

Exploring the barriers and effectiveness of larvae therapy in chronic wound management in community nursing: An integrative literature review

Evgeniya Krotneva ✉^{a,b}^a School of Nursing and Midwifery, University of Lancashire; ^b Lancashire Care NHS Foundation Trust: Preston, GB**Key Words:** *larvae therapy; chronic wound management; community nursing; barriers to implementation*

Abstract

Aim: This paper critically evaluates the effectiveness of larvae therapy, also known as maggot debridement therapy, in managing chronic wounds and its potential for wider implementation within community nursing settings. Larvae therapy, as a biological method of debridement, has been used for centuries, with recent advancements renewing the interest due to its ability to cleanse necrotic tissue effectively. **Methodology:** The methodological approach follows the PICO framework and includes an integrative literature review process based on the PRISMA guidelines. **Findings:** Larvae therapy is clinically effective in improving wound healing and dissolving necrotic tissue, yet challenges persist, such as patient/clinician acceptance, stigma, lack of awareness, insufficient training and finances influencing nurse-led management. **Conclusion:** Enhancing the integration of community nursing practice will require overcoming key barriers. These include, public, nurse and patient acceptance; clinical policy and evidence-based guidelines; continuing professional development; allocation of resources based on cost benefit analysis, while also prioritising further research into patient experience.

Introduction

Wound management remains a critical aspect of health-care, particularly within community settings where chronic wounds such as diabetic ulcers, pressure sores and venous leg ulcers are prevalent (Lumbers, 2018). Chronic wounds can significantly affect patient quality of life and traditional treatment approaches such as dressings, antibiotics or surgical debridement do not always lead to satisfactory outcomes (Frykberg & Banks, 2015). Wound management in the United Kingdom (UK) is generally nurse-led and the use of larvae (or larval) therapy (LT), also known as maggot debridement therapy (MDT), has been underutilised. There has been a renewed interest

in LT as an alternative treatment for hard to heal wounds and infected ulcers (Hopkins et al., 2022). LT involves applying sterile maggots to wounds and the larvae secrete proteolytic enzymes to dissolve necrotic tissue, allowing easier removal and regeneration of healthy tissue (Bazaliński et al., 2019; Guest et al., 2023). The effectiveness of LT, particularly in treating non-healing wounds, has been demonstrated in numerous studies, yet implementation in community nursing remains limited due to stigma, lack of awareness, insufficient training and cost (Guest et al., 2023).

This paper explores the critical effectiveness of LT for chronic hard-to-heal wounds, focusing on potential implementation within community nursing. The significance lies in addressing the growing need for effective wound care, especially in populations with comorbidities such as diabetes, antimicrobial resistance, and where wounds are more likely to become chronic (Coombes et al., 2024). Barriers to LT in community nursing will be identified to provide practical recommendations for its implementation.

Methodology

An integrated literature review (ILR) will examine the clinical and cost-effectiveness of LT, the outcomes it produces and the barriers to widespread adoption in community settings. The research synthesises evidence from primary and secondary studies, including systematic reviews, to evaluate the role of LT in wound management (Lau & Kuziemy, 2017). By integrating diverse research paradigms, the methodology addresses the multifaceted nature of LT in chronic wound management, allowing assessment of clinical effectiveness and contextual factors. This methodology enables evaluation of clinical effectiveness alongside the contextual, systemic, and human factors that influence implementation (Nilsen, 2015). By integrating quantitative data with qualitative insights, the

✉ **Corresponding author:** School of Nursing and Midwifery, University of Lancashire, PR1 2HE, UK.
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ILR goes beyond clinical results to address challenges in LT adoption and helps draw detailed conclusions capturing LT's complexity in community nursing and chronic wound care (Ejima et al., 2016)

Table 1. Summary of PICO

P	I	C	O
Population/Patient/Problem	Intervention/Exposure	Comparison	Outcome
Patients with chronic wounds, including diabetic ulcers, venous/arterial ulcers, burns and pressure sores	Larvae therapy as a method of debridement, improve wound healing and prevent infection	Conventional treatments, such as surgical debridement or advanced wound dressings	Efficacy, cost effectiveness, acceptability and community implementation of larvae therapy

