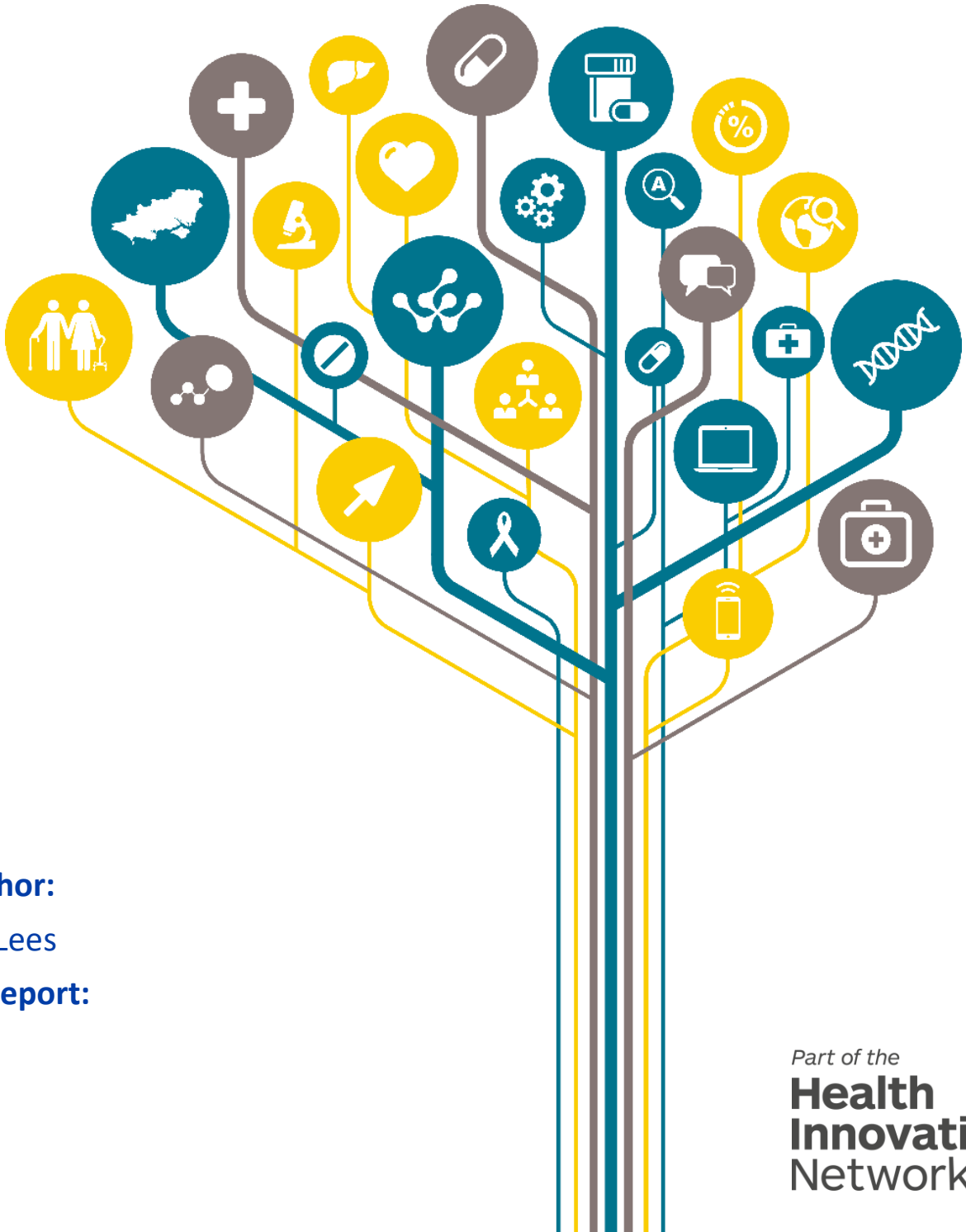
Health Innovation Wessex

The Transforming Wound Care Programme

Test and Evaluation Site case report
The Bromley Healthcare Community Interest Company (CIC) Ltd



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Date of Report:

25/11/24

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Disclaimer

This report presents the findings of an independent evaluation of the Transforming Wound Care (TWC) 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 Network South London and their project team in supporting communications and data collection with this TES.

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TES Executive summary

Bromley Healthcare Community Interest Company (CIC) Limited (hereafter referred to as 'Bromley Healthcare') is a social enterprise that provides community healthcare services for people of all ages across Bromley, Bexley, Greenwich and Lewisham[1]. The Transforming Wound Care (TWC) project team comprised clinicians, operational directors and managers, business intelligence and the digital team from within Bromley Healthcare and was supported by Health Innovation Network South London (HIN SL).

Bromley Healthcare joined the Transforming Wound Care (TWC) programme as a Test and Evaluation Site (TES) in September 2022 with the objective of delivering the National Wound Care Strategy Programme (NWCSP) Lower Limb Recommendations (LLRs) through dedicated services. The lower limb wound pathway encompasses identification, assessment, treatment, and maintenance for both ambulatory patients within a clinic setting and non-ambulatory patients within the home. The new pathway was launched in four District Nursing neighbourhoods and operational on 14 February 2023. The pathway was launched in Tissue Viability clinics prior to joining the TWC programme. A Wound Management Digital System (WMDS) was implemented for an initial 12-month pilot (35 licenses) within Tissue Viability, Podiatry, and one District Nursing team. It was expanded to a second District Nursing team in December 2023. A business case was developed for year-two funding.

At the end of the evaluation data collection period (March 2024), Bromley Healthcare had successfully implemented the NWCSP LLRs within four District Nursing neighbourhoods. Training had been rolled out to equip staff to deliver the recommended care. Ongoing areas for focus included the use of a WMDS as business as usual (pending outcome of business case for year two funding), development of pathways for education and referrals from primary care, and the development of processes for ongoing care (post discharge).

