#### Title

Lymphoedema and Heart Failure Staff Educational Needs Analysis: Insights from a UK Online Survey – Part 2: Quantitative Results

#### Abstract

### **Background:**

Managing patients with coexisting heart failure (HF) and chronic peripheral oedema/lymphoedema (CPO/LO) presents clinical challenges, particularly regarding compression therapy.

#### Aim:

To assess healthcare professionals' roles, confidence, training needs, and use of guidance in managing HF and CPO/LO.

#### Methods:

A UK-wide service evaluation survey was completed by 342 healthcare professionals. A descriptive quantitative analysis was conducted.

#### **Results:**

Compression-related care was undertaken by 97% of LO practitioners and 91% of nurses, but only 3% of HF professionals. Over 90% of participants requested further training, with 59% of LO staff receiving education in the last 5 years, compared to 21% of HF specialists. Only 16% of HF staff had read key compression guidelines. Top education priorities included referral pathways (64%) and compression in HF. Multidisciplinary webinars were the most preferred format (66%).

### **Conclusion:**

Findings highlight the need for integrated education, shared care models, and better dissemination of compression guidance to support safe, effective care for this multimorbid population.

### Keywords

Heart Failure, lymphoedema, Peripheral oedema, integrated education, shared care models.

### **Key Points**

- Community healthcare professionals frequently manage patients with coexisting heart failure (HF) and chronic peripheral oedema/lymphoedema (CPO/LO), particularly in older populations.
- There is significant uncertainty regarding the safe application of compression therapy in patients with HF, despite existing guidelines.
- Referral pathways to HF and LO services vary, leading to inconsistencies in practice and potential delays in care.
- Multidisciplinary collaboration and joint education initiatives are highly desired by healthcare professionals to improve patient outcomes.
- Community nurses play a pivotal role in the early identification, referral, and management of these complex patient groups.

### **Reflective Questions**

- How confident am I in differentiating between chronic peripheral oedema and heart failurerelated oedema in my clinical practice?
- What steps can I take to improve my understanding and application of compression therapy in patients with coexisting HF and CPO/LO?
- How can better collaboration between community nursing, heart failure, and lymphoedema services enhance patient care outcomes?
- What additional education or training would support my role in managing patients with HF and CPO/LO in community settings?
- How can evidence-based guidelines be better integrated into my daily practice to ensure consistent and safe care?

### **Background**

Heart failure (HF) affects approximately 1 million people in the UK, with an estimated 200,000 new diagnoses each year (Conrad et al., 2018). It is a complex clinical syndrome associated with reduced cardiac output, breathlessness, fatigue, and peripheral oedema (NICE, 2022a; McDonagh et al., 2021). Chronic peripheral oedema (CPO), including lymphoedema (LO), is a common but often under-recognised comorbidity in people with HF, particularly among older adults (Keeley et al., 2019; Moffatt et al., 2017). Up to 60% of patients with HF experience CPO or lymphorrhoea, and both conditions share overlapping risk factors such as ageing, multimorbidity, and social deprivation (Rankin, 2016; Rossitto et al., 2019). Similarly, the average age of patients seen by lymphoedema services in Wales is 67 years, which may indicate a risk of undetected heart failure. Since 2023, the Lymphoedema Wales Clinical Network (LWCN) has collaborated with Heart Failure Services to investigate potential overlaps between the two conditions. As part of this work, audits have identified a substantial burden of undetected or unlinked cases. One Welsh lymphoedema service found that 50% of 100 patients with bilateral lower leg lymphoedema had a raised NT pro-BNP and were subsequently reviewed for heart failure. A larger, unpublished audit conducted between September 2023 and January 2025 across three health board Heart Failure Clinics identified oedema in 257 of 470 patients (53%), yet only 24 (9%) were known to their local lymphoedema service.