Search process

A well-structured search strategy is essential to identify relevant, high-quality evidence (Bramer et al., 2017). Preliminary searches identified key terms and refined parameters for a systematic approach. Databases such as PubMed, CINAHL Ultimate and AMED were selected for their relevance to healthcare, nursing and wound care research. These databases ensured high-impact, peer-reviewed coverage. To uphold rigour, the framework Population, Intervention, Comparison and Outcome (PICO) framework (see Table 1) was used (Richardson et al., 1995). PICO provided structure for research questions and evidence review, ensuring focus and systematisation (Huang et al., 2006). Applying PICO ensured specificity, relevance and comprehensive synthesis (Melnyk & Fineout-Overholt, 2019). Key search terms included "larvae therapy," "maggot debridement therapy," "infected wounds," "chronic wounds," "community nursing," and "wound care." The timeframe was expanded from ten to sixteen years (2009 to 2025) due to limited evidence found. Only peer-reviewed English-language papers were included to maintain quality (Gough et al., 2017).

The initial search yielded n=69 records from the databases. n=2 duplicate records were identified; all n=67 records were screened based on title and abstract. n=55 records were excluded at this stage because they did not meet the inclusion criteria. n=12 full-text papers were fully assessed for eligibility and n=3 papers were excluded due to irrelevance. n=9 studies formed the foundation of the paper's analysis of the efficacy, cost-effectiveness, acceptability and community implementation of LT in wound care (Coombes et al., 2024; Dumville et al., 2009; Gaffari et al., 2023; Gieroń, 2018; Greene et al., 2021; Redford et al., 2024; Shi & Shofler, 2014; Soares et al., 2009; Zubir et al., 2020).

Inclusion and exclusion criteria (see Table 2) were applied to refine the search further. This ensured the review addressed the specific topic effectively while maintaining relevance and rigour (Gieroń, 2018). The geographical

focus was on Europe and the UK, as these regions share similar healthcare systems, funding models and demographics, making findings more transferable to the UK context (Gieroń, 2018). This structured approach ensured the review captured the most relevant, high-quality evidence to inform the research effectively.

Table 2. Inclusion and exclusion criteria

Inclusion criteria:	Exclusion criteria
Studies evaluating the effectiveness of LT in wound care	Papers focusing solely on hospital settings or acute care
Studies conducted in community settings or relevant to community settings/ primary care	Studies that did not compare larvae therapy with conventional treatments
Primary research, including randomised controlled trials (RCTs), cohort studies and case studies	Non-English language publications
Systematic reviews and meta-analyses focusing on wound debridement techniques	Studies outside the UK and Europe were excluded

A Preferred Reporting Items for Systematic Reviews and Meta-Analyses, PRISMA (see Figure 1) diagram was used to document the evidence selection process (McKenzie, et al., 2021). This visual tool outlined each stage of study inclusion, from initial identification to final eligibility, ensuring transparency and a consistent approach (Moher et al., 2009). Studies were critically assessed for methodological quality, relevance and potential biases, ensuring that only robust and credible evidence informed the analysis. Diverse evidence types, including randomised controlled trials, systematic reviews, and narrative studies, were integrated to achieve a comprehensive understanding of the topic (Whittemore & Knafel, 2005). To maintain high ethical standards, only peer-reviewed and ethically sound studies were included (Wu et al., 2019). This ensures that findings are credible, responsible, and contribute meaningfully to understanding LT in community nursing and wound care (Lincoln & Guba, 1985).

The Critical Appraisal Skills Programme (CASP) is a widely recognised set of tools designed to evaluate the quality of research studies systematically (Critical Appraisal Skills Programme, 2018). CASP (2018), provides structured checklists for various study designs, including random controlled trials (RCT's), cohort studies, qualitative research and systematic reviews. These tools guide researchers in assessing methodological rigour, relevance, and potential bias, ensuring that the evidence included in a review is credible and dependable (CASP, 2018). For instance, CASP enabled the assessment of whether studies addressed a clearly defined research question and employed appropriate methods to answer the question (Nigam et al., 2022). Moreover, the use of CASP ensured that study outcomes were clearly defined and measured using valid tools, enabling robust comparison of efficacy, cost-effectiveness, and acceptability (CASP, 2018).