Bromley Healthcare District Nursing and Tissue Viability 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 Bromley Healthcare indicated:

- The total caseload for Bromley Healthcare has progressed from 269 in October 2022 to 321 in March 2024, showing an upward trend from October 2022 to November 2023, followed by a downward trend linked to case load review.
- A decrease of new referrals for lower leg wounds was observed in District Nursing from September 2023 to March 2024.
- Despite an increase in the number of patients receiving full assessments by District Nursing, the percentage of patients receiving strong compression remained below 30%. In contrast, the Tissue Viability team reported significantly higher rates of strong compression. The team provided strong compression to 162 patients and for 74%-85% of suitable patients each month.

[1] About - Bromley Healthcare

- Between September 2023 to March 2024, the District Nursing team reported 454 wounds healed, with an overall reduction in wounds recorded as unhealed from 519 in October 2023 to 430 in March 2024.
- The Tissue Viability team reported all patients healed within 12 weeks for four of the seven months' data collection. The Tissue Viability team recorded a total of 39 patients healed from September 2023 to March 2024, which equates to 84% of patients reported healed within 12 weeks.

Qualitative data supplied by Bromley Healthcare (survey, focus group/interviews and 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 across the TESs 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 (WMDSs). 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 Bromley Healthcare Community Interest Company (CIC) Limited (hereafter referred to as 'Bromley Healthcare'), one of eight Test and Evaluation Sites (TESs) captured as part of the Transforming Wound Care (TWC) programme evaluation. Along with the other TESs, Bromley Healthcare 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. Bromley Healthcare 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 Bromley Healthcare was used to address evaluation questions at a programme level rather than to evaluate and fully describe activities undertaken within Bromley Healthcare. 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 Bromley Healthcare 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 Bromley Healthcare are included. Qualitative data supplied by Bromley Healthcare (survey, focus group/interviews and 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 Bromley Healthcare 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] 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

2. Case summary

Bromley Healthcare is a social enterprise that provides community healthcare services for people of all ages across Bromley, Bexley, Greenwich and Lewisham[3]. The project team comprised clinicians, operational directors and managers, business intelligence and the digital team from within Bromley Healthcare and was supported by Health Innovation Network South London (HIN SL).

Bromley Healthcare joined the TWC programme in September 2022. The lower limb wound pathway encompasses identification, assessment, treatment, and maintenance for both ambulatory patients within a clinic setting and non-ambulatory patients within the home. The pathway was launched in four District Nursing neighbourhoods and operational on 14 February 2023. The pathway was launched in Tissue Viability clinics prior to joining the TWC programme.

A Wound Management Digital System (WMDS) was implemented for an initial 12-month pilot (35 licenses) within Tissue Viability, Podiatry, and one District Nursing team. It was expanded to a second District Nursing team in December 2023. A business case was developed for year-two funding.

At the end of the evaluation data collection period (March 2024), Bromley Healthcare had successfully implemented the NWCSP LLRs within four District Nursing neighbourhoods. Training had been rolled out to equip staff to deliver the recommended care. Ongoing areas for focus included the use of a WMDS as business as usual (pending outcome of business case for year two funding), development of pathways for education and referrals from primary care, and the development of processes for ongoing care (post discharge).

3. Local context for lower limb wound care

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

3.1. Bromley locality description

Bromley is the largest London Borough (59 square miles) with a population of 330,000. It is a rural borough with densely populated areas and pockets of deprivation. While Bromley is a relatively prosperous area, the communities within Bromley differ substantially. Northwest and northeast Bromley have the highest levels of deprivation, while central and south Bromley have much lower levels. The most deprived areas include Cray Valley West, Mottingham and Chislehurst North, Cray Valley East, Crystal Palace, and Penge and Cator. Bromley has a predominately white population (76.5%), which is high amongst London Boroughs. It has a Gypsy Traveller community, of whom the majority live in the Cray Valley wards, with another 10% in the Orpington ward. People aged 65 and above make up 17.6% of Bromley's population, and the median age is 41. Bromley has a higher-than-average percentage of households with dependent children[4].

[3] About - Bromley Healthcare

[4] Demographic figures have been accessed from the Bromley Joint Strategic Needs Assessment, 2021 Demography JSNA Chapter Update 2021 (bromley.gov.uk) and 2021 census data How life has changed in Bromley: Census 2021 (ons.gov.uk)

3.2. Local health system infrastructure

Bromley Healthcare introduced the NWCSP LLRs within pre-existing Tissue Viability clinics and four District Nursing neighbourhoods already serving the local population.

For non-ambulatory (housebound) patients, the lower limb wound pathway is delivered by District Nursing neighbourhood teams across Beckenham/Penge, Orpington/Crays, Five Elms/Hayes Wick and MDC (Mottingham, Downham & Chislehurst)/Mid-Bromley. For ambulatory patients the service is offered within four leg ulcer clinics (Beckenham, Chislehurst, Orpington and Biggin Hill) run by the Tissue Viability team. Referrals are accepted from 42 GP practices. Practice nurses within GP surgeries also offer dressing change appointments. The service interacts with Podiatry services for the treatment of non-diabetic foot wounds.

3.3. TES objectives, service delivery and implementation plans

To equip staff to deliver the new pathway (and following a clinical audit), existing training was adapted to align with the NWCSP LLRs. Online modules from NHS England Workforce, Training and Education e-learning for health were introduced later in the programme and will be an additional resource available to staff. An Objective Structured Clinical Exam (OSCE) was instituted to enable nurses to practically demonstrate their competencies. Some ad hoc training was also offered to practice nurses.

A WMDS was implemented for an initial 12-month pilot (35 licenses) within Tissue Viability, Podiatry, and one neighbourhood District Nursing team. It was expanded to a second neighbourhood team in December 2023. A business case was developed for year-two funding.

The Equity Analysis Form for Bromley Healthcare highlighted the need to consider patients' socio-economic status and level of education when assessing capacity for self-care and ensuring accessibility of resources such as patient leaflets. This includes ensuring accessibility for those for whom English is not their first language. Mitigating actions identified included review of patient leaflets for accessibility (and translation) and drawing on the experience of Bromley Healthcare and Health Innovation Network colleagues to ensure co-production and involvement of those with lived experience (this action is now due to take place outside of programme timescales due to competing priorities).

