evaluation Site (TES) staff, and patients of the service, for their participation in this evaluation.

We would like to acknowledge the support of Health Innovation East in co-ordinating data collection for this evaluation.

We would like to acknowledge Health Innovation East Midlands and their project team in supporting communications and data collection with this TES.

Health Innovation Wessex

Table of Contents

TES Executive Summary

Lincoln Community Health Services NHS Trust and Skegness and Mablethorpe Integrated Community Team joined the Transforming Wound Care (TWC) programme in January 2023 as one of eight Test and Evaluation Sites (TESs) recruited by the programme. The Lincoln Community Health Service wound service is the primary community healthcare provider in Lincolnshire, delivering community-based services aimed at supporting people to manage their own health at home reducing the need for people to go into hospital. The Lincolnshire TES (referred to hereafter as Lincolnshire) launched its service in April 2023 with the objective of delivering the National Wound Care Strategy Programme (NWCSP) Lower Limb Recommendations (LLRs) through dedicated services.

Overall, Lincolnshire put a strong focus on supporting its community nursing team to deliver recommended wound care at point of care. Key issues that constrained delivery of wound care in this TES were workforce (both vacancies and staff absence) along with adequate funding to provide ongoing services to maintain leg health. It was reported that the proposed Wound Digital Management system (WMDS) has yet to deliver its potential.

At the end of the evaluation data collection period (March 2024), Lincolnshire had successfully implemented the National Wound Care Strategy Programme (NWCSP) Lower Limb Recommendations (LLRs) within its community nursing teams within the TES locality. Training had been fully implemented to equip staff to deliver the recommended care with a focus on staff engagement. Lincolnshire had also successfully automated collection of its critical metrics. Ongoing areas for focus included the use of a WMDS which remained in progress at the time of reporting.

Lincolnshire community nursing teams contributed metrics data to the programme evaluation in relation to the number of patients with a lower limb wound on their caseloads, number of new referrals receiving full assessment, proportion of patients receiving strong compression, and proportion of patients healed for lower limb wounds within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks between October 2022 to March 2024 from the monthly wound care aggregated dashboard and the TES metrics returns. The TES also contributed qualitative data in the form of staff surveys, patient cases, a focus group, and implementation trackers.

Analysis of metrics data from Lincolnshire indicated:

- The total caseload for Lincolnshire was 55[1] in September 2023 and 28 in March 2024. Notably, there is a downward trend in the number of patients with a lower limb wound on the caseload. However, it could not be established whether this reduction reflects an actual decrease in caseload or ongoing efforts to refine the cohort to meet inclusion criteria.
- Although the numbers are small there is an increase in the proportion of patients receiving strong compression from March 2023 to March 2024. Given the small numbers in the pilot and the variation in caseload numbers that could not be reconciled, it was not feasible to report healing rates within this cohort. Additionally, the site reported more assessments in certain months than referrals received due to staffing challenges which led to deferred assessments. These challenges made it difficult to interpret the assessments and the provision of strong compression in relation to healing rates.

[1] Postscript: Lincolnshire reported their data submission shows 31 for September 2023. The data received was 55 as reported here.

Qualitative data supplied by Lincolnshire (survey and focus group/interviews, patient cases) was analysed along with comparable data from the other TESs and these contributed to the development of key messages and themes at programme level. Across the TESs, qualitative findings from survey and interview/focus group data revealed that staff were committed to the aims of the TWC programme, had confidence in the programme resulting in better care, faster healing, improved outcomes, fewer appointments, anticipated net zero benefits and the positive contribution of wound management digital systems (WMDS). Challenges identified included patient lifestyle and health factors that can delay healing and reduce ability to tolerate compression. Other challenges related to engaging the wider health system, staffing and financial pressures, and logistics associated with the collection of metrics data.

Across the TESs, 100% of patient cases rated their treatment as either 'Very Good' or 'Good', 93% of patient cases understood information that they were given at their appointment. Patient cases felt staff to be friendly and approachable. Patient cases reported that staffing pressures sometimes caused appointments to be rescheduled and there were sometimes problems with availability of dressings and equipment.

1. Introduction

This case report presents an overview of findings from Lincoln Community Health Services NHS Trust and Skegness and Mablethorpe Integrated community team (hereafter referred to as 'Lincolnshire'), one of eight Test and Evaluation Sites (TESs) captured as part of the Transforming Wound Care (TWC) programme evaluation. Along with the other TESs, Lincolnshire contributed data to support a programme evaluation of the TWC programme, which was commissioned by Health Innovation East and undertaken by Health Innovation Wessex Insight team. Lincolnshire was not the focus of an individual TES-level evaluation.

Following an application process, successful TESs received funding to adopt the National Wound Care Strategy Programme (NWCSP) Lower Limb Recommendations (LLRs), supported by the TWC programme, if their locality met the criteria which included the involvement of a multi partner system with strategic engagement embedded within an Integrated Care System (ICS). The TWC programme was focused on delivering place-based wound care to align with wound care services in different geographical locations. Funding supported each TES to develop a specific lower limb wound service with foot wounds under the care of a podiatry service. The role of TESs was to deliver the NWCSP LLRs through dedicated services, via changes to the model of care delivery. TESs were asked to run a monthly audit of a predefined set of metrics and take part in a programme evaluation including supporting the collection of patient cases, staff interviews or focus groups, survey, and implementation information. All data collection was completed by 31 March 2024. Each TES commenced their programme of work at different times during the TWC programme.

Data contributed by Lincolnshire was used to address evaluation questions at a programme level rather than to evaluate and fully describe activities undertaken within Lincolnshire. This has shaped the way that data has been analysed (as described below); it has not been possible to draw conclusions or implications at the level of individual TESs.