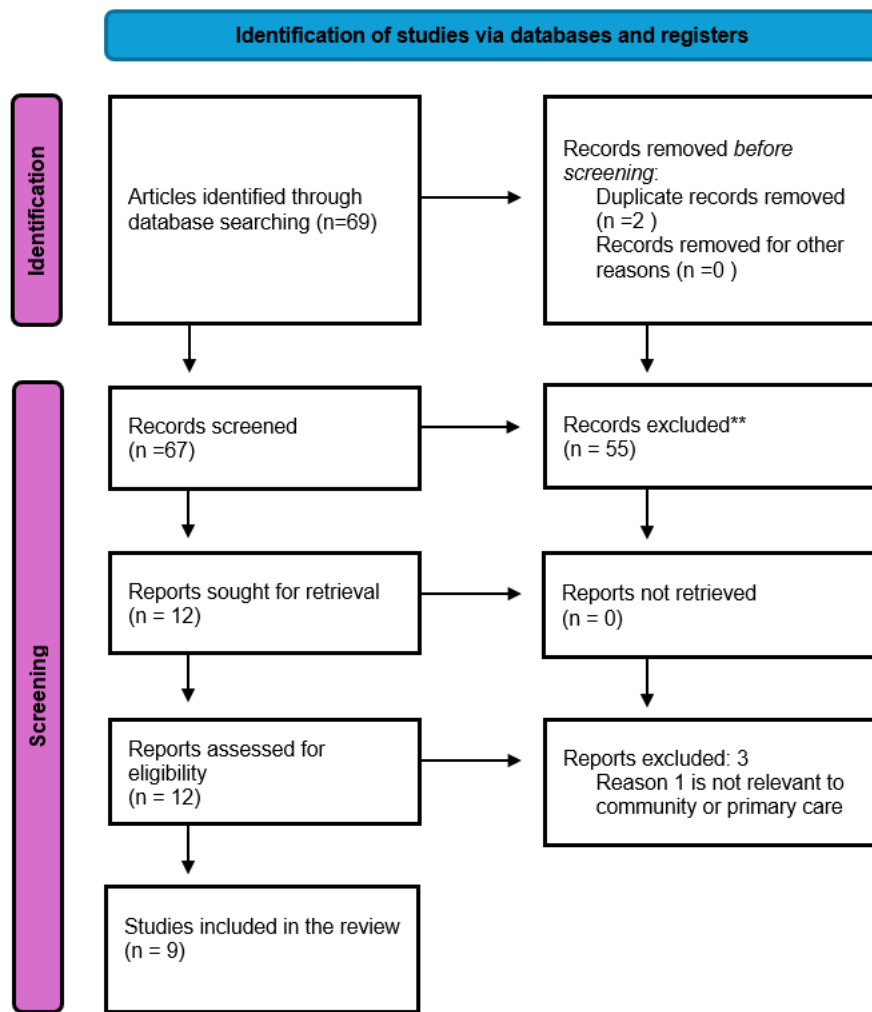


Figure 1. Summary of PRISMA

Analysis and synthesis

When conducting an ILR, adopting a systematic and rigorous approach to analysing evidence is critical to ensure the reliability and validity of the findings. Thematic synthesis was chosen over narrative synthesis because it offers a structured and systematic framework for comparing findings, allowing for the identification of patterns, relationships, and key themes relevant to the use of LT in chronic wound management. This approach is particularly suited to qualitative and mixed-methods studies, as it enables the integration of diverse evidence into a cohesive narrative. Table 3 was created to document key study characteristics, to provide a structured foundation for further analysis. The studies reviewed include various research paradigms, underscoring the importance of a pluralistic approach integrating quantitative, qualitative and mixed methods.

This is significant for LT, as successful implementation depends on factors such as patient comfort, nurse confidence, and societal attitudes toward live organisms in care (Welsh, 2017). Without understanding these elements, evidence-based interventions risk being underutilised regardless of efficacy (Kolaski et al., 2023). Barriers such as stigma, lack of training or logistical challenges

in community settings may limit adoption (Mumford & Nigam, 2024). Addressing these gaps requires qualitative and mixed-method research exploring patient and practitioner experiences, providing a holistic understanding of LT's real-world practicability and impact (Wasti et al., 2022).