4. Data contributed to the evaluation

The following summarises any specific adaptations to the methods outlined in the programme report and the technical reports for the different sources of data used in the evaluation of the TWC programme. Also detailed is the contribution this TES made 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 October 2022 and March 2024 from the monthly wound care aggregated dashboard and the TES metrics returns.

For Bromley Healthcare, monthly submissions were reported separately for District Nursing, Tissue Viability and Podiatry. **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 Bromley metrics reporting and adaptation by team

Metric	District Nursing	Tissue Viability
Lower limb wound caseload within community services (TWC001A).	Yes	Yes
Foot wound[5] referrals for new assessment (TWC002A).	Yes	No
Lower leg wound referrals for new assessment (TWC002B).	Yes, but TES could not confirm accuracy of the full data set due to capacity. Last two months (February and March 2024) are confirmed as correct.	Yes
Foot wound[5] patients receiving full assessment (TWC003A).	Out of scope.	Out of scope.
Lower leg wound patients receiving full assessment (TWC003B).	Yes	Yes
Foot wound[5] patients receiving full care[6] (TWC004A)	Out of scope .	Out of scope.
Lower leg wound patients receiving full care[6] (TWC004B).	Unable to provide.	Unable to provide.
Lower leg wounds treated with strong compression (TWC010).	Yes	Yes
Wounds healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks (TWC011A-H) (TWC011aA-D are for lower leg wounds and TWC011E-H are for foot wounds).	Yes, reported by wound.	Yes, reported by patient.

[5] The Podiatry pathway was not fully implemented during the evaluation period.
[6] Due to difficulties relating to definition it was agreed that metrics related to 'full care' could be excluded.

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 Bromley contribution, and adaptations, by qualitative data source

Data source	TES contribution	Adaptation
Survey	Surveys were sent to 139 clinical staff and two data analysts.	None
Patient cases	Five in total, three of which were recruited from Bromley Healthcare's Tissue Viability clinics and followed the expected approach.	Two cases were recruited by District Nursing teams. These patients were asked one set of experience questions about the overall experience of wound care, using a tailored version of the patient experience section. The District Nursing team also consented a small number of patients who did not fully meet the eligibility criteria. The Health Innovation Wessex Insight team followed these patients up for a brief telephone conversation to elicit their experiences, and while not included in the questionnaire analysis, relevant aspects of their experiences were noted and contributed to the development of themes.
Staff interviews or focus groups	One focus group took place on 4 September 2023. Six staff members in clinical and managerial roles participated.	None
Implementation tracker	Systems mapping session on 4 September 2023. Implementation tracker covering period November 2023 to February 2024.	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 3 Analysis conducted by TES or programme level** below is included to explain these differences in approach.

Table 3 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 collection tool (patient case questionnaire).	Programme level to protect anonymity of patients (due to small numbers involved), see **Figure 7** with some descriptive data shared at TES level.
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

6.1. Findings from metrics data

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

The collection of standardised metrics data was a major part of ensuring both the delivery and successful implementation of NWCSP LLRs and improvements to patient care. As part of the evaluation, information was gathered on the progress of implementing metrics and issues that arose to ensure critical metrics were captured. Bromley Healthcare identified 14 (out of 17) data collection points within the scope of their TES, and 13 out of the agreed data collection points were reported by March 2024. Further details about the metrics for Bromley Healthcare are provided in Appendices 1 and 2.

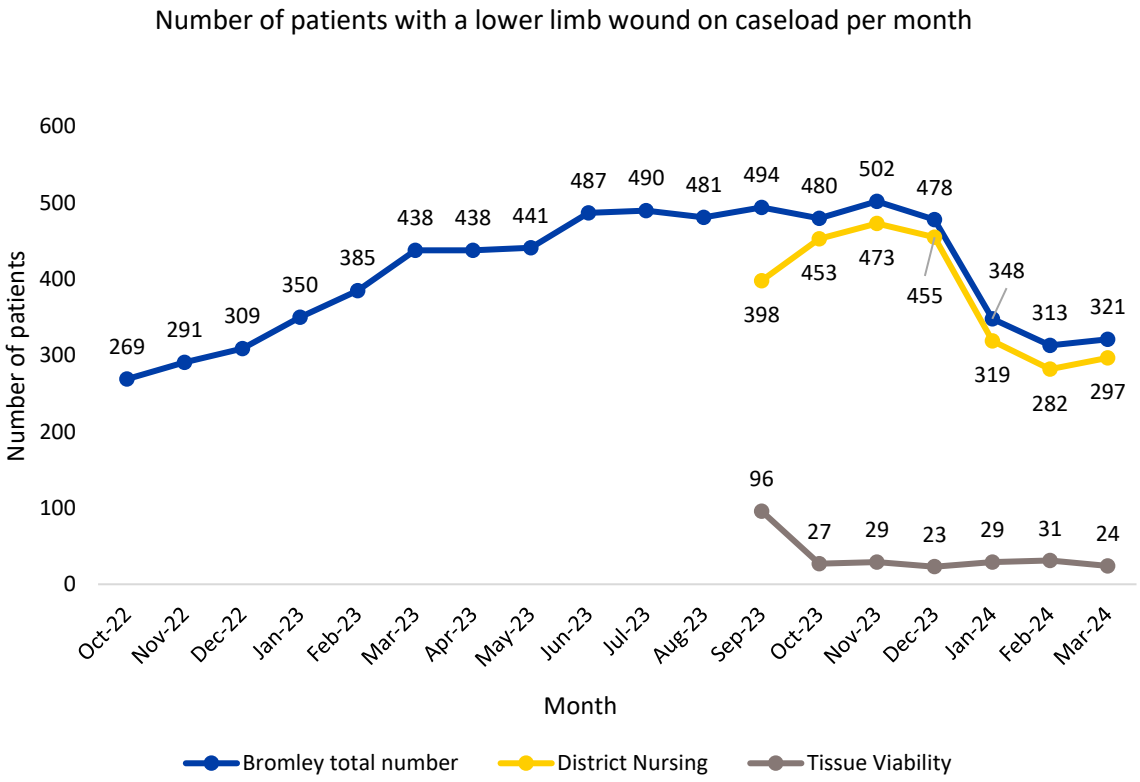


Figure 1 Number of patients with a lower limb wound on caseload per month

Figure 1 illustrates the monthly total of patients with lower limb wounds on the caseload from October 2022 to March 2024. Although the breakdown by team was only available starting in September 2023, the graph shows a consistent increase in the total caseload until November 2023, followed by a subsequent decline. One explanation for this decline is due to a change of data cleaning process. The new data cleaning process aimed to ensure that healed patients whose healed status had not been updated are removed and not included in the caseload. Following this logic, it is assumed that several patients would have been removed from the caseload, resulting in a noticeable decline between December 2023 to January 2024. Notably, the caseload never drops below the initial count of 269, doubling in size by September 2023.

