

Optimising community nursing: Addressing the wound care challenge with digital solutions

Cambridgeshire and Peterborough NHS Foundation Trust implemented a digital wound assessment initiative to reshape wound care delivery and workforce development in this aspect of care across community nursing services. The project has now been in place for 3 years and we can now provide comprehensive evidence of improved quality, clinical, operational and data quality indicators. The initiative shows how a focused digital project can serve as a scalable model for further roll out within Cambridgeshire and Peterborough NHS Foundation Trust services and wider transformation supporting system wide integration and sustainable data driven care.

The challenges facing community nursing are well documented, yet they continue to intensify. At Cambridgeshire and Peterborough NHS Foundation Trust, wound care accounts for approximately 50% of community nurse caseload activity, a stark reflection of the rising clinical burden. As the population ages and the number of people living with chronic conditions increases, we are seeing a significant rise in the complexity, frequency and cost of wound care. Without a fundamental change in how we deliver services, we risk being overwhelmed by demand.

Research by Guest et al (2020) found a 71% increase in the annual prevalence of wounds, with leg ulcer cases projected to grow by 4% each year. These trends are unsustainable within the current model. Innovation in practice and new service design are no longer optional – they are essential.

In response to these pressures Cambridgeshire and Peterborough NHS Foundation Trust (CPFT) embarked on a transformative digital journey in July 2022. Our decision to progress with digital innovation was not just about embedding a digital tool, it was about unlocking new ways of working that could provide new capacity, improve clinical outcomes and enable proactive, patient-centred care.

Having a digital solution to support our service aligns strongly with national drivers, particularly those outlined in the new NHS long-term plan (NHS, 2025), which emphasises a shift from hospital-based care to more proactive, personalised support in the community. By enabling earlier intervention, remote monitoring, and smarter caseload

management, a digital tool can empower community nurses to deliver more efficient, evidence-based care at home, particularly in high-demand areas like wound care. For services like CPFT, adopting a digital wound care platform and using our data is not only a response to rising demand but also a strategic move that supports national ambitions for a digitally enabled, community-first NHS.

Following the initial proof-of-concept and implementation phase, our primary focus shifted toward evaluating sustainability, scalability, and the long-term clinical and operational impact; themes that we will explore in depth throughout this article.

Summary of year 1

Our prior processes did not easily enable oversight of the current wound caseload. This made it very difficult to provide a baseline and monitor wound care and the success of any improvement programmes.

Our manual clinical audits were resource intensive which meant it was operationally not possible to interrogate caseload data in a clinically useful cadence to ensure consistency, quality or continuity of wound care frequently enough.

Prior to the start of our transformation programme, the Tissue Viability Service (TVS) at CPFT performed a baseline audit of patients receiving care for leg management in 2018. Community nurse caseload holders completed a questionnaire review for patients on the caseload for leg ulcer management. This data collection was based on a manual trawl of SystemOne and questionnaires containing data for 177 patients were returned.

Sally-Anne Bradford

Operational & Clinical Manager, Tissue Viability, Bladder & Bowel Service, Cambridgeshire & Peterborough NHS Foundation Trust, Cambridge, UK

Key words

- Digital transformation
- Community nursing
- Wound management
- Artificial intelligence
- Remote monitoring