Understanding broader implications for patient care is essential because LT's success depends not only on clinical effectiveness but on alignment with patients' needs, expectations and care context (Kwame & Petruccka, 2021). Patient comfort, emotional responses and willingness to undergo LT play critical roles in its acceptance and outcomes (Kwame & Petruccka, 2021). If unaddressed, patients may decline treatment despite proven efficacy (Kwame & Petruccka, 2021). Broader implications include LT's potential to reduce healthcare inequalities, particularly in community nursing where access to advanced treatments may be limited (Bazaliński et al., 2023). Addressing barriers such as nurse training, logistics, and societal attitudes enables effective implementation and improved outcomes (Bazaliński et al., 2023). Considering these implications, healthcare services should ensure patient-centred care remains a priority (Redford et al., 2024). LT, while effective, can have psychological impacts on patients unfamiliar with maggot

Table 3. Included Studies

Authors and year	Study Design	Sample Size	Intervention	Key Findings	Quality assessment (CASP)
Coombes et al. (2024)	Mixed-Methods Study	n=80 patients & clinicians	LT implementation in community settings	Highlights practical barriers such as supply issues, training, and patient reluctance	High-quality study with robust methodology
Dumville et al. (2009)	RCT	n=267 patients	LT vs. hydrogel in venous leg ulcers	No significant difference in healing time, but LT was more effective for debridement	Moderate-quality RCT, potential biases in wound assessment
Gaffari et al. (2023)	Systematic Review & Meta-Analysis	n=15 studies	LT for non-healing wounds	LT significantly reduces wound size and infection compared to standard care	Moderate-quality review, some heterogeneity among included studies
Gieron et al. (2024)	Systematic Review	n=12 studies	LT for chronic wounds	Confirms LT's effectiveness in debriding necrotic tissue and promoting healing	High-quality review with well-defined inclusion criteria
Greene et al. (2021)	RCT	n=100 patients	LT vs. surgical debridement	LT was as effective as surgery but less invasive and more cost-effective	High-quality RCT, rigorous methodology
Redford et al. (2024)	Survey Study	n=150 clinicians	Healthcare providers' views on LT	Many clinicians hesitate to recommend LT due to patient concerns and lack of training	Moderate-quality survey, some self-report bias
Shi and Shofler (2014)	Systematic Review	N/A	LT for chronic wounds	LT effectively debrides necrotic tissue and promotes wound healing	High-quality systematic review with strong methodology
Soares et al. (2009)	Economic Analysis	N/A	Cost-effectiveness of LT vs. surgical debridement	LT reduces long-term healthcare costs by preventing surgery and prolonged hospital stays	High-quality economic analysis with strong cost models
Zubir et al. (2020)	Qualitative Study	n=30 patients	Patient experiences with LT	Psychological barriers and stigma impact acceptance of treatment	High-quality qualitative study with strong thematic analysis

therapy (Bazaliński et al., 2023). Therefore, nurses' ability to communicate benefits and manage concerns is vital for successful outcomes (Kwame & Petrucka, 2021).

By integrating evidence from RCTs, systematic reviews, narrative reviews and observational studies, an ILR provides a holistic understanding that moves beyond clinical outcomes (Jordan et al., 2011). ILR's enable the synthesis of quantitative data, such as debridement efficacy and cost-effectiveness, alongside qualitative insights on nurse and patient attitudes and logistical barriers to LT adoption. This is crucial for LT, where evidence spans clinical trials to implementation science and barriers to uptake are as important as clinical outcomes (Nilsen, 2015).

Thematic findings

A synthesis of the reviewed literature revealed three key themes that influence the application and adoption of LT in chronic wound management:

1. Clinical efficacy of LT in wound care
2. Economic considerations and cost-effectiveness
3. Psychological and social acceptance

The reviewed studies demonstrate that LT offers significant therapeutic benefits by excelling in debriding necrotic tissue and promoting wound healing, especially in chronic or hard-to-heal wounds.

Clinical efficacy of larvae therapy in wound healing

The primary therapeutic benefit of LT lies in its capacity to debride necrotic tissue and promote wound healing, particularly in chronic and hard-to-heal wounds (Greene et al., 2021). Gaffari et al. (2023), Gieroń et al. (2024), and Zubir et al. (2020), demonstrate that LT accelerates necrotic tissue removal compared to hydrocolloid or silver dressings. Building upon this general understanding of LT's therapeutic benefits, several empirical studies have examined its practical outcomes and microbiological effects in real-world clinical contexts. Gieroń et al. (2024) specifically explored bacterial reduction following LT application. Gieroń et al. (2024) observed n=20 patients aged 18-81 with hard-to-heal wounds unresponsive to conventional treatments. Bagged LT applications significantly reduced bacterial burden, with total bacterial strains decreasing in eight wounds and alarm pathogens falling from 37.5% to 18.1%. However, only four patients received multiple applications, limiting the study's reliability. Single applications were less effective, with five cases showing increased bacterial strains post-treatment. Some wounds became temporarily more vulnerable to infection after debridement (Gieroń et al., 2024).