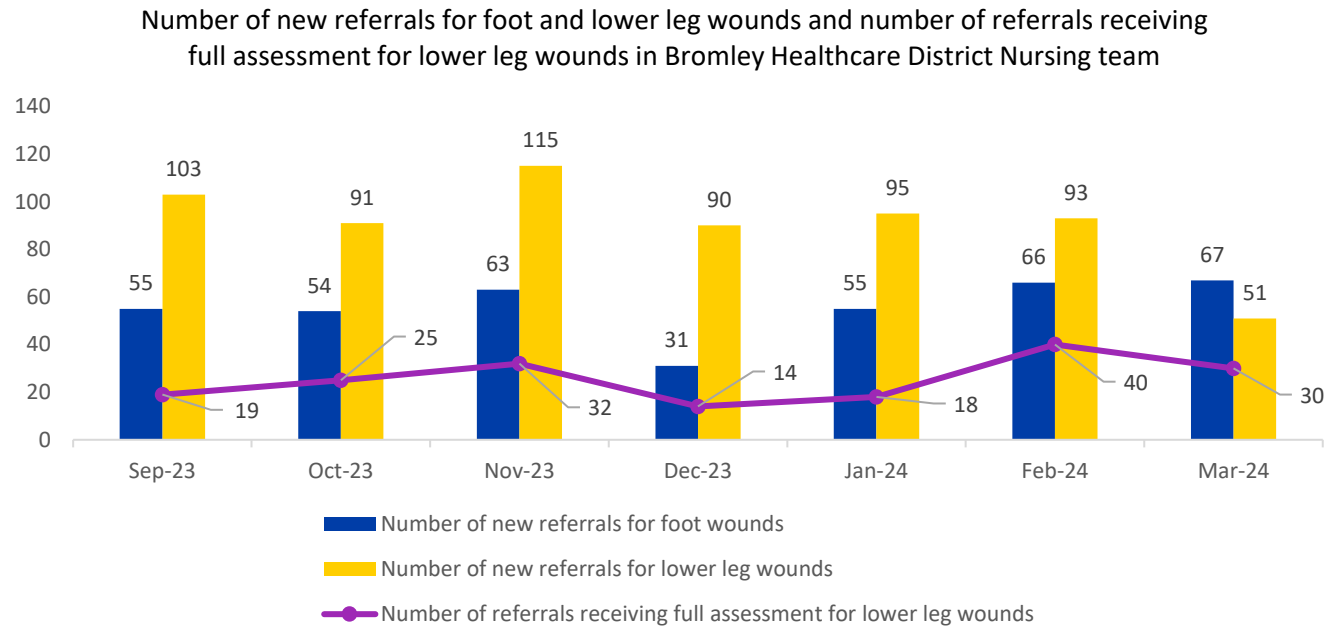


Figure 2 Number of new referrals for foot and lower leg wounds and number of new referrals receiving full assessment for lower leg wounds per month, District Nursing team

Figure 2 illustrates the number of new referrals received by the District Nursing team for foot and lower leg wounds, along with the number of new referrals receiving full assessments for lower leg wounds. The bar chart displays the number of new referrals for foot wounds and lower leg wounds, while the line chart shows the number of full assessments completed. Although data collection began in October 2022, data on the number of new referrals and the number of full assessments for the District Nursing team became available only from September 2023 onward (new pathway in District Nursing teams launched February 2023).

Between September 2023 and March 2024, the District Nursing team received 638 new referrals for lower leg wounds and provided 178 full assessments, covering 28% of new referrals. The figure shows an overall increase in new referrals receiving full assessments and a decrease in overall new referrals for lower leg wounds. The TES reported that not every new referral requires a full assessment[7]. Consequently, changes in proportions may be influenced by patients' individual conditions each month. The TES also highlights that changes to these figures could reflect data cleaning efforts and template changes within the system.

[7] Postscript: Bromley Healthcare explained that the reasons that not every new referral requires a full assessment include case load reviews being done on the app and knowledge that wounds are dermatological or that they are healing before a full assessment.