This case report describes Lincolnshire TES, its context and the approach taken to implement the NWCSP LLRs. A description of the data that the TES contributed to the programme evaluation is provided. Findings from the analysis of metrics data provided by Lincolnshire are included. Qualitative data supplied by Lincolnshire (survey and focus group/interviews, patient cases) was analysed along with comparable data from the other TESs and these contributed to the development of key messages and themes at programme level. Qualitative findings from surveys, patient cases, interviews and focus groups are reported at programme level only, with illustrative quotes specific to Lincolnshire included where possible. Conclusions and implications of the evaluation findings have not been identified at the level of each TES; those arising from the overall programme evaluation are included for information.

It is recommended that this case report is read in conjunction with the programme level executive summary, programme report and accompanying technical reports[2].

2. Case summary

Lincoln Community Health Services NHS Trust and Skegness and Mablethorpe Integrated Community joined the TWC programme in January 2023. Lincolnshire wound service is the primary community healthcare provider in Lincolnshire, delivering community-based services aimed at supporting people to manage their own health at home reducing the need for people to go into hospital. Lincolnshire launched its service in April 2023.

The project team for the Lincolnshire TES comprised divisional leads, matrons, clinical team leads, community nursing leads and nurses, project support officers' transformation team, tissue viability nurses, digital health team leads and data analysts, deputy director of operations and nursing, financial business intelligence (FBI) data and data Protection Officer.

3. Local context for lower limb wound care

The context for lower limb wound care in Lincolnshire is described in terms of the features of the locality covered by the TES and its local health system infrastructure.

3.1. Lincolnshire locality description

Skegness and Mablethorpe community nursing team were the chosen TES with a population coverage of 60,444 rising to 73,000 in the summer months and more significantly with deprivation being 92.6% of the population in the most deprived quintile (Public Health Intelligence, 2022).

This area is covered by Lincoln First Coastal Primary Care Network (PCN), one of 14 covering Lincolnshire. First Coastal has a lower life expectancy (78.3 years) than Lincolnshire as a whole (81.6 years). Premature mortality is higher in First Coastal (501 per 100k) than the rest of Lincolnshire (325.6 per 100k). The proportion of children and young people is lower in this area of Lincolnshire with a higher proportion of people over 70 years of age. A general description of this locality is that over a third of it is rural with villages and outlying houses, populated by older people, many of whom live alone on low incomes and whose access and preferences for technology use need consideration. For this PCN, projected patient list size is expected to increase by 9% between 2022 (n=52,568) and 2035 (n=57,294). However, the greater implication for both the PCN and wound care services is that the older population will increase in the same period by 29.2% and the working age population will decrease by -0.5%[3].

[2] Technical appendices:
Technical report 1: Staff survey
Technical report 2: Patient cases
Technical report 3: Staff interviews and focus groups
Technical report 4: Implementation tracker
Technical report 5: Implementation of metrics
Technical report 6: Quantitative metrics

[3] Source: NHS Digital – Patients Registered at a GP practice March 2022 and ONS Population Projections 2022.

Coastal areas and places in northern England have a higher proportion of people over 65. Lincolnshire has a high proportion of older people compared to other areas in the East Midlands. An older population is at greater risk of lower limb wounds. Also given age as one factor, people living in rural and coastal areas may have difficulty accessing clinics. Other categories of people who might need lower limb wound care services include those:

- without homes,
- with a range of disabilities who may face barriers accessing information, services, and self-care,
- misusing substances who are at risk of lower limb wounds and may not access services, and
- with lower health literacy who may not access information and services.

The TES's home-based service is likely to benefit most of these groups. For those not able to self-care, regular home-based wound care appointments are required. Demographic data for the evaluation was only available from the patient cases.

3.2. Local health system infrastructure and status

This TES focussed on a single team and area of community nursing in the Skegness and Mapplethorpe First Coastal PCN area. The TES team had staff vacancies and community nursing reported NHS Operational Pressure levels (OPEL) at level three and four numerous times throughout delivery of the TWC programme which impacted on care delivery.

3.3. TES objectives and service delivery and implementation plan

Following the systems mapping exercise (See TWC programme report for further information) and access to project plans the following were identified as key areas for implementation.

- Staff engagement to promote uptake of NWCSP recommendations.
- Delivery of the proposed TWC programme standardised metrics.
- Implementation of a wound care digital management system.

Lincolnshire focused its objectives within the first six months of the project on assessing 80% of patients by Tier 2 trained staff within 14 days and putting a personalised patient care plan in place; and ensuring that the patient understands this care plan and takes ownership.

Key criteria for inclusion in the TES reporting:

- Housebound patients including those in care homes.
- Active on the caseload.
- No diabetic diagnosis (either diet or medication controlled).
- Wound needs are on the Malleolus or above (not foot).
- New patients to caseload.

Lincolnshire began implementing Tier 1 and 2 training as "essential for role" before becoming a TES. This is the eLearning for Healthcare (ELFH) training provided. They also had three-day lower limb training available to all registered clinicians. The TES expected to deliver Tier 1, 2, 3 education plans with 50% of staff trained to Tier 1 level by 1 March 2023. Training was mandated and time protected. The intention was that the remaining 50% of staff would be Tier 1 trained by 1 May 2023 and that

between 2 or more would be identified for Tier 2 training and allocated time for this to be completed. No plans for tier 3 training as it is for the specialist service.

3.3.1. Pathway for housebound patients

The patient pathway agreed in the project plan was acceptance of referral to a full assessment by a Tier 2 trained staff member within 14 days and personalised plan completed. Follow-up care was completed by Tier 1 trained staff members. Discussions at the early planning stage involved the possibility of creating a virtual clinic to bring together different lead specialists (e.g. podiatry, leg ulcer) to offer a more holistic approach and improve patient experience.