Gieroń et al. (2024) found LT was particularly effective against resistant bacteria, including *Proteus mirabilis* (ESBL), *Pseudomonas aeruginosa*, *Enterobacter cloacae*

cae, and MRSA (Gierón et al., 2024). The authors recommended combining LT with antibiotics to enhance efficacy and delay antimicrobial resistance, while emphasising consistent treatment duration. Despite strengths such as clear inclusion criteria and robust methodology, the small sample and inconsistent application protocols reduce generalisability (Vasileiou et al., 2018). Zubir et al. (2020) conducted a systematic review comparing LT with hydrogel dressings for chronic wound management. The review of five studies (n=580 patients) concluded that LT facilitates faster and more effective debridement. The authors noted rising chronic wound prevalence among ageing populations, drove the exploration of biological treatments. Of the included studies, three were RCT's, one retrospective, and one cohort study, reflecting varying evidence quality. Studies spanned the US, France, and the UK, suggesting healthcare context may influence results (Anandaciva, 2023).

Zubir et al. (2020), addressed mixed chronic wounds, including venous, diabetic, and pressure ulcers; however, most did not account for comorbidities, which may have influenced healing outcomes. Follow-up periods ranged from one month to a year, and LT application methods varied: two studies used loose larvae, one mixed, and two used bagged larvae. The study found no significant outcome difference between loose and bagged larvae, although findings by Dumville et al. (2009) suggests loose larvae are more effective. The evidence consistently supported LT's superior debridement, with complete debridement achieved within five weeks and approximately 50% granulation observed by three weeks. However, no significant difference was identified in overall healing duration. Pain was a notable side effect, varying between patients (Zubir et al., 2020).

Coombes et al. (2024) explored not only LT's clinical performance but also its practical and economic implications, offering a more holistic understanding of its application in healthcare settings. Coombes et al. (2024) examined LT's clinical and economic efficacy, combining RCT's with qualitative case studies within PRISMA guidelines (Page et al., 2021). The study reinforced LT's effectiveness in debridement, granulation, and infection control. Larval excretions showed antimicrobial activity against MRSA and *E. coli* (Coombes et al., 2024). Economically, LT accounted for only 0.02% of NHS wound-care expenditure in Wales yet offered savings through reduced hospital stays and resource use (Coombes et al, 2024).

Gaffari et al. (2023) conducted an RCT comparing LT and silver dressings in n=31 male patients with grade III burns. Participants were randomly assigned (n=15 LT; n=16 control) using concealed allocation and treated for 18 months under ethical approval from Tehran University (Gaffari et al., 2023). LT was applied every two days, and silver dressings were applied thrice weekly. The primary outcome, time to debridement, was significantly shorter

in the LT group (median 96 hours), than in the control (156.5 hours) [$p < 0.001$]. Healing time was also shorter: 24 days versus 45 days, respectively [$p < 0.001$] (Gaffari et al., 2023). LT demonstrated superior granulation and necrosis resolution, with 5-, 15-, and 13-fold improvements over baseline. Although bacterial clearance differences were not statistically significant, LT reduced contamination trends, likely by disrupting biofilms (Lai, 2022).

To place these findings in a wider evidence base, Shi and Shofler (2014) conducted a systematic review to evaluate the general efficacy, safety, and clinical applicability of LT across various wound types. Shi & Shofler (2014) evaluated LT's efficacy, safety, and practical applications for chronic wounds, including diabetic ulcers, pressure ulcers, and venous leg ulcers (Shi & Shofler, 2014). The review analysed thirty-nine studies, but few were RCT's or high-quality observational trials. Many RCT's had small samples, short follow-up, or unclear outcomes, limiting reliability. Reporting inconsistencies, particularly for pain and infection control, complicated comparisons. Publication bias was evident, with positive results more likely to appear in print (Murad, 2018). Using the GRADE framework, overall evidence quality was rated "moderate to low" (Higgins et al., 2019) LT was found generally more effective than conventional methods across debridement time, healing rates, cost, and patient satisfaction. Its antimicrobial activity against MRSA further supports its therapeutic potential (Shi & Shofler, 2014).