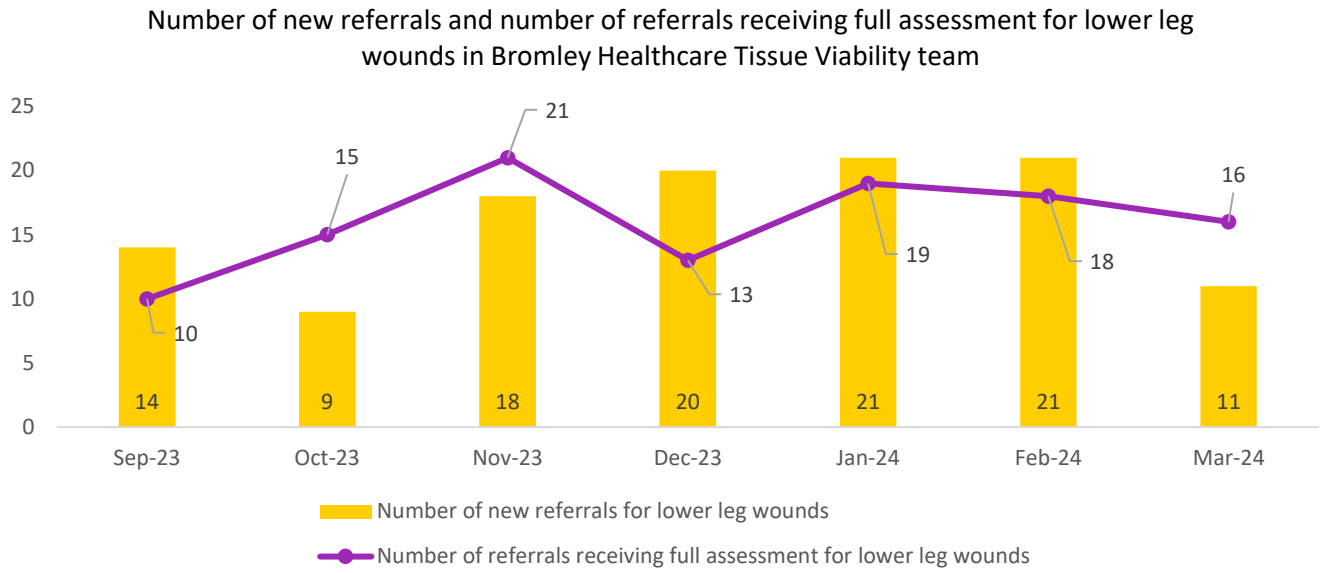


Figure 3: Number of new referrals and number of referrals receiving full assessment for lower leg wounds in Bromley Healthcare, Tissue Viability team

Figure 3 depicts the number of new referrals for lower leg wounds and the corresponding number of assessments conducted by the Tissue Viability team. As with Figure 2, the bar chart represents the number of new referrals, while the line chart displays the number of full assessments provided. Data for the Tissue Viability team was only available after September 2023. Since that time, there have been 114 new referrals and 112 full assessments conducted, covering 98% of referrals. In some months, the number of full assessments exceeds the number of new referrals. This is due to some patients being referred later in the month, resulting in their assessments being carried over to the following month.

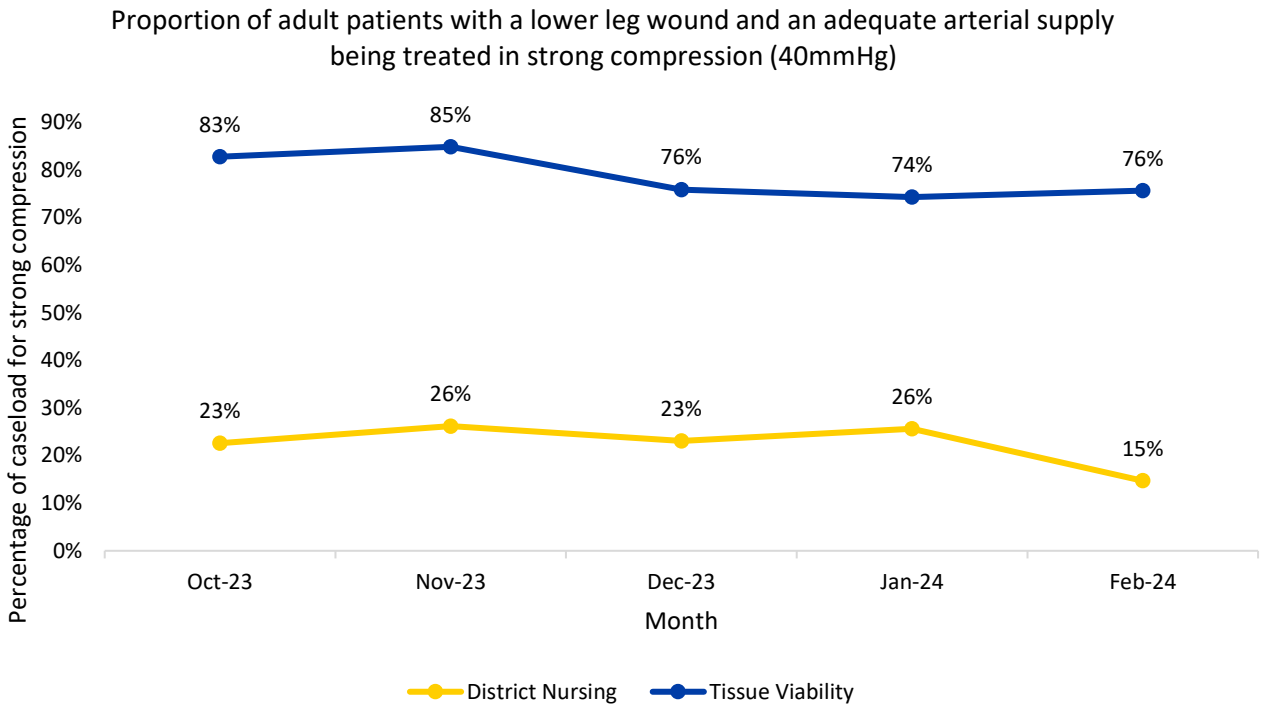


Figure 4 Proportion of adult patients with a lower leg wound and an adequate arterial supply, where no aetiology other than venous insufficiency is suspected, being treated in strong compression (40mmHg)

Figure 4 depicts the proportion of adult patients with lower leg wounds treated using strong compression. The total proportion of patients receiving strong compression remained stable over a five-month period, with approximately 209 patients being treated with strong compression. The metric is a cumulative measure - untreated patients could remain on the caseload in the following month until they could be treated. During the data capture period, the District Nursing team identified a maximum of 42 patients (as of November 2023) as suitable for strong compression and treated a total of 47 patients. Despite an increase in the number of patients receiving full assessments (Figure 2), the percentage of patients receiving strong compression remained below 30%. Bromley Healthcare attributed this low percentage to factors such as patient non-compliance, end-of-life care considerations, and age-related comfort needs. In contrast, the Tissue Viability team reported significantly higher rates of strong compression. The team provided strong compression to 31 patients and for 74%-85% of suitable patients each month. The maximum number of suitable patients per month was 41 (February 2024).

