Navigating the use of GenAI in wound care communication

Welcome to the first issue of the journal for 2026. We are only a few weeks into the new year, and the topic of generative artificial intelligence (GenAI) is once again prominent in the news. I do not intend to debate whether we should be using GenAI; my view is that it is here to stay and, therefore, must be understood and used judiciously. What matters is how we harness it to support our work in clinical practice, academia and research. This editorial explores the use of GenAI to support the health literacy of individuals with wounds, its potential to improve communication between healthcare providers and patients, and the accuracy of AI-generated personalised health information.

Bhattacharya et al (2025) highlighted the potential of AI, including GenAI, to enhance the health literacy of individuals with wounds by improving communication and patient engagement. They proposed that AI-driven tools can facilitate symptom reporting and help bridge communication gaps between patients and healthcare providers, thereby improving patients' understanding of their wound conditions and treatment options. Such tools include patient-facing symptom-checking chatbots and personalised treatment recommendations, which may empower patients through better access to information and education. Similarly, Nelson et al (2025) noted that symptom-checking chatbots can support patient reporting and strengthen communication pathways, contributing to improved understanding of wound conditions and treatment plans. Together, these findings support the idea that AI-driven communication tools can enhance patient engagement and education – key components of health literacy. By offering personalised recommendations and monitoring support, AI systems may help patients better understand their wound status and care requirements, potentially improving adherence and self-management (Rippon et al, 2024). In the context of postoperative wound management, Raghavan et al (2026) suggested that conversational chatbot tools can provide accessible guidance beyond clinician availability, helping to simplify complex medical information and improve patient comprehension.

Conversational chatbots also show promise in supporting individuals with specific wound types, such as diabetic foot ulcers. Shiraishi et al (2024) demonstrated high accuracy (mean accuracy 91.2%) in chatbot responses to clinical questions related to diabetic foot ulcers based on established guidelines, indicating their potential value in disseminating relevant medical information. However, limitations remain that affect their reliability and safety. Variability in response accuracy and the risk of AI hallucinations – where chatbots generate incorrect or fabricated information – pose concerns for patient safety and information quality (Asiksoy, 2025). Additionally, the authenticity of references provided by chatbots can be inconsistent, with some models showing lower rates of verified sources, which may undermine credibility (Shiraishi et al, 2024).

Regarding chronic wounds of the lower limb, Costa and Serra (2025) reviewed the central role of communication in supporting patient education, adherence, early detection, emotional support and coordination of care. They argued that culturally competent communication practices, attention to social determinants of health, and the integration of AI into patient–provider interactions all influence the effectiveness of communication in chronic wound care.

To evaluate the use of GenAI from a patient's perspective, I posed the following prompt to Copilot (Microsoft):

"I've been told I have a venous leg ulcer. Can you explain what that is? Can you also tell me what the best treatment is? And can you tell me what I can do to help it to heal?"

This was the response:

"A venous leg ulcer is a wound – usually on the lower leg, often around the ankle – that happens because the veins in the leg aren't moving blood back up toward the heart as effectively as they should. When that circulation slows, pressure builds, fluid leaks into the surrounding tissues, and the skin becomes fragile. Even a small knock can then turn into a wound that struggles to heal. They're quite common, especially if someone has varicose veins, swelling in the legs, a

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history of blood clots, or spends long periods sitting or standing.”

Importantly, the response also stated:

“I can give you an overview of the typical approaches, but this isn’t a substitute for personalised medical advice. Treatment usually focuses on improving circulation and protecting the wound so it can heal.”

Regarding treatment, Copilot told me that common components of care include compression therapy, which includes special bandages or stockings that help reduce swelling and improve blood flow. This is often the cornerstone of treatment. Wound care will involve dressings to keep the ulcer moist (but not wet), protect it, and support healing. A clinician usually selects the right type based on the ulcer’s appearance. If there are signs of infection, such as increased pain, redness, heat, or pus, a healthcare professional may prescribe treatment. Not all ulcers are infected, so antibiotics aren’t always needed. Addressing underlying vein problems is also important, so procedures to improve vein function (such as treating varicose veins) are recommended to reduce the chance of recurrence.

In terms of what I can do to support healing, suggestions included:

Support circulation
- Elevate your legs when resting, ideally above heart level, to reduce swelling.
- Stay active with gentle walking to encourage blood flow.
- Avoid long periods of sitting or standing without movement.

Look after the wound and skin
- Follow the dressing plan given by your clinician.
- Keep the surrounding skin moisturised to prevent dryness and cracking.
- Don’t scratch or pick at the area, even if it itches.

Support your overall health
- Maintain a balanced diet, especially with enough protein, vitamins, and minerals.
- Stay hydrated.
- Stop smoking if you smoke, because it slows healing.
- Manage conditions like diabetes, if relevant, since they can affect healing.

Protect your legs
- Wear compression stockings if prescribed, and put them on first thing in the morning.
- Avoid knocks or injuries to the lower legs, as the skin can be delicate.

In this instance, Copilot did not provide any resources or references to follow-up on. I will leave you to reflect on the advice that Copilot provided and how accurate it is.

In summary, the evidence discussed here suggests that AI tools have the potential to help address disparities in health literacy related to wound care. They may enhance patient education, support clearer communication, and provide accessible, personalised guidance that encourages engagement in wound management. However, as Nelson et al (2025) emphasised, these technologies are intended to support, not replace, clinical decision-making, and their use must be framed within appropriate professional oversight. While emerging studies indicate that AI-generated personalised health information can contribute positively to patients’ understanding of their wounds, direct evidence specifically examining the role of generative AI in wound-related health literacy remains limited. Continued research is therefore essential to determine how these tools can be used safely, effectively, and equitably in clinical practice. In the meantime, I would encourage you to explore how GenAI might help to support your approaches to patient education to facilitate improved health literacy. ●

References

Asiksoy G (2025) Nurses’ assessment of artificial intelligence chatbots for health literacy education. *J Educ Health Promot* 28(4): 128. doi: 10.4103/jehp.jehp_1195_24

Bhattacharya P, Liu H, Dutta PK et al (2025) *Revolutionizing Healthcare 5.0: The Power of Generative AI*. Cham, Switzerland: Springer

Costa D, Serra R (2025) The role of communication in managing chronic lower limb wounds. *J Multidiscip Healthc* 18: 3685–708. doi: 10.2147/JMDH.S533416

Nelson S, Lay B, Johnson AR Jr (2025) Artificial intelligence in skin and wound care: enhancing diagnosis and treatment with large language models. *Adv Skin Wound Care* 38(9): 457–61. doi: 10.1097/ASW.0000000000000353

Raghavan N, Monson AJ, Limon D et al (2026) Artificial intelligence in surgery revisited: leveraging AI for postoperative instructions, clinical support, and intelligent monitoring. *Am Surg* 92(3):652–7. doi: 10.1177/00031348251391854

Rippon MG, Fleming L, Chen T et al (2024) Artificial intelligence in wound care: diagnosis, assessment and treatment of hard-to-heal wounds: a narrative review. *J Wound Care* 33(4): 229–42. doi: 10.12968/jowc.2024.33.4.229

Shiraishi M, Lee H, Kanayama K et al (2024) Appropriateness of artificial intelligence chatbots in diabetic foot ulcer management. *Int J Low Extrem Wounds* 2024. doi: 10.1177/15347346241236811. Online ahead of print