Greene et al. (2021) explored LT's role in debriding venous leg ulcers (VLU's), reviewing six quantitative studies from n=357 screened records. LT was found to achieve faster debridement than hydrogel or sharp debridement and was more cost-effective. However, LT did not significantly enhance complete healing rates, particularly when combined with compression therapy. VLU's affect 1% of the Western population and consume up to 50% of community nurses' time, costing the NHS £5.3 billion annually (Greene et al., 2021). LT's natural debridement and antimicrobial properties make it an appealing adjunct yet the reports of increased pain during treatment may limit acceptance (Schul, 2023). The small sample sizes and methodological variation across studies limited generalisability (Ross & Zaidi, 2019). The authors called for larger, long-term RCTs focusing on quality of life and cost outcomes.

Dumville et al. (2009) compared LT and hydrogel for venous and mixed-aetiology leg ulcers. Recruiting n=267 patients across the UK, participants received loose larvae, bagged larvae, or hydrogel in community and hospital settings. The trial assessed debridement rate, healing time, pain, and cost. LT achieved faster debridement: 14 days (loose), 28 days (bagged), versus 72 days (hydrogel), yet no significant healing difference at 12 months (34% LT versus 44% hydrogel healed). Pain was high-

er among LT patients, reducing tolerability. Costs were initially greater but offset by shorter debridement times (Dumville et al., 2009). Although blinding was impossible, randomisation and stratification improved validity (Gieroń, 2018). As a pragmatic RCT, VenUS II balanced real-world applicability with variability in treatment delivery (Dal-Ré et al., 2018). Despite these challenges, the trial remains high-quality evidence for demonstrating LT's effectiveness for debridement but not for accelerated healing (Bazaliński et al., 2023).

Economic considerations and cost-effectiveness

Economic factors play a critical role in the adoption of LT. Chronic wounds demand long-term care, frequent dressing changes, and substantial nursing intervention (Lindholm & Searle, 2016). Soares et al. (2009) found that LT may reduce overall treatment durations and associated healthcare expenditures. Chronic wounds demand long-term care, frequent dressing changes, and substantial nursing intervention (Lindholm & Searle, 2016). However, cost-effectiveness of LT compared to other wound debridement methods remain a key concern (Gieroń et al., 2024). Guest et al. (2020) suggest that LT is more cost-effective than standard treatments, particularly for chronic wounds resistant to healing. This is because LT can reduce prolonged antibiotic use, hospitalisation, and surgical intervention, leading to long-term healthcare savings. However, upfront costs, such as larval production, sterilisation, and specialist training, may appear high, especially in resource-limited community settings (Dalglish et al., 2020), potentially deterring investment in necessary infrastructure (Guest et al., 2020). Consequently, future research should develop cost models tailored to community nursing, where resource allocation differs from hospital care (Bulamu et al., 2024). For instance, Soares et al. (2009) examined LT's cost-effectiveness for chronic wounds, including diabetic foot and pressure ulcers. While findings suggest that LT reduced treatment duration and costs compared to standard methods like hydrogel dressings, methodological and practical limitations reduce confidence in these conclusions.

Soares et al. (2009) provided a cost-effective intervention, yet its outdated cost data no longer reflects current healthcare expenses. Inflation, advances in wound care technologies, the cost of dressings and changes in NHS staffing mean reported financial outcomes may not apply today. For example, Hydrogel® dressings were common at the time and their limitations may have exaggerated LT's apparent cost-effectiveness (Guest et al., 2020). Hydrogel® is slower at debriding necrotic tissue, potentially making LT seem disproportionately advantageous (Dumville et al., 2013). Additionally, newer technologies such as enzymatic debridement agents, negative pressure wound therapy, and advanced dressings were not widely available or included, limiting the applicability of findings from 2009 to current practice (Norman et al.,

2022). An economic evaluation perspective is limited, focusing only on direct medical costs such as treatment materials, dressing changes, and staff time, but it ignores wider societal costs, including patient quality of life, productivity loss, and caregiver burden (Drummond et al., 2015).