Compression therapy (CT) is the mainstay of lymphoedema (LO) management, however, despite best practice guidance (Wounds UK, 2023; The British Lymphology Society [BLS], 2024) it's use in patients with coexisting heart failure (HF) remains contentious due to concerns about increased preload and the potential exacerbation of cardiac symptoms (Wounds UK, 2023; Mortimer et al., 2014). Compression garments and the use of bandaging in heart failure patients is of particularly among community nurses (Cooper and Bagnall, 2016; Cooper and Brown, 2024). Even in specialist HF clinics, the presence of oedema is frequently under-recognised, leading to missed opportunities for intervention. A national audit of heart failure services in England and Wales reported that 56% of hospital admissions between April 2019 and March 2020 involved patients with moderate or severe peripheral oedema (National Institute for Cardiovascular Outcomes Research, 2020). This clinical concern prompted a collaborative study developed in Wales between lymphoedema and HF nurses, supported by the national Value in Health Care team. To ensure broad applicability and capture diverse perspectives across service settings, a UK-wide survey was promoted across all four nations with support from the National Heart Failure Forum, British Lymphology Society, and an educational grant from Essity.

### **Aims**

This evaluation was intended to inform service development and workforce planning and aimed to:

- Identify the education and training needs of healthcare professionals (HCPs) managing patients with coexisting HF and CPO/LO.
- Explore current clinical roles and practices regarding referral pathways and compression therapy.
- Assess awareness and application of existing clinical guidelines.
- Inform future education and collaborative practice initiatives to improve patient outcomes.

### Methods

This service evaluation comprised two components: a quantitative survey analysis and a qualitative thematic analysis. The present article reports on the quantitative findings from a cross-sectional, UK-wide online survey completed by healthcare professionals. Of the 348 responses received, 342 were complete and included in the analysis. The survey was co-designed by clinicians and researchers with expertise in heart failure (HF) and chronic peripheral oedema/lymphoedema (CPO/LO). It included both adapted and newly developed items to explore role-specific knowledge, confidence, and

educational needs. The survey began with questions capturing demographic information such as professional role, banding, and geographic location. This was followed by 17 structured questions examining clinical responsibilities, decision-making, perceived competence, prior education, and preferred training formats (see Table 1). The full questionnaire is provided in the supplementary materials. Further details on survey development, participant recruitment, ethical considerations, funding, and data collection are available in the companion article: Lymphoedema and Heart Failure Staff Educational Needs Analysis: Insights from a UK Online Survey – Part 1: Qualitative Findings (Cooper et al., 2025). This reference will be confirmed at the point of publication, as both articles are scheduled for concurrent release.

Table 1 – Quantitative Focused Questions

Theme	Questions
Tasks, roles and clinical decisions	Q4. Which of the following education topics [listed] would enhance your role (if any)?
	Q7. If a patient without a diagnosis of heart failure presented to you with a new symptom combination of shortness of breath, bilateral leg oedema and fatigue, what, if any, would your main action(s) be?  Q8. If chronic peripheral oedema was present, for which of the following patients would you recommend some level of lower limb compression
Competence and confidence	(where there are no other red flags)  Q6. Which tasks do you feel competent in, which would you like extra training/education and which are not your role/not applicable?
Previous education	Q10. Have you had any education/training on managing chronic peripheral oedema (lymphoedema) in the presence of heart failure recognition and management?
	Q11. Who provided this education/training?
	Q12. Have you read any of the documents below and (if so) did they change your practice?
Perceived education needs	Q14. How well do you perceive your education needs are met regarding chronic peripheral oedema (lymphoedema) in the presence of heart failure?
and resources	Q15. Do you feel you would benefit from education or further information on managing chronic peripheral oedema (lymphoedema) in the presence of heart failure?
	Q16. Which of the following education topics would enhance your role (if any)? (Multiple responses possible)
	Q17. What would be the best way to address these needs (if any)?

**Note:** This companion article focuses on the qualitative elements of the survey. Questions 1–3 and 5, which captured demographic data, are summarised in a table in the companion article. Opentext responses to questions 9 and 13 are also explored in detail there. The full questionnaire is provided as supplementary material.