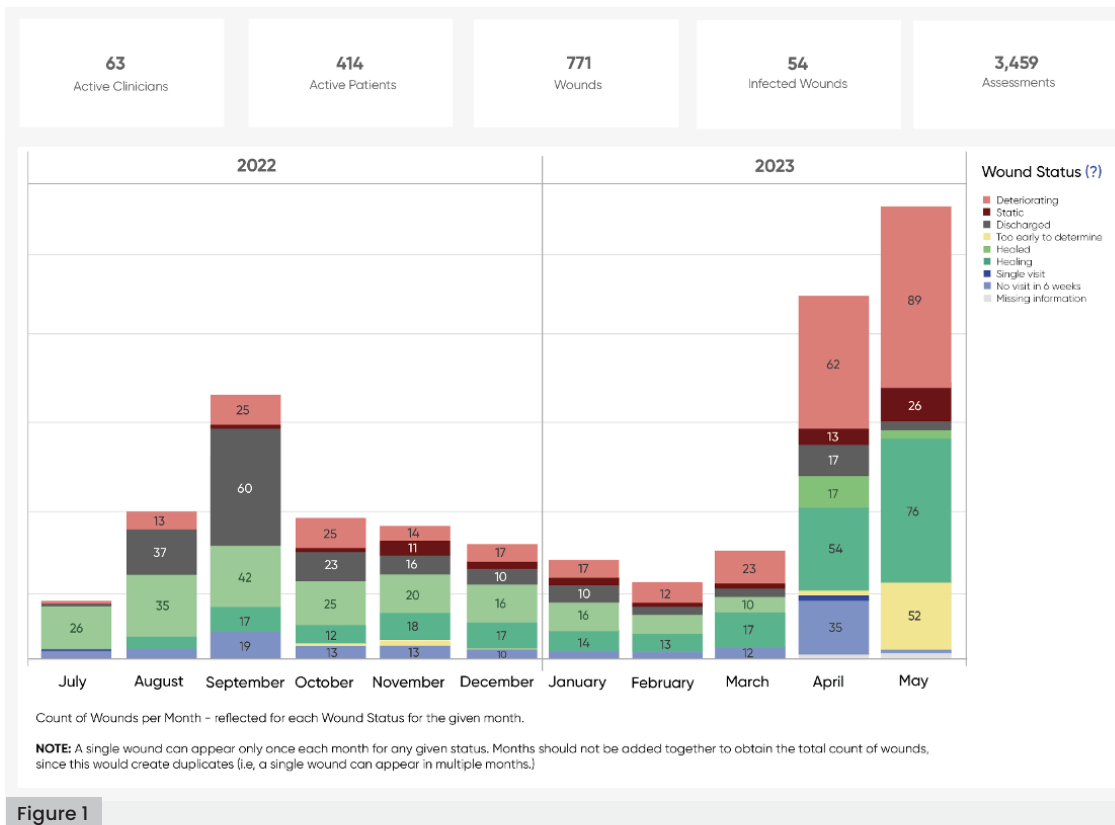


Figure 1. Caseload oversight from July 2022 to May 2023

Figure 2. Issues identified from the caseload review process

Figure 1

- The responses revealed that:
- 65 (37%) patients had been on the caseload for 12 months or longer.
 - 76 (43%) patients had not received gold standard compression therapy.
 - 126 (71%) of patients received two or three visits per week.
 - Only 4 (2.3%) patients self-cared for their legs or received care from their carers.
 - 58 (33%) patients had continuously wet legs
 - 70 (39%) patients had chronic oedema.

This audit demonstrated that real time and robust oversight of the caseload that does not involve a time-consuming manual audit, could highlight areas for improvement and could facilitate timely and effective operational and clinical decision making. To transform wound care, we needed the ability to dynamically identify ritualistic practice and treatment, diagnosis and education gaps in order to help reduce patient safety incidents and proactively optimise the care of deteriorating and/or static wounds.

Year 1 of our programme was focused on initial adoption and implementing a digital wound assessment platform, MinuteWound (MfW) from Healthy.io, in clinical practice across our community nursing teams. The project commenced in June 2022 and the initial period lasted 12 months and involved 61 staff members. Our early aims were:

- Improve access to wound data to support

- data-driven wound management.
- Support staff engagement and uptake.
- Enhance the quality of care and patient experience.
- Optimise the resources of dressings.
- Optimise the use of workforce.

As seen in Figure 1, between July 2022 to May 2023 using MfW, we were able to:

- Assess 457 patients.
- Complete 4,294 digital wound assessments.
- Document 876 wounds.