Figures 5 and **Figure 6** illustrate the monthly healing rates for Bromley Healthcare District Nursing team and the Tissue Viability team from September 2023 to March 2024. Each month features two stacked bars: the left bars are divided into four categories, representing patients who healed within 12 weeks (yellow), 12-24 weeks (dark grey), 24-52 weeks (purple), and after 52 weeks (teal). The right bars display two categories: unhealed patients (blue) and healed patients (aqua). The absolute numbers in the four categories of the left bar provide a detailed breakdown of healed patients, and their sum equals the total number of healed patients (aqua) in the right bar for each month. The unhealed patient data is derived from TWC016A-H (proportion of patients recorded as not healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks). Please note the right bar can only be shown if sites provided TWC016 metric data.

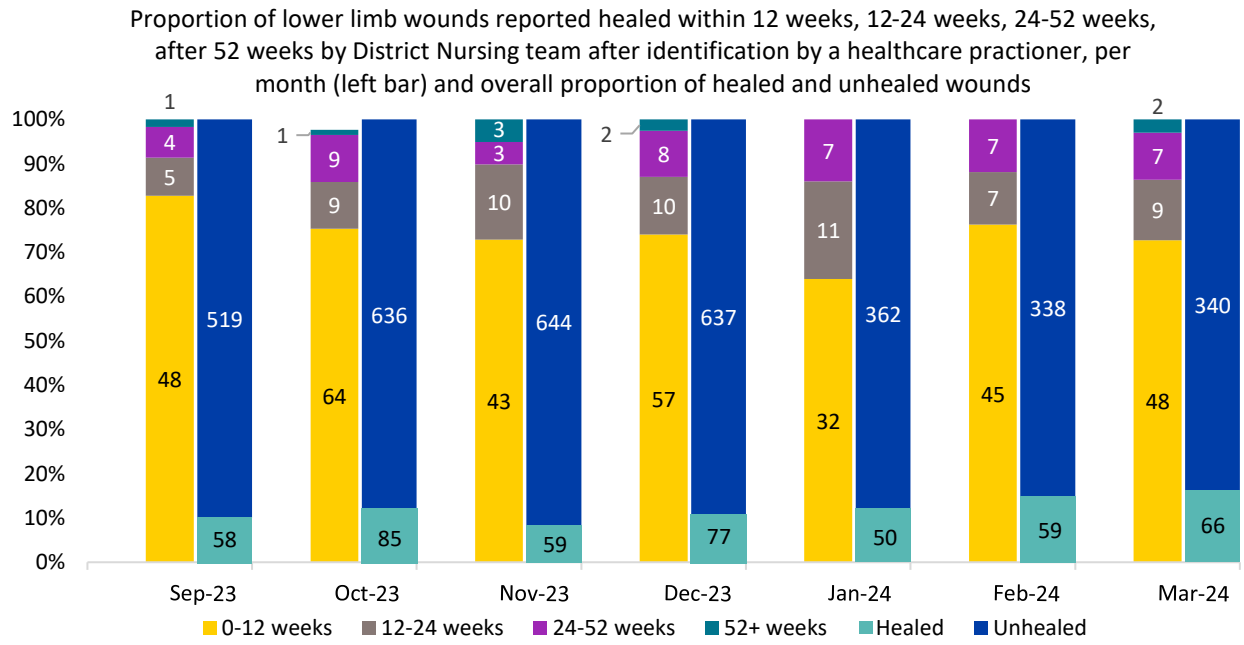


Figure 5 Proportion of lower limb wounds reported healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks by District Nursing team after identification by a healthcare practitioner per month and overall proportion of healed and unhealed wounds

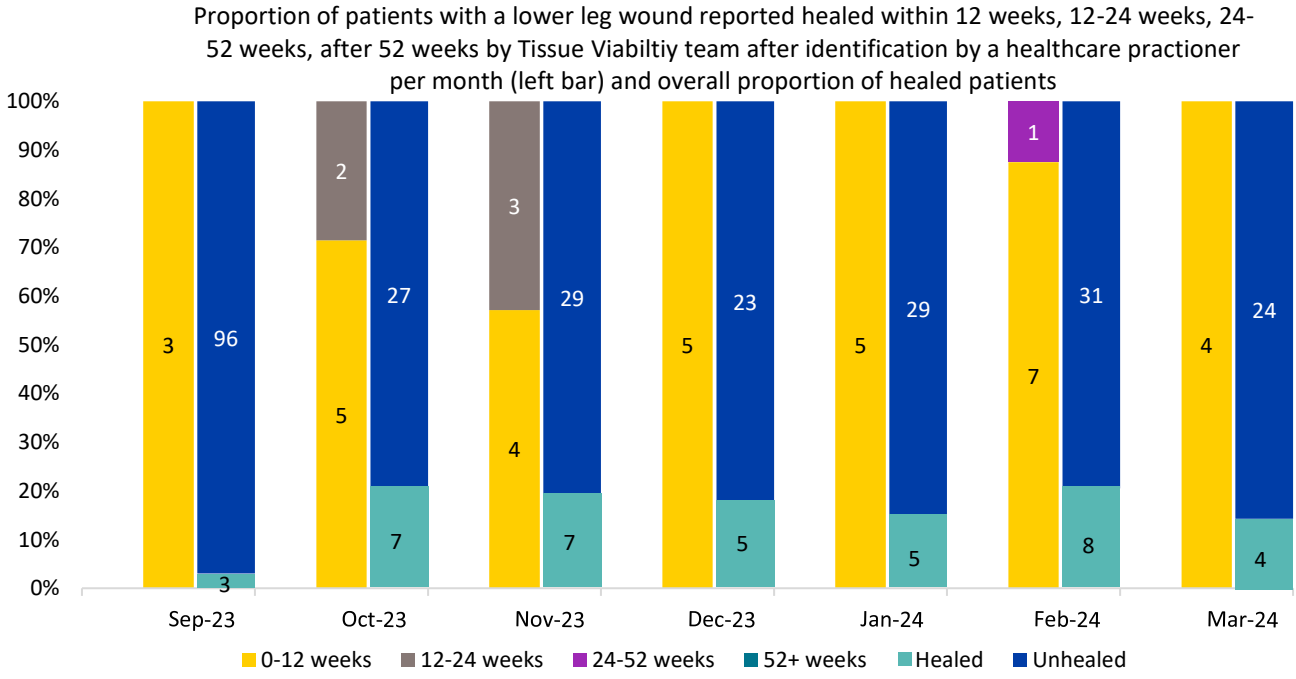


Figure 6 Proportion of patients with a lower leg wound reported healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks by Tissue Viability team after identification by a healthcare practitioner per month and overall proportion of healed and unhealed patients