### **Data Analysis**

Anonymised quantitative data were analysed descriptively using Microsoft Excel. Frequencies and percentages were calculated for all relevant variables, including demographic characteristics, competencies, and perceived education needs. The analysis focused on the demographics contained in the survey, with a focus on eleven questions outlined in Table 1.

### **Results**

The survey captured responses from a broad cross-section of HCPs. The following findings are presented to illustrate patterns in current practice, competency, decision-making, and the perceived value of existing guidelines and training resources.

# Question 4: Which of the following is included in your role regarding patients with heart failure and chronic peripheral oedema?

Respondents reported a wide range of responsibilities when caring for patients with HF and CPO/LO, reflecting significant role diversity across HCPs. The most frequently selected tasks overall included advising patients on reducing the risk of cellulitis or skin infections (n=282; 83%). Most agreed on their role including identification of new or worsening CPO/LO (66% HF; 87% LO and; 79% nurses) providing advice on self-management (n=256; 75%), and referral to other services (62% HF; 57% LO and; 71% nurses).

Compression-related activities were predominantly carried out by lymphoedema (LO) practitioners and nurses. Among participants, 97% of LO practitioners and 91% of nurses were involved in measuring compression garments, and over 90% in both groups were responsible for applying bandaging or other forms of compression. By contrast, heart failure practitioners were more likely to manage symptoms and medication, with 97% identifying HF symptoms and 93% involved in pharmaceutical management. These role-based distinctions were further reflected in responses around diagnosis and referral.

Most participants agreed their role included identification of new or worsening CPO/LO (66% HF; 87% LO and; 79% nurses) and referral to other services (62% HF; 57% LO and; 71% nurses). Free-text responses expanded on role descriptions, with additional tasks including health promotion, educating colleagues, and managing end-of-life symptoms. This division of labour underscores the need for joined-up working and mutual understanding across specialities.

# Question 6: Which tasks do you feel competent in, which would you like extra training/education, and which are not your role/not applicable?

Overall, 63% felt confident identifying HF symptoms, while 62% knew where to find cellulitis management guidelines. However, confidence in compression therapy tasks was lower; just 48% felt confident applying compression to patients with HF, and only 46% felt able to assess compression suitability in this group.

Notably, a substantial proportion of respondents expressed interest in further education across all task areas (range 29-45%)—especially in compression assessment and referral pathways—indicating a deficit among those already performing the tasks.

LO practitioners were the most confident in compression therapy [Table 2]. However, over half still wanted more training on HF referral pathways, suggesting that multidisciplinary integration is needed. Nurses reported moderate confidence and high interest in further education, especially around assessment and referral. In contrast, HF specialists demonstrated very low confidence in compression-related tasks—only 3% felt able to apply compression, and 66% wanted training in compression assessment.

Table 2 – Key Tasks and Reported Competency

Tasks	Feel con Nurse (N	•	Feel com Heart Fai Practition 71)	Iure	Feel com Lymphoe Practitio 143)	edema
	n %		n	%	n	%

I know the referral route for patients to a heart failure service	36	31	69	97	42	29
I know which patient with chronic peripheral oedema to refer to a lymphoedema service	42	36	17	24	98	69
If a patient with chronic peripheral oedema presented with infection cellulitis I would know where to find the latest consensus guidelines on management	63	54	11	15	135	94
I know which type of emollient would be prescribed to reduce skin problems and risk of infection	69	60	8	11	124	87
I know how to assess the suitability of a patient who has heart failure and chronic peripheral oedema (lymphoedema) for compression	49	42	8	11	97	68
I am confident in applying the appropriate strength class of compression to the lower limbs of a patient with heart failure	59	51	2	3	100	70

# Question 7: If a patient without a diagnosis of heart failure presented to you with a new symptom combination of shortness of breath, bilateral leg oedema and fatigue, what (if any) would be your main action(s)?

