

# Working together to improve outcomes for patients with chronic oedema/wet legs

## KEY WORDS

- » Chronic oedema
- » Lymphoedema
- » Tissue viability service
- » Lymphoedema service

Chronic oedema is a life-long condition that can be complicated by excess fluid leaking onto the skin, resulting in 'wet legs'. Prevention, early intervention and the provision of appropriate compression are key to optimising patient outcomes. The authors developed timely chronic oedema strategy for community nurses to reduce their caseloads and improve patient quality of life. This article outlines the challenges and phases involved in the project.

Swollen legs that have been present for 3 months or more that are not alleviated by elevation or diuretics may be the result of chronic oedema, also called lymphoedema (Heal, 2017). This is a life-long condition due to overloading of the lymphatic system. In some cases, the excess fluid (lymph) can leak out of the tissue onto skin, causing skin breakdown, irritation and putting the person at increased risk of cellulitis (Wounds UK, 2015). Older age increases the likelihood of developing this condition and of it becoming more complex, as the ageing process can cause changes in the structures of the lymphatic system and make damage more likely (Cooper-Stanton, 2018).

## BACKGROUND

Cambridgeshire and Peterborough Clinical Commissioning Group (CCG) is the fourth largest in England. It covers a population of >850,000, 18% of whom are aged >65 years. In 2017, Cambridgeshire and Peterborough Foundation Trust tissue viability service (TVS) was tasked with reducing the number of weekend visits made by community nurses to tend to patients with leaky/wet legs.

As a first step, the TVS reviewed 20 patients with chronic oedema and wet leg conditions who were on the community nurse caseloads. The review was performed to develop an understanding of how these patients were being managed and to assess and improve their treatment in practice. It established the following gaps, challenges and training needs:

- » Community nursing staff need support on how to manage wet legs
- » Patients need to be empowered to participate in their own care
- » Attention needs to be paid to toes and thighs, not just below-knee oedema
- » Patients should be managed collaboratively by the TVS, which predominantly manages patients with wet legs, and the lymphoedema service, which manages patients with dry legs
- » Mild to moderate oedema needs to be effectively managed in primary care.

Staff from the lymphoedema service attended the British Lymphology Society (BLS) conference in October 2017 and heard a presentation on the Welsh wet leg pathway. They shared this pathway with the tissue viability team on their return. As a result, staff from the services approached the CCG to secure funding to develop local wet leg pathways to improve patient referral and management.

Although this request was unsuccessful, the two specialist services committed to continue working together to develop a strategy to manage patients in the community. On talking to the community nurses who manage these complex patients, it became clear that not only would the nurses and patients benefit from a more joined-up cohesive approach, but also the wider health economy. The authors were determined to increase Trust staff member awareness of their key messages, namely that:

- » Patients on the nurses' caseload with wet legs had underlying chronic oedema

SALLY-ANNE BRADFORD  
*Clinical Manager Tissue Viability, Cambridgeshire and Peterborough NHS Foundation Trust*

SUE ROSSITER  
*Joint Day Therapy Lead and Clinical Specialist in Lymphoedema, Arthur Rank Hospice, Cambridge*