The two figures above illustrate the percentage of lower limb wounds/patients with lower limb wounds reported healed within 12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks by the District Nursing and Tissue Viability teams, as a proportion of the total cohort (healed and unhealed) of wounds (District Nursing) or patients (Tissue Viability). In **Figure 5**, foot wounds are included in the analysis from September 2023 to March 2024 to show an overall healing rate. Bromley Healthcare reported foot wounds and lower leg wounds together from January 2023 to January 2024 and began distinguishing these categories after January 2024. The limited timeframe for separate reporting is insufficient to establish meaningful trends for foot wounds and may introduce inaccuracies in the analysis of lower leg wound trends. Therefore, consolidating the data ensures a more robust and reliable evaluation of the overall healing trajectory. Between September 2023 and March 2024, the District Nursing team reported 454 wounds healed for lower leg wounds and foot wounds, with an overall reduction in wounds recorded as unhealed from 519 in October 2023 to 430 in March 2024. There is an upward trend in the proportion of healed wounds compared to the entire cohort, increasing from 8% in November 2023 to 16% in March 2024. It is important to note that in **Figure 5**, the left bar in October 2023 (proportion of wounds reported healed within 0-12 weeks, 12-24 weeks, 24-52 weeks and after 52 weeks and over) does not equal 100%, due to an error in one of the data points.

The Tissue Viability team reported all patients healed within 12 weeks for four of the seven months' data collection (**Figure 6**). The Tissue Viability team recorded a total of 39 patients healed from September 2023 to March 2024, which equates to 84% of patients reported healed within 12 weeks. The lower rate in September 2023 is attributed to a high number of unhealed patients in September 2023 compared to later months. However, no reason was specified in the data submission. Due to the small cohort size, the graph shows fluctuation in overall healing rate, which is considered typical for a small dataset such as this.

6.2. Findings from staff surveys

Bromley Healthcare staff returned 21 surveys (from a distribution of 141 surveys, a 15% 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** below 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.
- 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 Lower Limb Recommendations 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.

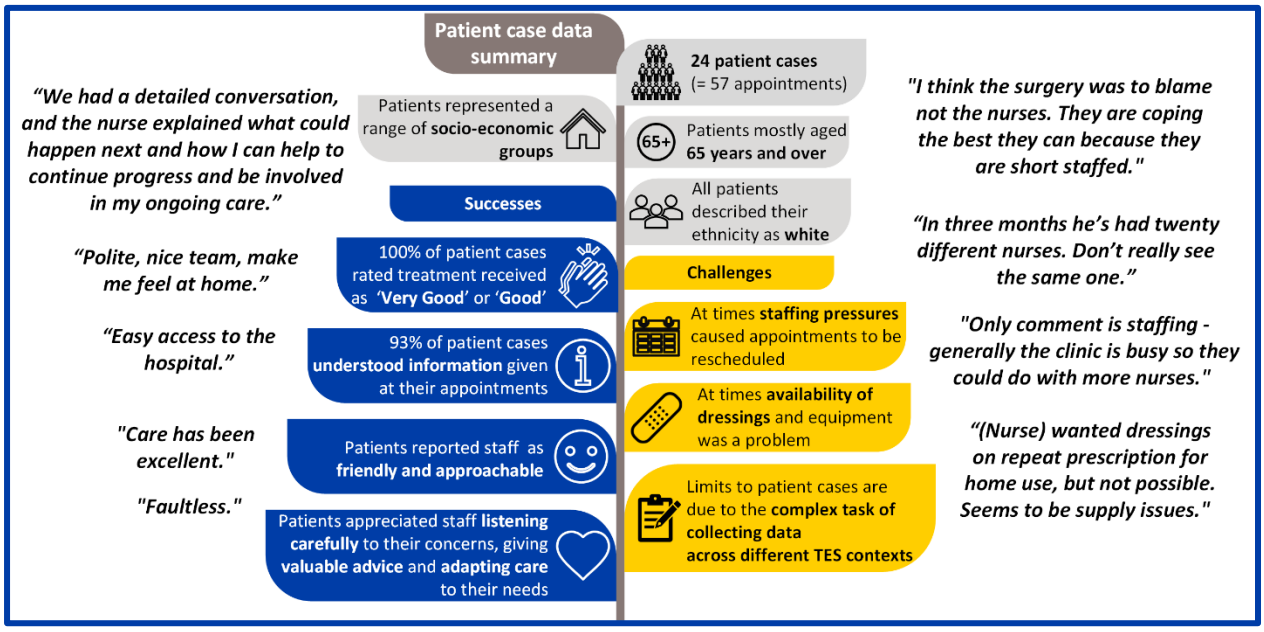
Challenges

- Limited or reduced workforce capacity was the most reported barrier to the implementation of the NWCSP Lower Limb Recommendations.
- 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

Bromley Healthcare provided five patient cases: three from Tissue Viability clinics and two from District Nursing teams. All patient cases' wounds were situated on the lower leg. Two patient cases were female and three were male. All cases were aged sixty-five years or older. Cases tended to come from areas with lower levels of socio-economic deprivation. All Bromley Healthcare patient cases stated that they sought help for their wound within 48 hours or less. In terms of outcomes reported by the end of data collection, three of the patient cases were continuing with professional care, one was healed/discharged and one self-rated as healing well/nearly healed. **Figure 7** below shows an overview of findings from patient cases across all TESs (programme level).

Figure 7 Summary of programme level patient case data with quotes



6.4. Programme level findings from staff interviews and focus groups

Box 2 below highlights key themes that emerged from analysis of 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 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.

Bromley Healthcare staff agreed that the key driver of the NWCSP LLRs was to apply compression to lower leg wounds at an earlier stage to aid venous leg ulcers. The quote below from the focus group reflects this as the overarching aim *("We know that lower leg wounds, apart from the ones with red flags need to be in compression")* and alludes to the need to get treatment started while the wound is still in an acute stage. The quote also highlights patient-related factors that can delay healing despite best practice *("the health of that patient and their lifestyle massively influences the outcome")* and reinforces the need for highly skilled staff *("the more knowledge you've got about that, then the more you can do something about that")*.