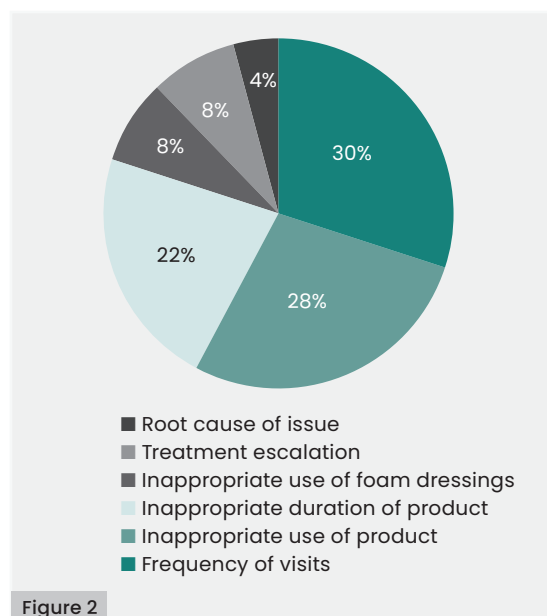


Figure 2

Figure 3. Adoption over time: the number of assessments completed over time

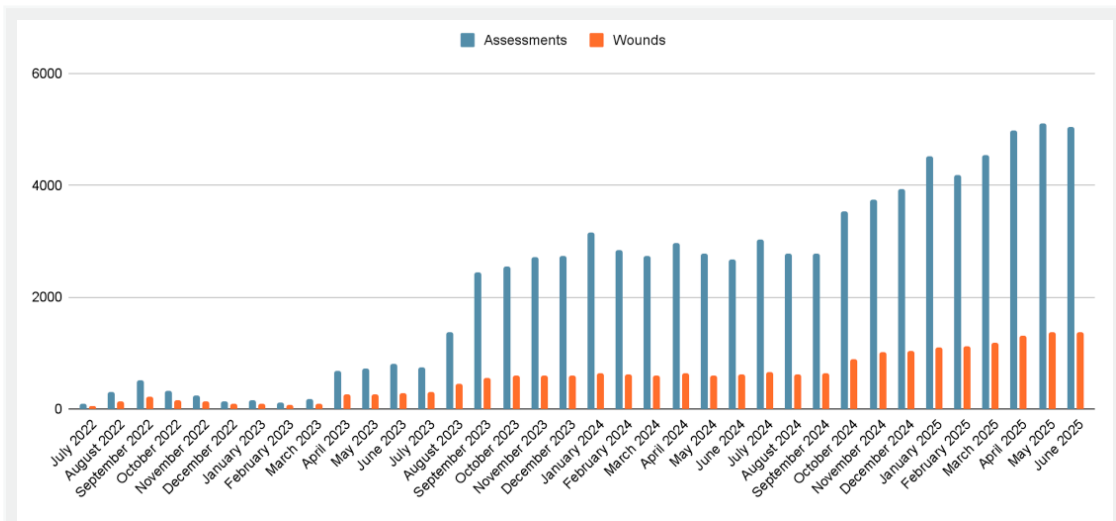


Figure 3

With new, easy access to our wound data and caseload metrics, we introduce a senior oversight mechanism in December 2023. We completed an audit of 34 patients with deteriorating wounds and identified improvements, treatment changes or unnecessary visits that most likely would have gone unnoticed with previous processes. **Figure 2** shows the issues and outcomes identified by completing this process.

By digitising our processes, we have enabled staff to objectively and consistently complete assessments, with a better quality of documentation, and remote reviews are possible. This year demonstrated the early signs that adoption of digital wound assessment platforms, such as MfW, could lead to improvements in clinical practice through better oversight of the caseload.

Year 2 onwards

Since May 2023, MfW has been expanded across the district nursing service in Huntingdon, St Ives, St Neots, Wisbech and Fenland. It has also been utilised in the tissue viability team and our Trafford Rehabilitation

Ward; overall supporting 164 clinicians.

As **Figure 3** demonstrates, since the project started in 2022:

- More than 85,000 MfW digital wound assessments have been completed.
- More than 10,000 wounds have been documented.
- More than 3,500 patients have been assessed.

Aims

After a successful year 1e, we widened the programme to include extra team members, expand into a rehabilitation unit and work with our local acute site. This was significant because it allowed us to begin to assess the feasibility of a system-wide adoption of digital solutions and align wound care to a patient-centred approach to treatment.

Our aims and objectives for the embedding and insights phase were:

- Assess the long-term clinical outcomes.
- Further embed senior oversight and measure quality outcomes.
- Understand the workforce impact (e.g. clinician time saved).