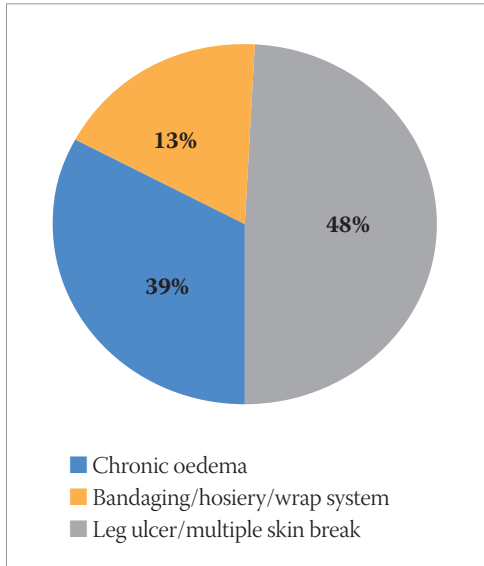


Figure 1. The reason the patient is on the community nurses' caseload

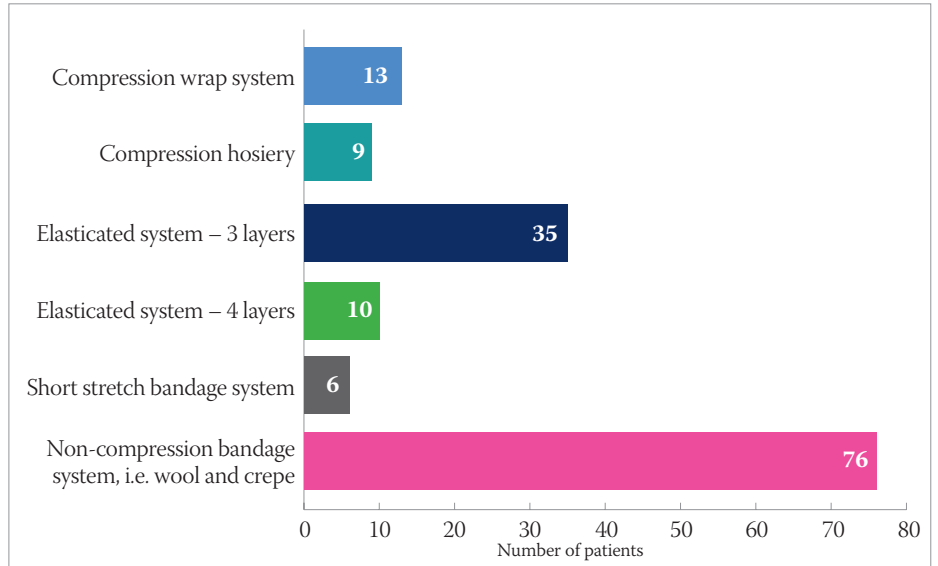


Figure 2. What treatment was in use for each patient?

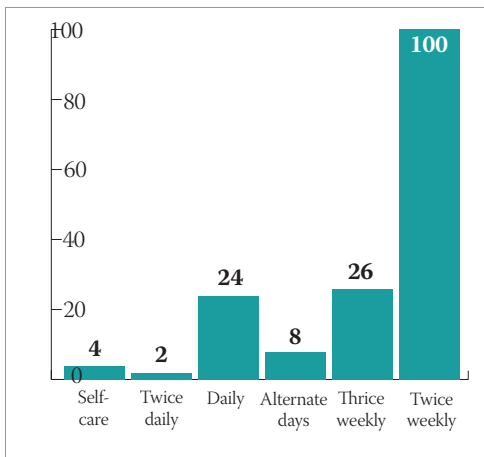


Figure 3. How often is the patient cared for?

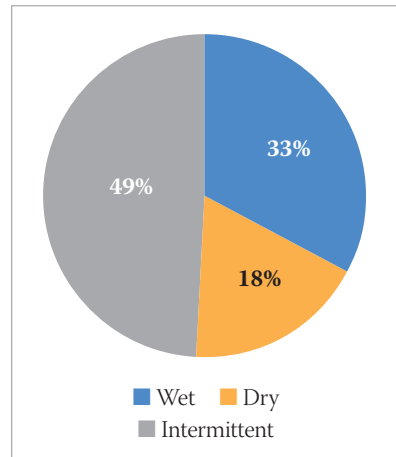


Figure 4. Status of patient's legs

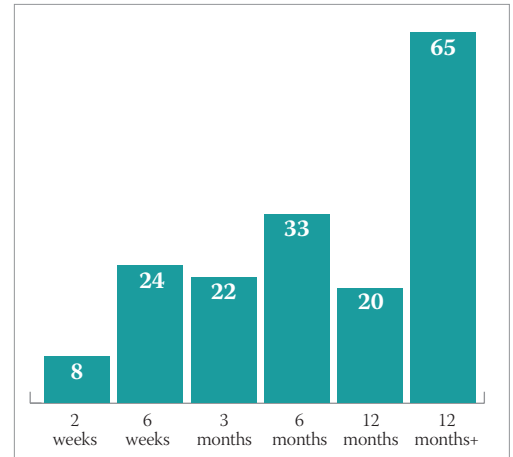


Figure 5. How long has the patient been on the caseload?

- » Managing chronic oedema patients appropriately would not only help improve their quality of life but also reduce community nurses' wet legs caseload
- » Not all patients require a Doppler assessment before applying compression therapy.