Most respondents indicated proactive behaviour: 68% would contact the GP for an urgent review, and 29% would refer to the Emergency Department. Only 5% would refer directly to an HF team, and just one respondent opted for a passive "watch and wait" approach and this person identified in an 'other' job role [Table 3]. It is worth noting that there will be variations of referral pathways across the four home nations, with most participants based in England.

Table 3 – Overall Response to Question 7

Response	n	% of all respondents
If new breathlessness on slight exertion/walking I'd contact the GP for urgent review/blood tests	232	68
If breathless even at rest I would send them to the Emergency Dept.	100	29
No response	69	20
Other	21	6
I can refer the patient straight to the heart failure team	17	5
I would take a 'watch and wait' approach and hope someone else deals with it	1	0.3

HF specialists had a 95% non-response rate, suggesting this scenario may fall outside their routine scope or that they only had patient contact once a diagnosis of heart failure was made.

## Question 8: If chronic peripheral oedema was present, for which of the following patients would you recommend some level of lower limb compression (where there are no other red flags)?

Respondents were presented with clinical scenarios involving chronic peripheral oedema (CPO) across varying stages of heart failure (HF). As shown in Table 4, confidence in recommending lower limb compression was highest for patients without a confirmed HF diagnosis (nurses: 50%; LO staff: 49.7%; Other: 41.7%) and those with compensated HF (LO: 62.9%; HF: 59.2%; Other: 41.7%). However, this dropped sharply for decompensated HF (LO: 22.4%; nurses: 14.7%; HF: 7%; Other: 16.7%) and refractory end-stage HF (LO: 21.7%; nurses: 12.1%; HF: 9.9%; Other: 8.3%). HF respondents were the least likely to recommend compression and more likely to report no access to information—for example, in cases of pulmonary oedema, 26.8% of HF staff reported lacking information, and 49.3% would not recommend compression. The 'Other' group, which included healthcare assistants, GPs, and service leads, showed lower overall confidence and were more likely to indicate the scenario was outside their scope of practice. These findings highlight marked variation in practice, particularly in complex HF presentations and among non-specialist roles.

Table 4 – Summary of compression recommendations and information access across HF scenarios

Patient presentation	Highest proportion recommending compression (% and group)	Lowest proportion recommending compression (% and group)	% indicating 'no access to information' (range)
No dx, SOB, bilateral oedema, fatigue	50% – Nurse	7% – HF	16.1%–33.8%
Compensated HF	62.9% – LO	31.9% – Nurse	12.7%–25%
Decompensated HF	22.4% – LO	7% – HF	26.8%–43.1%
Refractory end-stage HF	21.7% – LO	8.3% – Other	28.2%–43.1%
Pulmonary oedema	22.4% – Nurse	7% – HF	26.8%–38.8%

**Note:** Further anonymised information on individual group responses is available from the corresponding author on reasonable request.

# Question 10: Have you had any education/training on managing chronic peripheral oedema (lymphoedema) in the presence of heart failure recognition and management?

Results varied substantially by role, country, and band. LO practitioners had the most recent and consistent education, with 59% receiving training in the past 5 years. HF specialists and nurses reported lower rates of recent education—21% and 38%, respectively. Notably, 63% of HF specialists and over half of nurses had never received such training [Table 5].

Table 5 – Participants' Response to Job Role and Training

Job Group	No/ Nev	er	Yes, ove	er 5 years ago	Yes, within 5 years			
	n	%	n	%	n	%		
HF	45	63	11	16	15	21		
LO	44	31	15	11	84	59		
Nurse	62	53	10	9	44	38		
Other	7	58	2	17	3	25		

**Note:** 'Other' includes roles reported in small numbers, such as healthcare assistant/technician (multiple entries), foot & leg practitioner, service lead, and general practitioner.