Figure 4. Healing rate improvement – percentage of wounds healed within 12 weeks

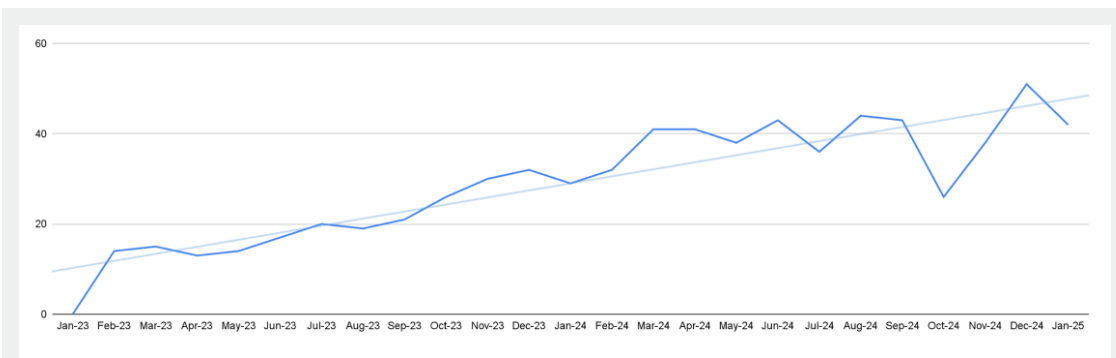


Figure 4

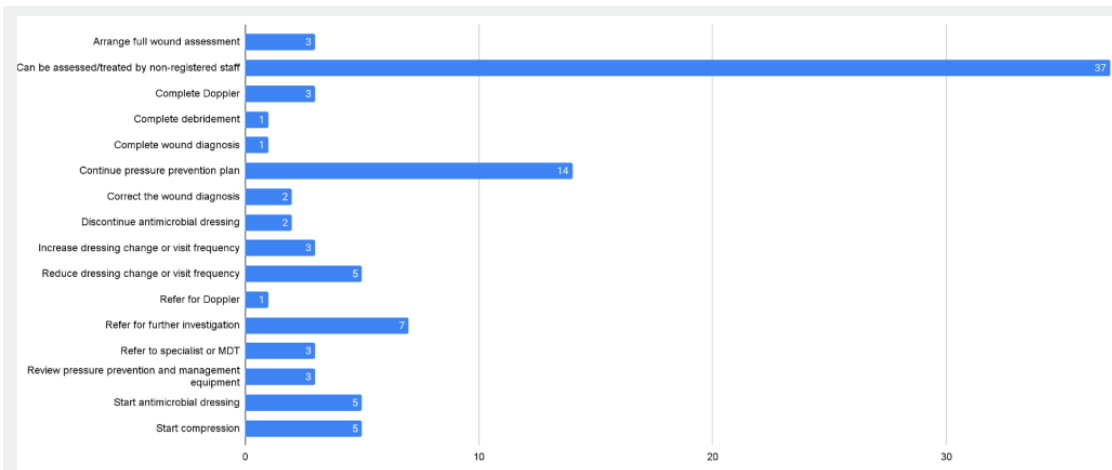


Figure 5

Figure 5. Issues and actions identified from the caseload review process

- Gauge staff competency and confidence growth.
- Explore patient engagement over a longer timeline.
- Evaluate trust-wide adoption and cross-service integration.

Results

Long-term clinical outcomes

Healing wounds within 12 weeks is considered a clinical and operational benchmark in wound care. For instance, the National Wound Care Strategy Programme (NWCSP) advocates for standardised care pathways aimed at healing venous leg ulcers within 12 weeks where possible (NWCSP, 2023). Though there is not a single national mandate that all wounds must be healed within 12 weeks, this timeframe is supported by best practice guidelines. Therefore, we opted to track this as an initial performance measure [Figure 4]. This shows the trendline where the number of wounds we have healed within this period has steadily increased over the course of our programme.

Embed senior oversight

With the use of a web-based portal for caseload oversight and visibility of static and deteriorating wounds, CPFT embedded regular caseload reviews by senior clinicians. Since the start of the project, more than 2,100 of these senior caseload reviews have been completed and to demonstrate the quality impact of this process this has had, we summarised the actions and outcomes.

Outcomes from senior reviews completed by CPFT

Between 20 April 2025 and 16 June 2025, 304 senior reviews were completed. There were 270 in-person visits that were classed as being “saved”. This is where a member of the team decided that by reviewing remotely and offering advice and guidance, they were able to avoid the need for a face-to-face visit and utilise that time for more urgent care needs.

Additionally, the following actions and outcomes were generated, all leading to improved quality of care and proactive intervention. Of note was the 37 instances where

Table 1. Clinical time saved documenting wounds in app V EPR

Mode of documentation	Number of wound care schedules to date with MfW	Documentation time	Time in Hours
SystemOne - photo capture and template	84,657	7.71 mins per schedule	10,878
MfW - scan and assessment in app		3.85 mins per schedule	5,432
	Saving	3.85 mins per schedule*	5,432

*This result was in line with time and motion analysis completed by other NHS providers that either used EMIS or SystemOne before commencing with MfW and saw approximately a 50% reduction in documentation time

Figure 6. Responses when asked how they felt it improved patient outcomes.

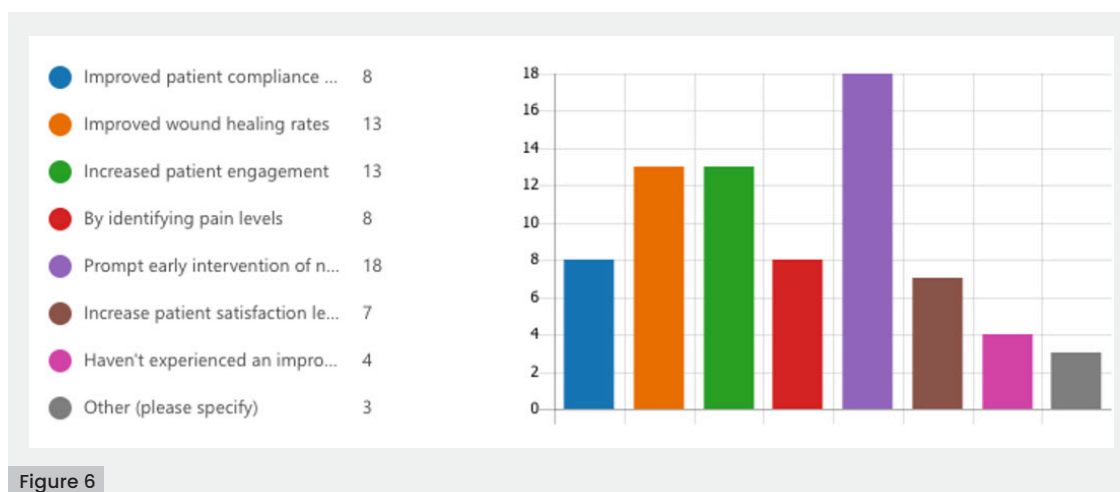


Figure 6

the senior nurses felt it was appropriate for a health care assistant to support on-going care, freeing up registered nurses to see those who needed senior clinical advice [Figure 5].