4. Data contributed to the evaluation

The following summarises any specific adaptations to the methods outlined in the TWC programme report and the technical reports for the different sources of data. Also detailed is the contribution of this TES to the different data collection activities.

4.1. Metrics data

The metrics data in this case report refers to the number of patients with a lower limb wound on caseload, number of new referrals receiving full assessment, proportion of patients receiving strong compression, and proportion of patients healed for lower limb wounds within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks between January 2023 to March 2024 from the monthly wound care aggregated dashboard and the TES metrics returns.

For Lincolnshire, all monthly submissions covered most of the six critical metrics (and 17 data collection points). Table 1 presents how each metric was scoped, collected, and the caveats emphasised by the TES. When interpreting the findings, it is crucial to account for these caveats to ensure an accurate understanding of the metrics and their implications.

Table 1 Lincolnshire metrics reporting

Metric	Lincolnshire
Lower limb wound caseload within community services (TWC001A)	Yes, two data points missing.
Foot wound referrals for new assessment (TWC002A)	Out of Scope.
Lower leg wound referrals for new assessment (TWC002B)	Yes
Foot wounds patients receiving full assessment (TWC003A)	Out of Scope.
Lower leg wound patients receiving full assessment (TWC003B)	Yes
Foot wounds receiving full care (TWC004A)	Out of Scope.
Lower leg wounds receiving full care (TWC004B)	Yes
Lower leg wounds treated with strong compression (TWC010)	Yes, reported from March 2023 to March 2024 only.

Wounds healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks for lower leg wounds (TWC011A-H) (TWC011A-D are for lower leg wounds and TWC011E-H are for foot wounds)	Yes, reported by patients from March 2023 to March 2024. Foot wounds Out of Scope.

4.2. Qualitative data

Qualitative data refers to patient cases, staff interviews, focus groups, staff survey, and implementation trackers that captured TESs' delivery of planned service changes to meet the NWCSP LLRs.

Table 2 Lincolnshire contribution, and adaptations, by qualitative data source

Data source	TES contribution	Adaptation
Survey	Surveys were sent to 13 clinical staff and two data analysts.	None.
Patient cases	Three patient cases with repeated contact recorded.	Patient case questionnaires were supplemented by the provision of clinical case studies for each of the three patients, providing additional details on their care.
Staff interviews or focus groups	Three staff interviews	None.
Implementation tracker	For three months.	None.

5. Analysis approach

As described above, some data contributed by TESs was analysed at TES level and some (survey, patient cases and interviews/focus groups) was analysed at programme level. Table 1 below is included to explain these differences in approach.

Table 1 Analysis conducted by TES or programme level

Data source	Level of analysis (TES or Programme level) and reason	Included in findings (section 6):
Metrics data	TES level, due to the way data was collected and submitted.	TES level, see **Findings from metrics data**.
Survey	Programme level because of the detailed nature of the data collection tool which generated a substantial body of findings at programme level.	Programme level with returns information provided at TES level, see **Box 1**.
Patient cases	Both programme and TES level. This was possible due to the concise nature of the data	Programme level to protect anonymity of patients (due to small numbers involved), see **Figure 5** with some descriptive data shared at TES level.

	collection tool (patient case questionnaire).	
Staff interviews and focus groups	The main analysis was conducted at programme level to generate themes relevant to all TESs.	Programme level, see **Box 2** with supplementary TES level quotes/points included where possible.
Implementation tracker	TES level due to the way the data was submitted. Some common themes were identified across TESs.	TES level, see **Findings from the implementation tracker**.

6. Findings

The following presents a high-level view of data that Lincolnshire contributed to the programme evaluation in a series of graphs depicting findings at the TES level.

6.1. Findings from metrics data

The following section presents a high-level view of metrics data that Lincolnshire contributed to the programme evaluation in a series of graphs depicting findings at the TES level.

The collection of standardised metrics is a major part of ensuring both the delivery and successful implementation of NWCSP recommendations and improvements to patient care. As part of the evaluation, information was gathered on implementation progress and issues that arose to ensure the data collection points were captured. A full report across all sites is provided at technical report 5. Lincolnshire identified 13 (out of 17) data collection points within the scope of their site, and nine out of the agreed data collection points were reported by March 2024. Further details about the metrics for Lincolnshire are provided in Appendices 1 and 2.

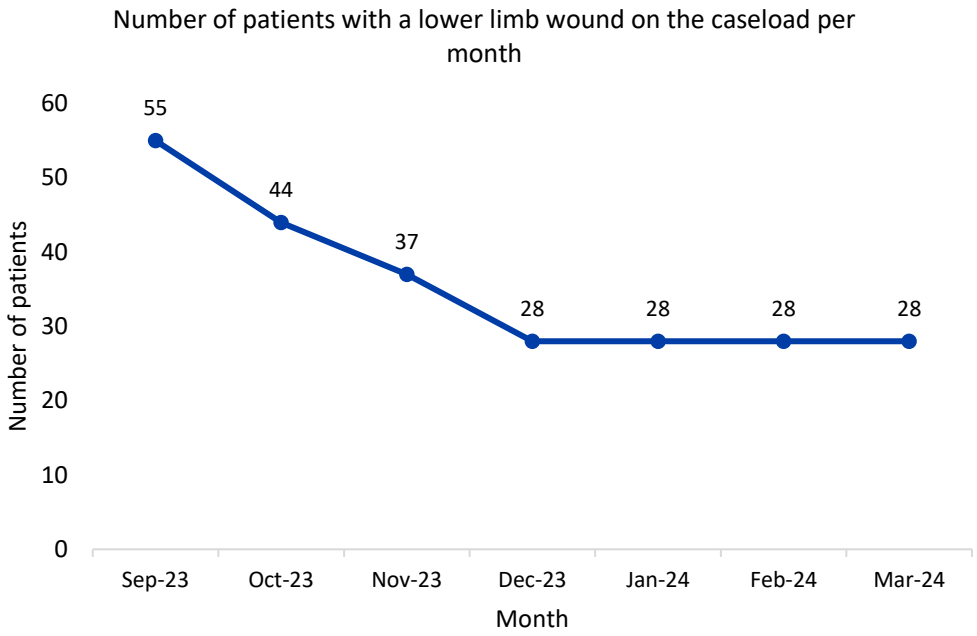

Figure 1 Number of patients with a lower limb wound on the caseload per month[4]