Faster wound healing through LT could improve patient outcomes, reduce pain, and shorten time away from work, all of which have economic value (Soares et al., 2009). Nevertheless, future research must address weaknesses with updated, robust RCT's comparing LT to modern debridement methods (Dumville et al., 2009). Longer-term follow-up should evaluate healing rates, readmissions, and quality of life. Comprehensive evaluations, including direct and indirect costs, would better reflect LT's value to patients and healthcare systems (Drummond et al., 2015).

Psychological and social acceptance

Despite promising clinical results, the evidence base for LT in community nursing is incomplete, with a lack of large-scale RCT's comparing LT to standard treatments in community settings. There is limited research on integration into routine practice, and insufficient data on long-term outcomes, such as recurrence or durability of wound healing (Bazaliński et al., 2023; Sherman et al., 2017). Public perceptions also influence acceptance of LT and the evaluation of clinical efficacy and policy changes that integrate LT into standard treatment pathways, alongside demonstrated cost-effectiveness, could facilitate wider acceptance (Nigam et al., 2022; Redford et al., 2024; Soares et al., 2009).

Patient acceptance remains a significant barrier to the widespread use of LT, as patients often express pain, discomfort, anxiety, or disgust at the idea of maggots applied to wounds, which can reduce treatment adherence and overall efficacy (Sherman et al., 2017). Babiarczyk and Tobiczky's (2024) study based on n=60 patient questionnaires, found participants reported feelings of disgust (50%), anxiety (43.3%), disbelief (18.3%), and biting, itching and fear of maggots (20%). Despite these experiences, 63.3% of patients reported a willingness to undergo further LT. Addressing these barriers are important in community nursing, as patient-centred care relies on education to explain the sterile nature, scientific rationale, and clinical benefits of LT improves acceptance and outcomes (Sherman et al., 2017; Wayman et al., 2019). However, ensuring community nurses are adequately trained and confident remains a challenge, particularly as cultural factors may further influence acceptance, necessitating culturally sensitive communication strategies (Sherman et al., 2017). Additionally, healthcare providers' lack of training and familiarity with LT limits implementation, especially in community settings with fewer specialised resources compared to hospitals (Sherman et al., 2017). Continuing professional development pro-

grams, including immersive workshops, e-learning, and mentorship, could equip nurses with the necessary skills to communicate strategies and overcome both psychological and practical barriers (Ocloo et al., 2021).

Conclusion

This ILR critically evaluated LT effectiveness in managing chronic wound infections. Three themes were found to be clinical efficacy, cost-effectiveness, and the psychology of acceptance.

LT shows promise in promoting debridement and reducing chronic wound size. LT consistently accelerates debridement, enhances granulation, and reduces bacterial load in chronic wounds especially against antimicrobial resistant organisms (Coombes et al. 2024).

Outdated cost data further complicates interpretation, highlighting the need for updated economic evaluations (Guest et al., 2017). Economic analyses suggest potential cost savings through reduced hospital stays, reduced use of antibiotic therapy, and faster wound preparation, though upfront costs remain higher.

Psychological barriers, including discomfort and disgust, reduce adherence, but targeted education and clinician training can enhance acceptability (Babiarczyk & Tobiczky, 2024; Bazaliński et al., 2023). However, evidence remains inconsistent regarding overall healing duration and patient-reported comfort. Pain, cultural stigma, and limited clinician familiarity continue to constrain adoption of LT (Babiarczyk & Tobiczky, 2024).

Addressing methodological limitations, cost challenges, and psychological barriers, alongside higher-quality, patient-centred research, could support LT's broader integration into NHS community nursing as an effective chronic wound therapy.

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Author Biographies

Evgeniya Krotneva  <https://orcid.org/0009-0004-9777-6733>
University of Lancashire. Lancashire Care NHS Foundation Trust:
Preston, GB

Evgeniya is a registered nurse currently working as a Community Nurse within NHS England. She completed her Bachelor's degree in Nursing at the University of Central Lancashire and later obtained a Master's degree in Nursing, further developing her clinical and academic expertise. She has extensive experience in community healthcare, patient-centered care, and health promotion, supporting individuals with complex health needs through holistic, evidence-based practice. Her academic interests include public health, preventive healthcare, and the integration of clinical practice with research and education. She is committed to continuous professional development and aims to contribute to healthcare innovation through academic research and collaboration.