Understand the workforce impact

Clinical time saved

High workloads and administrative burdens limit time for direct patient care, so at the outset of the project we measured the impact of the new ways of documenting wounds. A time and motion analysis of the time taken to complete our previous method of documentation and the new method within the app was captured by a senior nurse. We used this comparison and calculated the estimated time saved by completing documentation based on the number of app assessments we have completed to date – in total, we saved more than 5,432 hours of clinical time [Table 1].

Efficient, standardised wound care pathways support faster healing, fewer complications, and reduced reliance on specialist services. With smarter triage processes and early interventions, nurses can focus their time where it is most clinically impactful.

Since the start of our project, it is estimated we have saved 2,000 in-person visits by reviewing wounds remotely. This was determined by staff checking a box to note when they thought a visit had been saved when providing remote advice and guidance via the caseload portal. This saved approximately 1,000 hours in travel and appointment time.

Staff and patient engagement

What patients say

- Patients feel more motivated to improve their overall health to aid healing of the wound.
- Patients advised that viewing the images of the wound motivated them to embrace their treatment plan.
- Patients felt more involved in their care as a result.

- Patients can find the images distressing.

What staff say

“I cannot begin to describe the time saved utilising [the app] for senior reviews. Staff can escalate their concerns, have a senior clinician review the wound photograph and wound history alongside dressings applied and give feedback and advice without the delays of waiting for a home visit. This improves the distribution of skill mix within the team and releases time to care” – Robyn Rendall, Clinical Lead

In July 2025, we shared a survey with our end users to establish their general sentiment and perceived impacts of the programme. Of the 25 responses we received.

- 80% of respondents felt either extremely confident or very confident using the app. No respondents felt unconfident.
- 68% of respondents felt it helped them meet their needs a great deal or a lot. No respondents said the app did not help their needs in any way when staff were asked how it improved patient outcomes; the responses can be seen in Figure 6.

“I have found Minute! for Wound has made managing a caseload easier as it enables reviews to happen remotely. This may mean an RN is requested for the next visit or simply just a change to the regime as the app has flagged issues that may previously have gone unnoticed. I have also found it extremely helpful when working as a duty nurse as it allows me to review patients I would otherwise not know before, advising staff on appropriate treatment when they ask for support. Previously this would have meant a potential delay in commencing the correct regime.” – Anonymous feedback

Trust-wide adoption and cross-service integration

In November 2023, Trafford Ward at

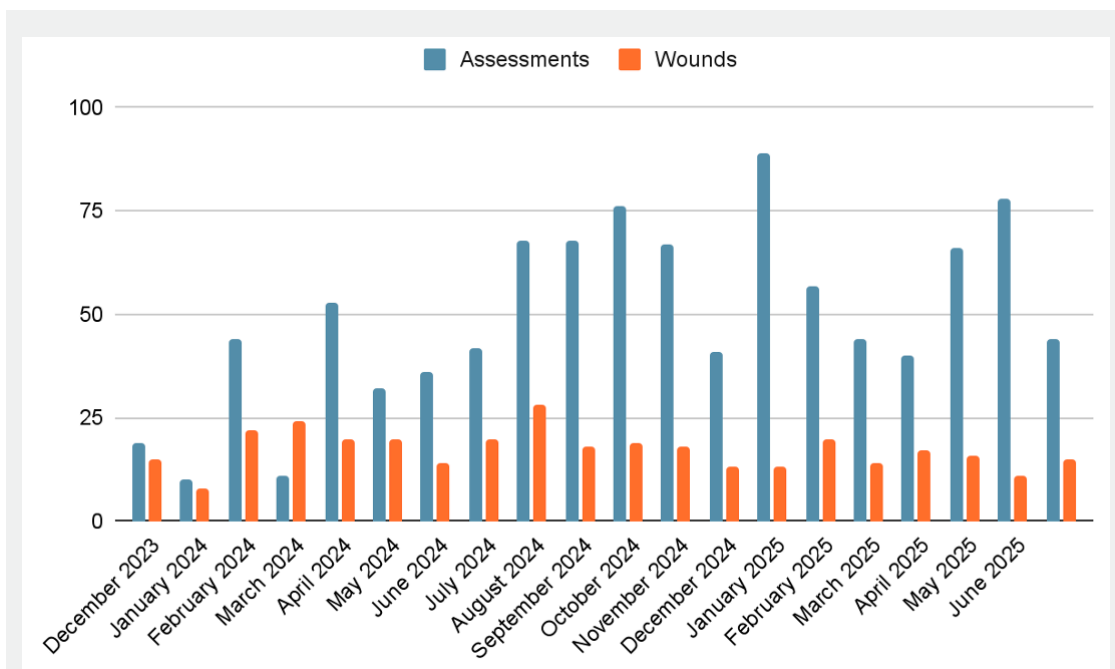


Figure 7

Figure 7. Trafford Ward Rehabilitation Unit engagement and usage

Figure 8. Care pathway overview for patients with wounds across community and acute services