Data on the number of patients with a lower limb wound on the caseload was available between January 2023 and March 2024, except for July and August 2023. During this period, a caseload review led to the removal of some patients. Therefore, the data presented covers September 2023 to March 2024. Notably, there is a downward trend in the number of patients with a lower limb wound on the caseload (**Figure 1**). However, it could not be established whether this reduction reflects an actual decrease in caseload or ongoing efforts to refine the cohort to meet inclusion criteria.

[4] Postscript: Lincolnshire reported their data submission shows 31 for September 2023. The data received was 55 as reported here.

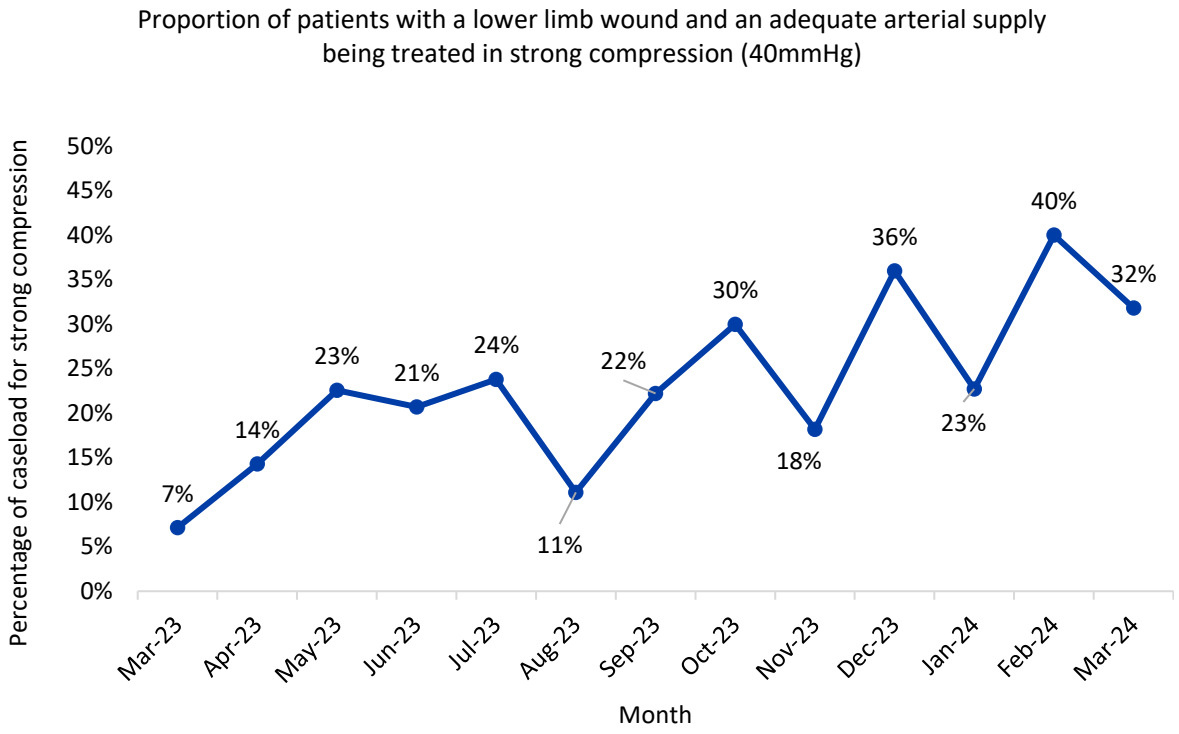

Figure 2 Proportion of patients with a lower limb wound and an adequate arterial supply, where no aetiology other than venous insufficiency is suspected, being treated in strong compression (40mmHg)