**METHOD**

The TVS performed a baseline audit of patients receiving care for leg management in 2018. The audit questionnaire contained 19 questions, most of which were related to the number of wet legs and patients who had not been given optimum compression garments. All nurses in

Cambridgeshire and Peterborough Foundation Trust were sent the questionnaires and given 4 weeks to complete them – one questionnaire per patient. Findings were recorded electronically via an online portal.

**RESULTS**

Questionnaires containing data 177 patients were returned (not all questions had been answered/mandatory). The responses revealed that:

- » 70 (39%) patients had chronic oedema (Figure 1)
- » 76 (43%) patients had not received appropriate compression therapy (Figure 2)

- ▶ 126 (71%) patients received two or three visits per week (Figure 3)
- ▶ Only 4 (2.3%) patients self-cared for their legs or received care from their carers (Figure 3)
- ▶ 58 (33%) patients had continuously wet legs (Figure 4)
- ▶ 65 (37%) patients had been on the caseload for 12 months or longer (Figure 5).

The audit confirmed that a number of challenges needed to be addressed and a phased approach instigated. It was decided to focus on early and effective diagnosis, as this is essential to reducing the number of wet legs, and on providing nurses with guidance as to which form(s) of compression could be applied.

The authors approached the hygiene and health company Essity to work in partnership with stakeholders, as their patient-centred values mirrored the authors' own vision. Essity played an integral part in every phase of the project.

**PHASE 1**

A new suite of treatment and prevention pathways for chronic oedema were developed during phase 1. The pathways, based on the 2019 BLS *Position Paper for Ankle Brachial Pressure Index (ABPI)*, ensured that community nursing staff had clear guidance and support on managing their patients. The recommendations were summarised in three chronic oedema/wet leg treatment pathways:

- ▶ Pre-Doppler (Figure 6)
- ▶ Post-Doppler (Figure 7)
- ▶ Prevention/maintenance (Figure 8).

To encourage patient participation, the authors created an information leaflet for looking after swollen legs (Figure 9) and a recommended limb care plan for patients and carers covering foot hygiene, legs, exercise, compression and skin care, abbreviated to FLECS (Figure 10).

The TVS, lymphoedema service, a health coach and Essity developed a training programme