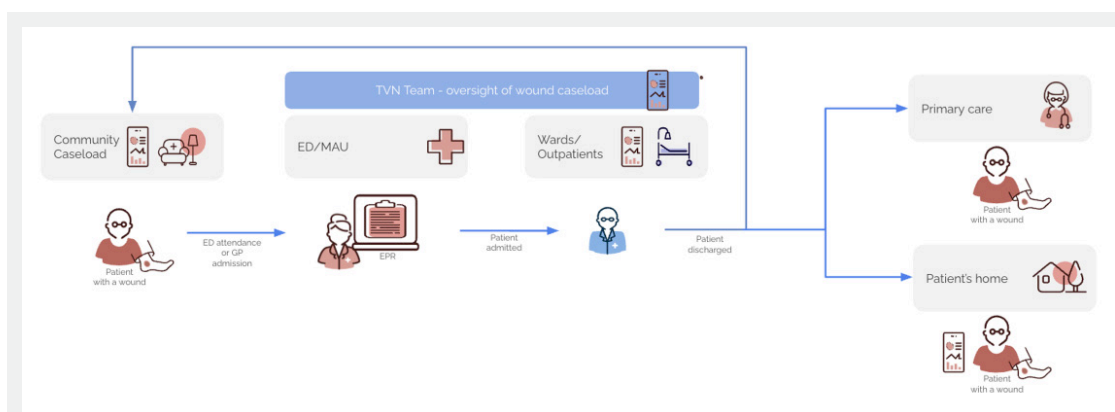


Figure 8

North Cambridgeshire Hospital joined the project. Trafford ward is a 16-bed inpatient rehabilitation unit that typically supports step-down from the acute setting. The majority (95%) of the wounds that the staff see are pressure ulcers that may have developed while the patients were inpatients in the acute setting. It was the ideal trial for a ward-based model of wound management and connected cross-service working.

The unit has been using MfW to improve TVN access and oversight of their patients' wounds. Staff complete a full assessment on the app on admission, which is available to the TVN team during caseload reviews of any deteriorating or complex wounds [Figure 7].

Hospital to community

Now that we have a strong foundation built on our work in the community, we are seeking to work more closely with our system partners. Our new aims are to reduce unnecessary

hospital admissions through timely, evidence-based care that prevents wound deterioration and complications. Having our community caseload easily visible enables proactive, integrated care through better data sharing, development of triage tools, and early identification of non-healing wounds [Figure 8].

Issues we identified

The following issues were identified prior to our ward trial and with conversations with our acute partners, and we are seeking to address these going forward:

- No ability to know the status of the wound on attendance/admission, e.g. if the wound is deteriorating, static or healing.
- No ability to see and continue the current treatment plan for the wound, leading to delays in healing.
- No ability to see the wound progression over time prior to admission/attendance to

Figure 9. Patient case study: 9-month sacral wound healing trajectory with remote oversight