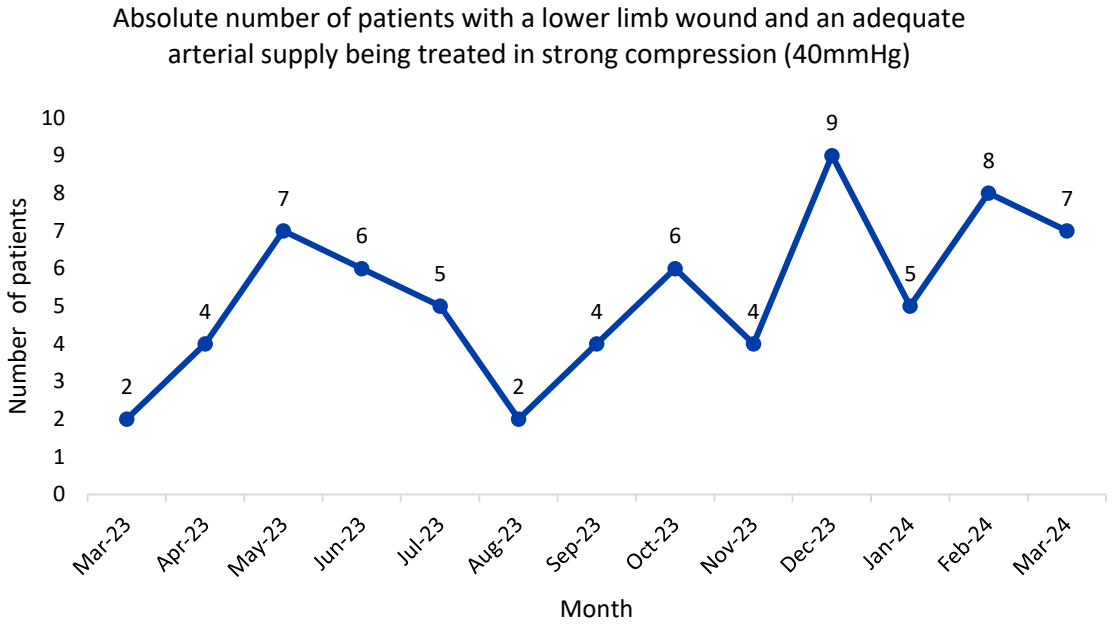

Figure 3 Absolute number of patients with a lower limb wound and an adequate arterial supply, where no aetiology other than venous insufficiency is suspected, being treated in strong compression (40mmHg)

Although the numbers are small (caseload for strong compression was less than 9), an increase in the number and the proportion of patients receiving strong compression from March 2023 to March 2024 has shown the implementation of strong compression has been carried out throughout the data capture period. While not confirmed by the site (for metric TWC010 specifically), the decline in percentage observed in August 2023 may be attributed to factors such as case reviews leading to overall reductions in numbers, and potential staff capacity issues due to system pressures, making accurate data reporting challenging for the site[5]. Appendix 2 describes the site's interpretation of their metrics narrative.

Given the small numbers in the pilot and the variation in caseload numbers that could not be reconciled, it was not feasible to report healing rates within this cohort. Additionally, the site reported more assessments in certain months than referrals received due to staffing challenges which led to deferred assessments. These challenges made it difficult to interpret the assessments and the provision of strong compression in relation to healing rates. However, **Figure 4** shows as an illustration of the healing rate analysis instead of actual results as the number are too small to be representative. Additionally, there are several months with no bars, where no wounds were reported healed during that month.

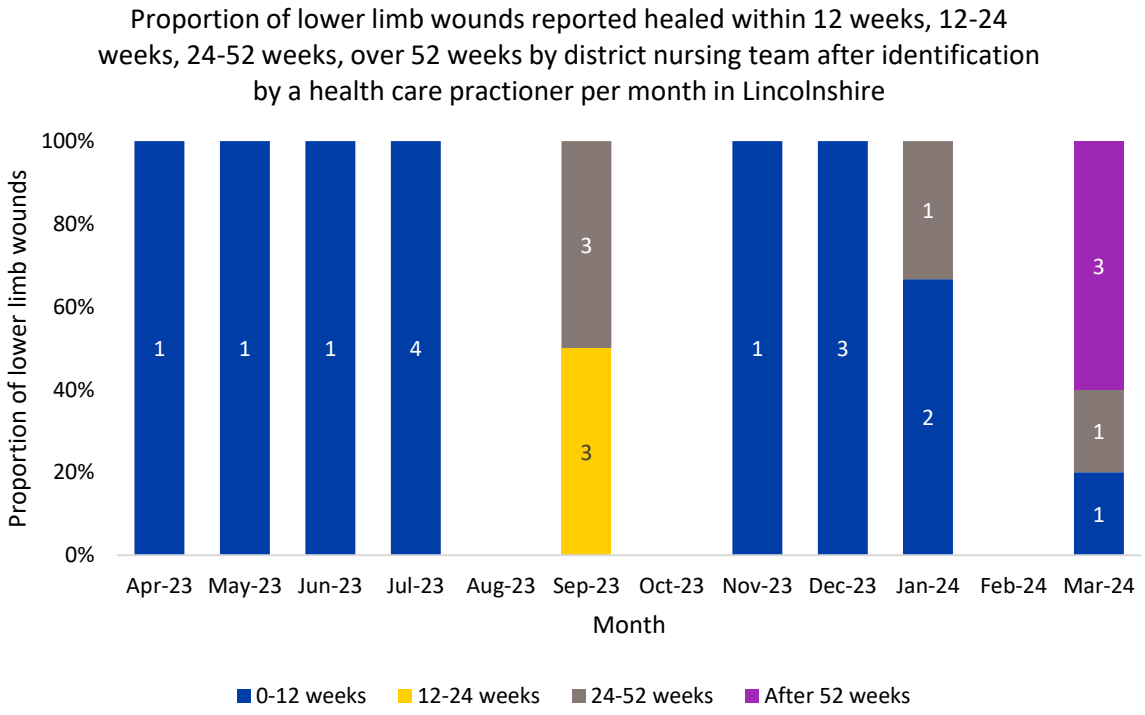

Figure 4 Proportion of lower limb wounds reported healed within 12 weeks, 12-24 weeks, 24-52 weeks, after 52 weeks by district nursing team after identification by a health care practitioner per month in Lincolnshire

[5] Postscript: The Lincolnshire TES confirmed that "the decline in August was due to staff capacity and OPEL levels across all integrated care teams".

6.2. Findings from staff surveys

Lincolnshire staff returned five surveys (from a distribution of 15 surveys, a 33% response rate). Findings from the survey are presented at a programme level rather than at TES level due to the analytical approach taken for the evaluation. **Box 1** highlights key findings that emerged from the survey across all TESs (programme level evaluation), divided into 'key points', 'successes' and 'challenges'.