"The more acute a wound is - the newer a wound is, the faster it will heal if they're in the right treatments. We know that lower leg wounds, apart from the ones with red flags…need to be in compression... All these patients that have had wounds for years on end, at some point that will have been an acute wound. The faster you get them into treatments… There's always the influences of, you can never have tunnel vision on a wound because the health of that patient and their lifestyle massively influences the outcome. There's always those elements to it, and those elements that actually prevent healing. The more knowledge you've got about that, then the more you can do something about that." Bromley Healthcare focus group

Bromley Healthcare staff reported early signs of staff and net zero efficiencies resulting from the new service,

"Certainly, in our clinics we're using more garments, and I've covered clinic the last two weeks and it makes a difference…It was bliss, it was absolutely bliss that I even managed to do a few emails in between each session because I was so timely on the appointments, makes a huge difference. "Bromley Healthcare focus group

"We're working with (name of WMDS) to look at a benefits analysis really. That's not just cost, that's also working towards net zero, less use of bandaging, those sorts of things, less visits to the clinics if we're seeing them less frequently, that's less CO2 emission. It's a holistic view of what we're trying to achieve from the app." Bromley Healthcare focus group

With regards to technology and data, Bromley Healthcare staff recognised that high-quality data could answer important questions about service delivery,

"She just developed some pie charts that she was showing the growth of the number of patients in compression, and what that meant in time and number of visits. It was quite significant and had quite an impact on their nurses being able to see actually what delivering the right care does." Bromley Healthcare focus group

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,

"The app (name of WMDS) we're using to standardise what we see, measurements, photography. We've been quite lax with photographs and wound photography so it's really something that's come at the right time for us as well. We're not just taking pictures, the app will help with measurement, with making sure that everyone is doing the same thing and standardising that measurement we can use it to produce our notes as well and again that will give us prompts." Bromley Healthcare focus group

In addition, Bromley Healthcare staff noted the value of existing Tissue Viability expertise and infrastructure as a platform on which to build,

"I think we had a really good foundation we're really fortunate…I think your team, although there's some learning and some changes, we already have the limb ulcer service, the structure of the clinics, and the support that you do provide to primary care when they reach out to the nursing teams." Bromley Healthcare focus group

6.5. Findings from the implementation tracker

Implementation trackers were collected and analysed by each TES. As such, this summary relates specifically to Bromley Healthcare. A review of the implementation tracker across four time periods (monthly between November 2023 and February 2024) revealed the following progress against the defined milestones.

- The new pathway has been successfully implemented within District Nursing teams, although some hesitancy to apply strong compression remains.
- The TES project team established that whilst much of the guidance is being followed, the Podiatry pathway is not currently being followed sufficiently to be confident that the national recommendations are being fulfilled. Podiatry did not have the same lead time as Tissue Viability and District Nursing and are still working towards alignment, which will therefore fall outside of the programme timeline.
- Staff training has been successfully implemented, with some difficulties remaining with monitoring, due to systems issues. E-learning training was not linked to staff profile as the TES changed how they manage mandatory training, which means that wound care e-learning needs to be searched for by staff individually.
- Continued use of WMDS is dependent on gaining further funding.
- No further development with regards to aligning patient self-care guidance with NWCSP LLRs, and/or further development of ongoing care occurred during the project timeline. This is because Bromley Healthcare focused on mature meaningful data being captured in the last couple of months of the programme (with a focus on the strong compression metric), which has taken priority over the opportunity to explore outreach for health inequalities.

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 (WMDSs). 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: Bromley Healthcare

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.	Wound and patient.
TWC011B	Wounds healed within 12-24 weeks.	Wound and patient.
TWC011C	Wounds healed within 24-52 weeks.	Wound and patient.
TWC011D	Wounds healed after 52 weeks.	Wound and patient.
TWC011E	Proportion of healed foot wounds within 12 weeks.	Wound and patient.
TWC011F	Proportion of healed foot wounds within 12-24 weeks.	Wound and patient.
TWC011G	Proportion of healed foot wounds within 24-52 weeks.	Wound and patient.
TWC011H	Proportion of healed foot wounds after 52 weeks.	Wound and patient.

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

Table 5 Commentary on critical metrics and data collection points collated by Bromley Healthcare

Bromley	In scope data points collated by March 24: 13	In scope data points not collated by March 24: 1
Metrics collated by patient or wound	Metrics TWC001-010 report by patients, Metrics TWC011A-H report by wounds.	
Biggest challenge	Data cleaning and clinical reviews to maintain accuracy.	
Key points to note	Caseload: The community service • No movement on providing TWC001B as it sits within primary care and unable to access the data. • Delays pulling data for TWC003A, but CQUIN (NHS England framework: Commissioning for Quality and Innovation) template was reported to be uploaded January 2024. By March 2024, the metric was out of scope due to the podiatry team not following part of the pathway (and therefore not being reported as part of the data submission). • TWC004A was not in scope from January 2023 and remained out of scope in March 2024. TES was unable to report on full care of foot wound, however, the TES do a full background assessment of the patient (complexities, health conditions) followed by a lower leg assessment including screening for red flags and performing a Doppler test. • Although reported from January 2024, there were complexities reporting TWC010 as it required a combination of staff selecting the dropdown option for garments/brand on their system (EMIS) and then manually checking the wound care app to pull the appropriate data for strong compression on patients. Additionally, the data on the app was not labelled 'strong compression'. It required the individual clinician to know the branding of the hosiery or bandage to understand the levels of compression. • Although reported from January 2024, there were also problems reporting all TWC011 metrics due to the difficulty separating lower leg and foot wounds in their system. This was mentioned to be a historical challenge in district nursing; however, with the data from the wound care app and support from their Business Intelligence lead, they can collate. It is worth noting that podiatry did not submit healed and unhealed rates therefore the healing rates only relate to the data from the district nursing service.	