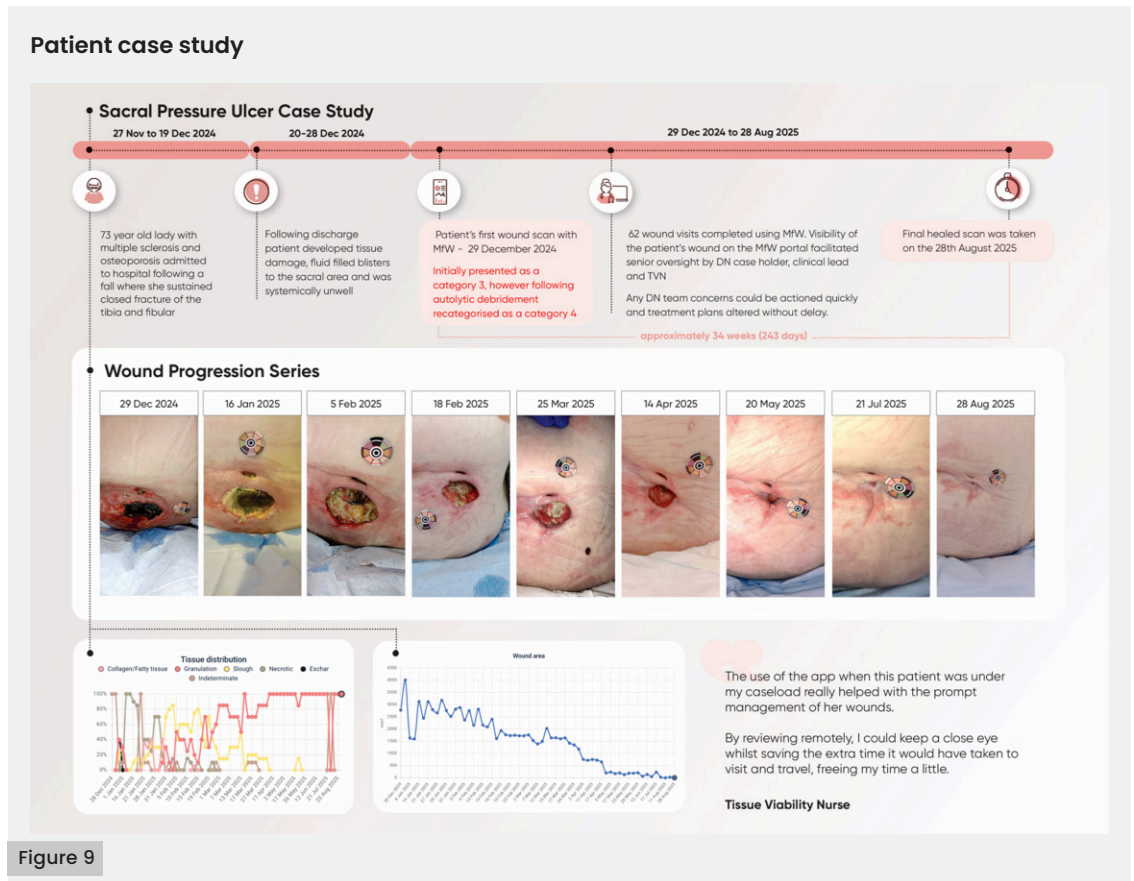


Figure 9

Table 2. Time saved documenting wounds

Band	Hourly rate used for costings	Time saved in £
Band 4	£17.09 × 5,432	£92,832
Band 5	£21.07 × 5,432	£114,452
Band 6	£26.18 × 5,432	£142,209

- inform clinical decisions and treatment.
- No ability to monitor high-risk patients post discharge to prevent deterioration and potential readmission.
 - Community nurses are unable to see what treatment was undertaken for the wound or wound progress during the inpatient stay.

Patient case study: 9-month sacral wound healing trajectory with remote oversight

Remote oversight from specialist team was possible as they have access to a time line of high-quality imagery and comprehensive assessment. Remotely, they are able to support the community nursing care with quick advice and guidance when required. The graphs show the change in tissue distribution and decrease in wound size through to healing [Figure 9].

Healing rate analysis

As of 29 July 2025, 9,713 wounds have been marked as healed).

Studies have shown that the cost of managing unhealed wounds can be 2.5–3 times more than managing healed wounds. For example, one study found that the mean cost to the NHS of managing an unhealed wound was £3,700, while managing a healed wound cost £1,500 (Guest et al, 2017; 2020; Legs matter, 2023). For 9,713 healed wounds, assuming an average of 12 weeks, which is a cost of £3.36 million instead of £8.29 million – a £4.93 million saving by healing wounds more quickly.

Remote oversight

There were 2,000 in-person visits saved from senior oversight. An average visit is a 4-mile journey, so that has saved 8,000 miles of driving and approximately 1.1 tonnes of CO₂. It would take 50 trees a year to capture the same amount of CO₂.

Time saved documenting wounds

Based on the time and motion analysis, it was estimated that we saved approximately 5,432 clinical hours in efficiency savings. Though this is a direct cash-realising benefit to our service, putting it into a cashable outcome does demonstrate its impact. For example, those hours are equivalent to three additional band 5 staff members [Table 2].

Table 3. Treatment optimisation of pressure ulcer by senior review			
Cost of conservative treatment for 12 weeks before treatment optimisation by senior review		Cost of NPWT for 12 weeks after treatment optimisation by senior review	
Item	Cost	Item	Cost
Cavilon Durable Barrier Film	£1.39	TNP pump	No ongoing cost
Flaminal Hydro 50g	£9.00	Granufoam dressing kit	£24.58
Tegaderm foam adhesive	£7.30	KCI canister (1 × week change)	£23.92
Ribbon 2cm x 45cm	£5.30		
Sterile scissors, forceps (single use)	£0.95		
Dressing pack	£1.02		
Total cost per day (4 changes per week)	£24.92 (£99.84)		
Total cost for 12 weeks	£1,198.08	Total cost for 12 weeks	£582.00

Treatment optimisation from senior review

By using a senior review static and deteriorating wounds feature, we were able to identify patients that were suitable for treatment optimisation by topical negative wound therapy. An example of the cost impact of this treatment improvement is optimising pressure ulcer treatment with intervention from negative pressure wound therapy (NPWT) [Table 3].