Box 1 Overview of programme level survey findings

Key points

- The survey covered a range of topics related to the implementation of the National Wound Care Strategy Programme (NWCSP) Lower Limb Recommendations (LLRs).
- A total of 523 staff across all TESs were invited to complete the survey and 100 responses were received.
- Overall, the survey responses show positive perceptions of the transformation of lower limb wound care and services.

Successes

- Staff observed improvement in patients' healing rates and reduction in recurrence of wounds.
- Input from tissue viability nurses (if locally available) was a valuable source of specialist training, advice and support for colleagues.
- Overall, responses on the experience of wound care training (e-learning and/or face-to-face) showed that training gave staff more confidence in providing wound care.
- The two common components of the NWCSP LLRs implemented in TESs were:
  1. Immediate and necessary care.
  2. Compression therapy (both mild and strong compression).
- The key impact of using technology (Wound Management Digital System or any other technologies) was the improved oversight of patient care with accurate and consistent clinical recording.
- Staff appreciated the continuous support from the local health innovation network and TWC Central Team.

Challenges

- Limited or reduced workforce capacity was the most reported barrier to the implementation of the NWCSP LLRs.
- A small proportion of patients do not engage well with self-care mainly due to their intolerance of compression treatment.
- The complex nature of wound management, often involving several health and care providers to address patients with multiple comorbidities, was also highlighted as challenging.
- Ensuring data accuracy and time required for data collation were the two most reported challenges with metrics reporting.

6.3. Findings from patient cases

Lincolnshire provided three patient cases. All were female and two were 75+ years. Two had a venous wound and one had mixed venous and arterial. They were either foot or leg wounds. They were from deprivation categories between IMD 4 to 5. All were seen within two weeks and received between three to four follow-up visits. Two received wound dressings. All three patients' wounds healed in the evaluation data collection period and patients were very positive about their treatment. **Figure 5** below shows an overview of findings from patient cases across all TESs (programme level).

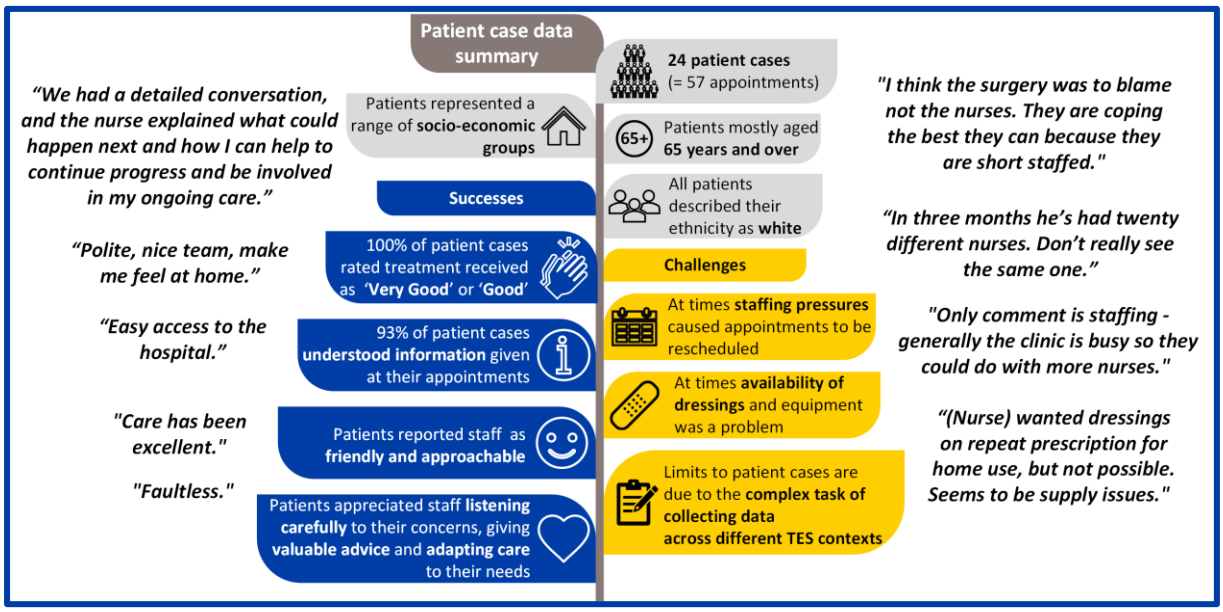

Figure 5 Summary of programme level patient case data with quotes

6.4. Findings from staff interviews and focus groups

Box 2 below highlights key themes that emerged from analysis of the data from the staff interviews and focus groups across all eight TESs (programme level evaluation), divided into 'successes' and 'challenges'. The key points explain the approach taken to data collection and analysis.

Box 2 Summary of programme level findings from all staff interviews and focus groups

Key points

- The Health Innovation Wessex Insight team conducted 16 interviews and four focus groups with key staff from each TES.
- The TWC programme's key enablers of implementation i.e. people (patients and staff), processes, and technology and data, were used to broadly organise the coding of the interview transcripts.
- Following coding, thematic analysis was carried out to derive key categories from the data.

Successes

- Staff expressed enthusiasm and commitment to the TWC programme aims of starting patients in compression earlier and ensuring consistent pathways
- The need for staff expertise to deal with the complicated field of wound care was acknowledged and training to upskill those delivering care was being delivered across all TES.
- Staff reported feeling confident that patients are getting better care, and that this is leading to faster healing, improved outcomes, and fewer appointments needed per patient.
- Staff anticipated environmental net zero benefits resulting from the new pathways e.g. fewer appointments for district nurses, fewer miles travelled etc and cited some efficiency savings.
- With regards to technology and data, staff recognised that high-quality data could answer important questions about service delivery.
- Positive comments relating to wound management digital systems included improved quality of images, images can be uploaded straight to patients' notes and faster referral processes.