Regional and banding breakdowns suggested additional disparities, with Band 3–5 staff least likely to have had any relevant education, and Band 7–8 staff mostly having older training (over 5 years). These disparities likely contribute to the clinical variation observed in previous questions.

### Question 11: Who provided this education/training?

Respondents reported a broad mix of training sources. The most common were self-study literature (n=68), online learning (n=64), local LO services (n=63), and multidisciplinary webinars (n=56). Other methods included national conferences, manufacturer sessions, and higher education [Table 6].

Table 6 – Participant Response Education Providers

Education provider	n
Self-study journals/literature	68
Self-study online	64
Local LO service	63
Multidisciplinary webinar masterclass	56
National/regional conference	45
Manufacturer/supplier	40
Local HF service	20
Higher education institution	18
Other	12

Qualitative comments revealed informal learning, such as colleague support, workplace exposure, and experiential learning from years of practice. While this adaptability is commendable, it also risks inconsistency in care. Perceived training value was rated modestly. Higher education institutions scored highest (mean = 2.6 out of 4), followed by local HF services (2.5) and local LO services (2.4).

# Question 12: Have you read any of the following documents and (if so) have they changed your practice?

Guideline engagement showed clear divisions by speciality. HF practitioners had high awareness and application of the National Institute for Health and Care Excellence (NICE) (75%) and European Society of Cardiology (ESC) (79%) guidelines. In contrast, LO practitioners and nurses had low awareness of cardiology-specific documents: 60–89% had not read them. Conversely, LO and nursing staff were more likely to engage with the Wounds UK Best Practice Statement (2023) (LO: 47%, nurses: 38%). Only 16% of HF specialists had read this document [Table 7]. Between 4-25% of respondents said they had read the documents but had not changed their practice with variations between healthcare professionals HF practitioners16-25%; LO practitioners 4-20%; Nurses 4-17%.

Table 7 – Participant Response Documents Read or Not Read

Document	Nurse				Heart Failure Practitioners					Lymphoedema Practitioners				
	Read/Changed practice.		Not Read		Read/Changed practice		Not Read		d Read/Changed practice		Not I	Read		
	n	%	n	%	n	%	n	%	n	%	n	%		
Nice	23	20	81	70	53	75	0	0	29	20	86	60		
Guidelines on														
Chronic HF														
(2018)														

National guidelines and or pathways.	12	10	99	85	36	51	24	34	27	19	105	73
ESC Guidelines: Diagnosis & Treatment of acute and chronic HF (2023)	6	5	104	90	56	79	2	3	13	9	125	87
Wounds UK Best Practice Statement - Compression Therapy & Peripheral Oedema (2023)	44	38	55	47	11	16	60	85	67	47	48	34

# Question 14: How well do you perceive your education needs are met regarding chronic peripheral oedema (lymphoedema) in the presence of heart failure?

Perceptions of educational adequacy were generally low across all job groups. Only 4% of LO staff and 3% of nurses said their needs were completely met. HF professionals expressed the greatest dissatisfaction: 30% said their needs were not met at all, and their average rating (1.9 out of 4) was the lowest of all groups.

Even LO professionals, who rated their training most favourably, reported only partial fulfilment of their learning needs [Table 8]. This underscores the systemic gaps in education provision and the importance of more comprehensive, interdisciplinary training.

Table 8 – Participant Responses to Educational Needs

Job Group	Not	at all	Part	ially	Mos	stly	Completely		
	n	%	n	%	n	%	n	%	
HF	21	30	39	55	11	16	0	0	
LO	17	12	71	50	50	35	5	4	
Nurse	29	25	65	56	19	16	3	3	
Other	3	25	6	50	1	8	2	17	

# Question 15: Do you feel you would benefit from education or further information on managing chronic peripheral oedema (lymphoedema) in the presence of heart failure?

The overwhelming majority reported a benefit from further education [Table 9].