A £636.08 saving per pressure ulcer that goes on to heal via NPWT or £46,433 for our current caseload of 73 category 4 pressure ulcers.

Safety and risk

The absence of quality documentation or digital wound management solutions in

community services poses significant risks for both patient safety and organisational liability. Without accurate, standardised documentation and timely tracking, wounds may go unmonitored or deteriorate without escalation, increasing the likelihood of avoidable complications such as infection, sepsis, or even amputation. These clinical failings can lead to serious incidents including emergency admissions, prolonged healing, and in some cases, patient death.

From a legal and governance perspective, inconsistent records, missed reviews, or delays in treatment decisions expose providers to litigation and regulatory scrutiny, particularly when harm results from preventable deterioration (White et al, 2015). Inadequate wound documentation has already been

Table 4. Serious incidents	
Areas live with transformation programme:	All other areas (control):
Between June 2022 to May 2025 (3 deployment years)	Between June 2022 to May 2025 (3 years)
Number of claims = 0	Number of claims = 4
Between June 2019 to May 2022 (prior 3 years to deployment)	
Number of claims = 2	

cited in legal claims and inquests, underlining the urgent need for reliable, defensible documentation to ensure accountability, continuity, and high-quality care. Digital wound solutions may help close the evidence gap by providing quicker and easier access to standardised imagery and detailed documentation to strengthen the factual basis of any litigation and redress.

Though it is challenging to say for certain when an intervention may have prevented further deterioration or escalation or if our work has directly impacted outcomes. We did track the number of serious incidents that led to litigation at our organisation in the areas that were using the digital solution versus those that were not [Table 4].

Alignment with National Policy

The NHS 10-year Plan demands bold, system-wide transformation. Digital wound care directly supports all three national shifts, unlocking value today while laying foundations for sustainable, integrated care.

1. Hospital → community

- Keeps patients out of hospital through earlier intervention and better wound management.
- Supports place-based care by empowering neighbourhood teams to deliver safe, effective treatment closer to home.
- Reduces avoidable admissions, emergency department attendance, and pressure on urgent and elective services.

2. Sickness → prevention

- Identifies deteriorating wounds early, reducing the risk of chronic complications.
- Promotes timely, evidence-based treatment that speeds up healing and prevents escalation.
- Helps teams intervene before harm, improving outcomes and reducing serious incidents and litigation.

3. Analogue → digital

- Replaces manual assessments, paper records, and fragmented tracking.
- Offers real-time visibility of caseloads, healing trends, and clinical risk across teams.

Conclusion

CPFT has shown that to meet the growing demand for wound care and ensure the sustainability of community nursing, it is imperative that we invest in scalable, digitally enabled solutions. Evidence from our transformation journey highlights how digital wound management tools can significantly enhance clinical efficiency, support early intervention, and reduce unnecessary waste. However, it has not been an easy journey. With wound prevalence rising and community services under increasing strain, it is challenging to embed a transformation programme and evidence it for sustained investment, when we are continually tasked with cutting costs.

Easier access to funding is urgently needed to embed and expand these innovations across the system. Strategic investment to go alongside policy and national recommendations will not only ease pressure on services but will facilitate us to future-proof the NHS workforce.

Our vision is to embed self-supported care pathways with the use of a patient app and assess new ways of working with our care homes. ●

References

- Guest JF, Vowden K, Vowden P (2017) The health economic burden that acute and chronic wounds impose on an average clinical commissioning group/health board in the UK. *J Wound Care* 26(6): 292–303. doi: 10.12968/jowc.2017.26.6.292
- Guest JF, Fuller GW, Vowden P (2020) Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: update from 2012/2013. *BMJ Open* 10(12): e045253. doi: 10.1136/bmjopen-2020-045253
- Lee R (2024) A system approach to lower limb wound care. *Wounds UK* 20(4): 8–9
- Legs Matter (2023). The cost of care. Available at: <https://legsmatter.org/about-us/the-cost-of-care> (accessed 23.10.2025)
- National Wound Care Strategy Programme (2023) *Leg Ulcer Recommendations*. Available at: <https://www.nice.org.uk/guidance/hte32/documents/supporting-documentation-3> (accessed 23.10.2025)
- NHS (2025) *Fit for the future: 10 Year Health Term Plan for England*. Available at: <https://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future> (accessed 23.10.2025)
- White R, Bennett D, Bree-Aslan C, Downie F (2015) Pressure ulcers, negligence and litigation. *Wounds UK* 11(1): 8–14