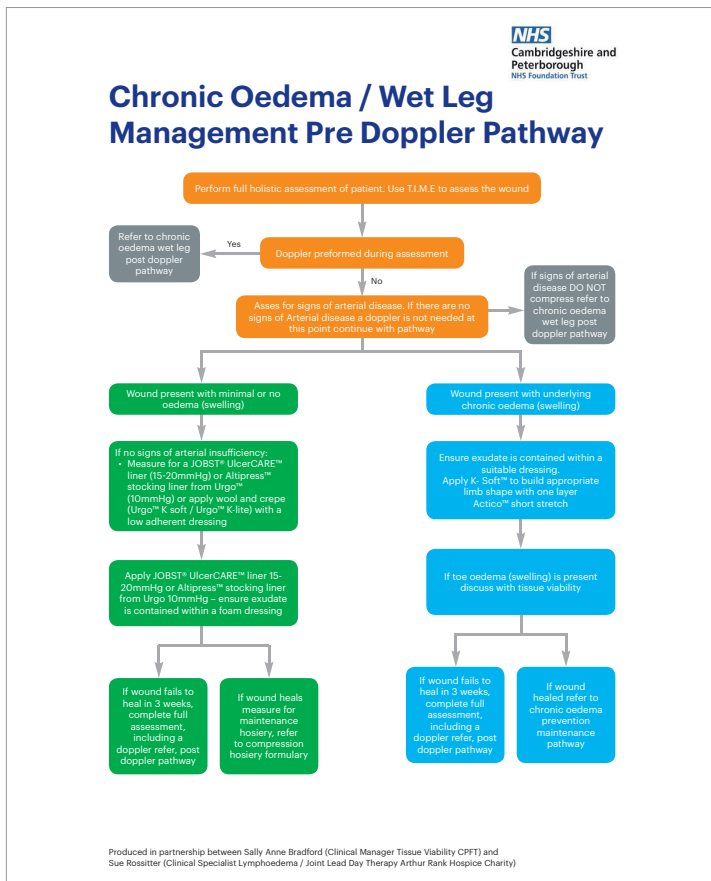


Figure 6. Chronic oedema/wet leg management pre-Doppler pathway

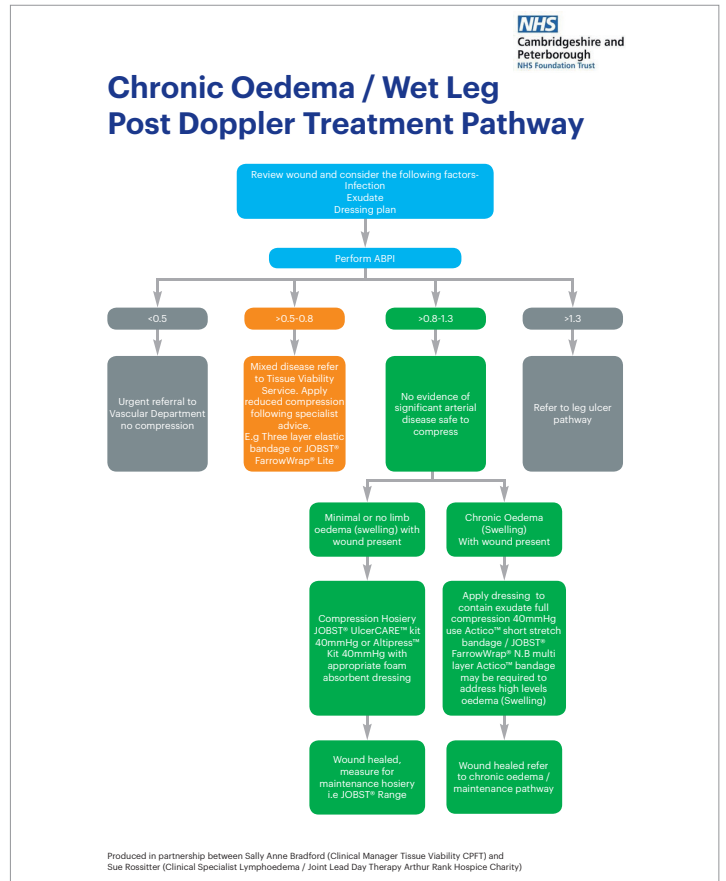


Figure 7. Chronic oedema/wet leg post-Doppler pathway

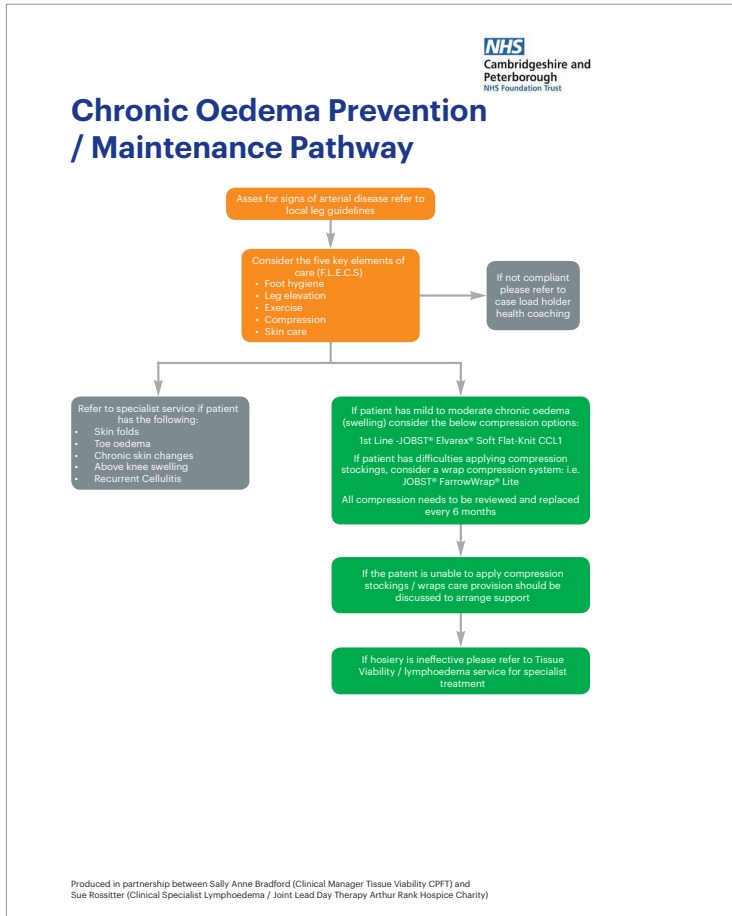


Figure 8. Chronic oedema prevention/maintenance pathway

Figure 9. Patient leaflet for swollen legs

Figure 10. Recommended limb care plan for patients and carers

for community and primary care staff. This programme provides a thorough understanding of chronic oedema and lymphoedema. It encourages holistic patient assessment and provides an opportunity to explore health coaching. Health coaching aims to support patients to live well within the limitations they are facing. Through a number of conversations, awareness is raised and options are created to engage patients in their own care, if they feel strong enough to do so. The 1-day training programme starts with education about the anatomy and physiology of the lymphatic system and holistic management approaches based on the FLECS care plan. As part of the introduction to compression therapy, the use of Doppler is discussed and staff members are introduced to the BLS vascular assessment tool to underline and encourage the early use of compression when managing legs. Health coaching is then presented as a method of engaging with patients and a way of benefiting staff members' wellbeing.

It facilitates healthy, sustainable behaviour change by helping patients develop awareness about their condition, identify key issues, and transform words into action in a way that meets the patient's lifestyle and desire for change. The day concludes with practical workshops on compression hosiery, wraps and bandaging, from toe to thigh. All of the training programme documents are available on the local staff intranet.

### PHASE 2

During phase 2, each team was asked to:

- ▶▶ Perform a deep audit of their full patient caseload, covering all patients under community care who were receiving limb care in order to understand current practice across whole service
- ▶▶ Develop a scoring system based on key factors affecting care. The authors used this to identify patients that required further investigation to determine their underlying diagnosis
- ▶▶ Implement a 12-month rolling training schedule for each community base, including:
  - ◆ Vascular assessment training session (to be completed by the clinical nurse specialist)