Challenges

- Patient factors: Lifestyle and general health factors that can work against healing and treatment adherence (such as co-morbidities, obesity, low literacy) as well as resistance to strong compression for reasons of discomfort or lack of belief it will work. This resistance can be mitigated by building trust over time in the nurse-patient relationship.
- System challenges: These included challenges related to engagement and involvement with the wider system beyond the immediate TES, staffing, supply of dressings, and financially challenged systems with competing priorities.
- Technology and data: These challenges focused on difficulties related to the collection of metrics and the implementation of wound management digital systems.

Lincolnshire staff explained that the programme has provided an opportunity to tackle the backlog of patients on their caseload. This has been achieved by providing more capacity to support the prioritisation of lower limb wound care,

> *"TWC, that takes a priority to me. It's given as a priority to me and my colleague that are actually on the TWC project. Whereas, if it was somebody else, they might have moved that to a different day, but we're told that we're under, while really, we should be given the time by our management to allow this project".* Lincolnshire interview 3

Benefits of the WMDS not yet installed are anticipated, particularly given the limitations of a standard phone,

> *"If we can get the system where we are, then we can do it ... live in the home, but that doesn't always work depending on the area that you're in. There's also mobile working, and if that doesn't crash-- it doesn't always crash, so we can do it on there, but that's a bit slower, and then you just upload that. Things like your pictures and things like that, you would normally have to do that back at the office".* Lincolnshire interview 1 (Lincolnshire Community Nurse)

Compression was highlighted as a particular focus for patient resistance There is a difference in acceptance and adherence when a patient has no prior experience of compression to someone that has previously experienced strong compression,

> *"…they have been offered compression before. They've come onto the books. Maybe they've broken down, they've come onto the-- and they're like, "Oh, yes, we can put them on the TWC caseload," but because they've had compression on in the past and they weren't explained about the benefits of compression, the first two weeks will be increased pain and exudate. There wasn't that conversation. They'll just automatically, "I'm not putting that on."* Lincolnshire interview 2

Some patients have been on the caseload long term and require maintenance to prevent reoccurrence of the lower limb wound. This requires an additional service (referred to as a 'well-leg clinic') that is not yet in place,

> *"Some people also, it's lifelong. We are just helping that circulation with a hosiery garment or bandage. When they've healed, they haven't suddenly miraculously their veins are going to start pumping and be absolutely fine. It is a lifelong wearing the hosiery, and that sometimes is explained. Then in the future, we need to make sure that we have a well-leg clinic because that's something we don't have".* Lincolnshire interview 2

Lincolnshire is a large county and therefore the community service is stretched geographically. According to the TES, there should be ten tissue viability nurses covering the whole area, however at the time of interview (September 2023), there were only three tissue viability nurses with a fourth starting imminently. The role involves a lot of travelling to provide specialist care across the area.

- Tissue viability nurses provide additional training to the standard training provision and also support assessing staff competencies. For tissue viability nurses, training is advanced.
- A key objective of the Lincolnshire TES was to develop better staff engagement, and this has included the BeSafe meetings. These are daily handover and feedback meetings which also provide opportunities for teaching.

6.5. Findings from the implementation tracker

Implementation trackers were collected and analysed by each TES. As such, this summary relates specifically to Lincolnshire. A review of the implementation tracker across the period September to October 2023 (monthly) with an update in January 2024 revealed the following progress against the defined milestones.

- **Delivery of a wound care digital management system** – this was not implemented because it was awaiting final integration with SystmOne before rolling it out. Although roll-out was ready to commence this was not seen as viable given the changes staff would need to make to their practice. Therefore, staff continued to use the current system on their mobile phones.
- Staff engagement to promote uptake of NWCSP LLRs as part of this programme, **four key interventions sought to embed good wound care practice** as business as usual:
    - **Use of video meetings**, however staffing remained a key issue with loss of clinical team leader, sickness amongst other key staff and general lack of staff to cover all sites. This impacted on maintaining consistency of wound care practice.
    - **Television screen installed to provide prompts and information** to clinical staff at both the community nurse base at Skegness hospital and Marisco Medical Practice. There were some technical issues with these screens.
    - Most recently **a specific dashboard on the SharePoint** was implemented to keep clinical staff up to date across all sites on progress and feedback data on healing rates and other metrics. It is regarded as a motivational tool as well as staff understanding the benefits of metric data collection.
    - Senior staff tried to ensure consistency of practice across all sites and noted that some clinical staff needed to ensure their cars were stocked with appropriate dressings before undertaking visits, **WhatsApp group set up as a reminder system**.
- Other concerns raised related to healed patients who are returned to primary care, as some practice staff are not trained to use Doppler tests as part of the assessment and there were concerns regarding risk of wound breakdown. There was a gap in provision for local "ongoing care" services (e.g. Well leg clinics). A key factor was the commissioning and funding of these services. Well leg clinics were seen as providing a socialising environment. However, a previous local model supported by volunteers including refreshments, conversation and patient education was closed due to lack of funding.

7. Programme level conclusions

The following conclusions are drawn from programme level analysis and are not specific to the TES (for reasons described above).

Overall, the healing rate for wounds for the period October 2023 to March 2024 showed a steady increase in the number of wounds healed within 12 weeks. Patient healing rates varied between 53% and 78% recorded as healed within 12 weeks. It was not possible to show a clear correlation between early assessment, application of strong compression and wound healing rates to support implementation of the proposed care pathways due to data quality issues and the lack of suitable baseline data.