Table 9 – Participant Response to Further Education & Training

Job Group	Ye	es	Ма	ybe	No		
	n %		n	%	n	%	
HF	68	96	3	4	0	0	
LO	125	87	14	10	4	3	
Nurse	109	94	7	6	0	0	
Other	11	92	1	8	0	0	

### Question 16: Which of the following education topics would enhance your role, if any?

Based on the question participants selected a wide array of topics, with the top five being:

- 1. When to refer to the HF team (64%)
- 2. Exercises for patients with HF and LO (60%)
- 3. Differential diagnosis of swollen legs (60%)
- 4. Management of oedema in advanced disease (59%)
- 5. Knowledge of medications that increase LO (59%)

Role-based analysis revealed predictable differences: HF staff wanted LO-related training (e.g. compression, cellulitis), while LO staff focused on HF awareness and referral knowledge. Nurses expressed broad interest across nearly all categories, suggesting their central position in delivering shared care.

### Question 17: What would be the best way to address these education needs?

Respondents favoured practical and accessible learning formats. The most endorsed method was a multidisciplinary webinar or masterclass (66%), followed by local training from HF (56%) and LO teams (47%). Online learning and in-practice training were also popular (45–46%).

Free-text responses highlighted preferences for:

- Locally tailored education
- Written guidelines and case-based materials
- Joint training between HF and LO services
- Accessible formats that reflect real-world care settings

### **Discussion**

This service evaluation offers a unique, two-part analysis of how HCPs engage with the complex task of managing coexisting HF and CPO/LO. The quantitative findings presented here are strengthened by insights from the accompanying qualitative analysis, revealing consistent themes of role ambiguity, variation in clinical confidence, and fragmented education and service provision. The insights confirm longstanding concerns around care fragmentation, uneven training access, and the cautious application of compression therapy in patients with HF. When viewed alongside recent audits, which indicate an unmet need in terms of recognising CPO/LO in the presence of HF and vice versa, it is clear that there is a widespread unmet education need (Jones et al. 2024).

### **Competency and Clinical Confidence**

The survey revealed striking differences in competence and confidence between job roles. While LO practitioners reported high confidence in applying compression (90%), only 3% of HF practitioners felt competent in this task. This disparity exists despite emerging guidance supporting the cautious application of compression in compensated HF when clinically appropriate (Wounds UK, 2023; Cooper & Brown, 2024). The reluctance among HF practitioners may stem from fears of exacerbating HF symptoms or limited access to practical training. However, when used appropriately, it may prevent complications such as cellulitis, immobility, and reduced quality of life (International Lymphoedema Framework, 2012; Wounds UK, 2023). This echoes the findings of Mortimer et al. (2014) and Itkin et al. (2021), who describe the overlapping pathophysiology of HF and lymphatic dysfunction, reinforcing the need for interdisciplinary management. Notably, over 60% of HF practitioners did not know where to find guidance on managing cellulitis or oedema, suggesting a gap in awareness; with many seeking colleague support and advice. A recent service evaluation revealed similar findings about lipalgia syndrome/lipoedema, particularly concerning the availability and use of guidance, and how this influences practitioners' perceptions of their competency (Cooper

et al. 2025). The discrepancy between evidence and confidence underlines the importance of jobspecific education and clear guidance for safe compression use in HF.

### **Guideline Dissemination and Implementation**

Despite the publication of detailed guidance (Wounds UK,2023; BLS, 2024), only 16% of HF professionals reported that these resources influenced their clinical practice and 60% had not read them. By contrast, 75% reported relying on the broader NICE HF guidance (NICE, 2022a; 2022b), which does not offer detailed recommendations on compression therapy. This suggests an implementation gap, where speciality guidance fails to reach or resonate with the generalist or community-based staff (Backhouse & Ogunlayi, 2020; Moule et al., 2016). Implementation science highlights the need for tailored dissemination strategies that embed guidance into local pathways. This is particularly relevant for services that encounter patients with oedema, regardless of a formal diagnosis of HF or lymphoedema. A retrospective observational study presented at The British Heart Failure Society (2024) reported that up to 20% of patients may present with oedema in the absence of a known diagnosis of HF or LO (Jones et al., 2024). This highlights the need for guidance that is both accessible and integrated across disciplines. When guidelines are siloed or difficult to access, uptake is inevitably limited, and opportunities for timely intervention may be missed.