  - ◆ Complex patient review (to be completed by clinical nurse specialist)
  - ◆ Multidisciplinary approach to complex patients

- ◆ Pre- and post-Doppler/chronic oedema/leg ulcer/wet leg and post-healing maintenance pathways, underpinned with training and implementation

- ◆ New patient care plan introduction and training

- ◆ New compression hosiery formulary training and product selection

- ▶▶ Health coaching

- ▶▶ Engage with other community healthcare services, e.g. podiatrist, occupational therapist, physiotherapist, psychiatric nurses


- ▶▶ Continue engaging with practice nurses by sharing all documents via the practice forums

- ▶▶ Focus on the whole leg, not just below the knee.

### PHASE 3

Phase 3 involves a re-audit of the patient population to evaluate the outcomes and impact of the project. The 2018 audit will provide a baseline against which we can measure improvements over time. The re-audit will be completed by November 2020 and we hope that the results will confirm that effective inter-service collaboration can stop wet legs being a strain on patients and nursing teams alike. Training sessions are planned with GP practice nurses and community nurses over the next 24 months to ensure continuity of care if patients are being cared for by primary care teams.

### CONCLUSION

Care pathways, a limb care plan, patient information and comprehensive training were developed to address challenges and training needs identified in the management of patients with chronic oedema/wet legs. The impact of this practice development project will be monitored over time through audit and re-audit. It is hoped that the re-audit will demonstrate improved treatment quality and patient outcomes as well as reductions in nursing time. 

### REFERENCES

- British Lymphology Society (2019) *Position Paper for Ankle Brachial Pressure Index (ABPI)*. Available at: <http://bit.ly/3a6Dy1r> (accessed 14.01.2020)
- Cooper-Stanton (2018) Chronic oedema and the older person. *Br J Community Nurs* 23(Sup10):S14–20
- Heal D (2017) Improving patient concordance in lymphoedema management with SoftFit technology. *Br J Community Nurs* 22(Suppl5(Sup5):S22–S27
- Wounds UK (2015) *Best Practice Statement Compression Hosiery (2nd edn)*. Available at: <http://bit.ly/2QStxxq> (accessed 26.09.2019)

### ACKNOWLEDGEMENT

*This project was supported by Essity*