Other findings from qualitative data support TWC programme implementation success. Staff were committed to its aims, had confidence in the programme resulting in better care, faster healing,

improved outcomes and fewer appointments, anticipated net zero benefits and the positive contribution of wound management digital systems (WMDS). Challenges identified included patient lifestyle and health factors that can delay healing and reduce ability to tolerate compression. Other challenges related to engaging the wider health system, staffing and financial pressures, and logistics associated with the collection of metrics data and implementation of WMDSs.

8. Programme level implications

The following implications are drawn from programme level analysis and are not specific to the TES (for reasons described above).

8.1. Implications for lower limb wound care practice

1. The scale up and spread of the necessary improvements to wound care and the delivery of dedicated wound care services across the NHS requires a significant implementation effort, associated resources and sustained support over time to embed changes in practice. Exemplified by the TWC programme this includes strategic leadership; financial support; coordination of activities; community of practice; guidance and an implementation toolkit and expert facilitation.
2. Staff willingness to deliver effective care was countered by contextual pressures that prevented wider engagement and delivery of best clinical practice. The extent to which an improvement programme is actively managed and facilitated was shown to be a critical factor in explaining implementation success.
3. Programme level findings indicate that patient factors can inhibit opportunities for effective lower limb wound care due to co-morbidities, intolerance for strong compression and the inability of some patients to support self-care. Greater effort and time to build trust with patients are strategies that staff employ to manage wound care in these cases, and therefore the need for greater staff capacity and time to manage this area of care is highlighted.
4. Programme level findings show that whilst supporting digital solutions such as WMDSs is viewed as providing benefits, they also present adoption challenges when integrating this technology at local systems' level. This indicates the need for further development and assistance to services in this area.
5. To ensure that investment in implementation is making a difference, data monitoring should be continued.
6. Automated data collection supported by point of care reporting needs to become embedded and routinised into local systems and may need more resources.

8.2. Implications for future evaluations and metrics data collection

1. Low patient participation in the evaluation resulted in an imbalance of patient perspectives. Purposive sampling of specific patient groups to better understand inequalities should be considered in future.
2. To ensure implementation investment is making a difference, there is a need to embed automated data collection into local systems and in addition support provided to clinical staff collecting data during patient contacts.

3. The collection of demographic data on patients receiving wound care would enable an assessment of the extent to which services are addressing inequalities.

Version Control

Version	Status	Key Changes	Authorised by
Version 1 October 2024	Circulated to TES for comment.		
Version 2 November 2024	Live	Final amendments completed.	Philippa Darnton

Appendix 1: Metrics reported by patient or wound

Table 4 Metrics reported by patient or wound: Lincolnshire

Metric code	Abbreviated metric name	Reported by patient or wound
TWC001A	Lower limb wound patients in community services.	Patient
TWC002A	Foot wound referrals for new assessment.	Patient
TWC002B	Lower leg wound referrals for new assessment.	Patient
TWC003B	Lower leg wound patients receiving full assessment.	Patient
TWC010	Lower leg wounds treated with strong compression.	Patient
TWC011A	Wounds healed within 12 weeks.	Patient
TWC011B	Wounds healed within 12-24 weeks.	Patient
TWC011C	Wounds healed within 24-52 weeks.	Patient
TWC011D	Wounds healed after 52 weeks.	Patient

Appendix 2: Commentary on critical metrics and data points collated by Lincolnshire

Table 1 Commentary on critical metrics and data collection points collated by Lincolnshire

Lincolnshire	In scope data points collated by March 2024: 9	In scope data points not collated by March 2024: 4
Metrics collated by patient or wound	Report by patients.	
Biggest challenge	Staff training and capacity that caused issues with how the data was reported (not ticking the data entry field on the TES's EPR system template).	
Key points to note	Caseload: Cohort for the pilot team (total number of lower leg wounds but diabetics and foot excluded). • An ongoing issue with staff capacity at the TES that has impacted staff completing Tier 2 [6]training. Due to staff being ill or leaving, staff availability has ultimately impacted the number of patients seen in the service. The TES aimed to complete all staff training by January 2024. • In April 2023, the data collection team reported to have difficulty pulling the data required for the metrics and were continuing to pull the data manually until October 2023, when a template was introduced. Nevertheless, the TES reported ongoing challenges for some staff understanding how to complete the template correctly, resulting in data quality concerns. For example, lower leg wounds treated with strong compression (TWC010) numbers each month reflected this (June 2023, 6 patients, March 2024, 7 patients). Although non-compliance was reported to be high due to staff confidence and informing patients about the benefits of compression. • In July 2023, there was a decrease in the number of patients on the caseload (TWC001A). This was due to a caseload review and removing diabetic patients (part of TES exclusion criteria), a patient's wound had healed, and two patients died (June 2023, 48 patients, July and August 2023, 0 patients, September 2023, 55 patients). However, it was also reported that this caseload review and reporting no patients in July and August was due to staff capacity and no data being collected.	

[6] The National Wound Care Core Capabilities Framework for England sets out the requisite wound care knowledge and skills for the workforce. There are three tiers of training ranging from essential to advanced wound care education.

	• The conversion from lower leg referral to full assessment was due to capacity and demand and reflected system pressures and the ability to deliver assessment and care in line with the recommendations (TWC002B and TWC003B). Although due to reduced staff capacity and being understaffed, the number of referrals does not match the number of assessments (higher number of assessments to referrals). Patients were on a waitlist to be assessed e.g. May 2023 referral 3, full assessment 9, July 2023 referral 2, full assessment 7). • The TES reported an ongoing challenge recording healed patients (TWC011). This challenge was due to limited staff capacity and training (not completing the template correctly to indicate a patient is healed). • In terms of future implementation, they aim to roll out three teams at the beginning June 2024 to spread across the whole of Lincolnshire.