### **Multidisciplinary Collaboration**

A lack of integration between HF and LO services emerged as a consistent theme with siloed service delivery, fragmented pathways, and confusion around roles. This finding is supported by Rankin (2016) and Keeley et al. (2019), who call for integrated lymphoedema pathways that reflect the reality of multimorbidity. Professionals expressed frustration at being unable to coordinate care effectively across teams. Indeed, only 5% of respondents reported that they could make direct HF referrals; an area ripe for service improvement. These are relevant considerations when we consider the multiple services which those with CPO may present, such as HF and echocardiography clinics (Jones et al. 2024). Shared decision-making tools such as the Derby Compression Therapy Pathway (2023) are examples of good practices that could be replicated nationally.

### **Education and Training Needs**

Over 90% of respondents reported that they would benefit from further education. The topics with the highest demand included recognising when to refer to HF teams, differential diagnosis of oedema, and compression therapy in HF. These findings align with the qualitative data, where staff reported learning 'on the job' and a reliance on self-study rather than formal training. Satisfaction with existing education was modest, with HF practitioners reporting the lowest perceived fulfilment (mean score 1.9/4). Structured education from higher education institutions or local services scored highest (2.5–2.6/4), reinforcing the value of contextualised, practical training (Backhouse & Ogunlayi, 2020). Despite broad engagement with webinars and online self-study, these formats were rated lower in satisfaction. This supports adult learning theory, which emphasises the need for role-specific, case-based training embedded in everyday practice.

### **Implications for Practice**

This evaluation highlights the need for integrated, cross-speciality education and standardised care pathways to support clinicians managing coexisting heart failure (HF) and chronic peripheral oedema/lymphoedema (CPO/LO). LO specialists felt confident with compression but required support in HF-related care. HF practitioners were cautious about compression, and nurses—often spanning both domains—expressed uncertainty around referral processes and treatment planning. With rising HF prevalence (Conrad et al., 2018) and chronic oedema recognised as lymphatic dysfunction (Mortimer et al., 2014), multidisciplinary collaboration is essential across the patient healthcare journey. Tools like the Derby and Oxford HF compression pathways offer replicable

models, while wider uptake of guidance from Wounds UK (2023) and BLS (2024) can help reduce practice variation.

#### Recommendations

- 1. **Integrated Education**: Multidisciplinary training on compression use and co-management of HF and CPO/LO.
- 2. **Guideline Implementation**: Improve dissemination and use of relevant clinical guidance across services.
- 3. **Collaborative Care**: Strengthen links between HF and LO teams to ensure consistent decision-making.
- 4. Referral Pathways: Standardise access to HF and LO services to avoid treatment delays.
- 5. Ongoing Evaluation: Monitor how education and pathway use influence patient outcomes.

### Conclusion

This survey highlights significant variations in confidence, practice, and education among healthcare professionals managing patients with coexisting HF and CPO/LO. While lymphoedema practitioners reported high competency in compression therapy, heart failure specialists and generalist nurses expressed uncertainty—particularly regarding safe compression use, referral pathways, and guideline application. Despite the availability of targeted guidance, its impact on practice remains limited, underscoring a need for more accessible, integrated education. The findings support the urgent development of cross-speciality training, shared care protocols, and decision-making tools to promote safe and consistent management. Community nurses and generalists, who often act as the first point of contact for this patient group, require enhanced support to bridge gaps between cardiac and lymphatic care. Embedding multidisciplinary education and unified referral pathways into clinical practice will be essential for improving outcomes and ensuring equitable, evidence-informed care for people living with both HF and CPO/LO.

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