



The necessity of developing a virtual care model for patients with chronic wounds: letter to the editor

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Dear Editor,

Chronic wounds are serious, protracted, and costly health problems that occur in all healthcare settings [1]. The prevalence of chronic wounds due to various causes during life is approximately 2.2 per 1000 population [2]. It is estimated that the incidence and prevalence of chronic wounds will continue to increase in the coming decades, following the predicted increase in the prevalence of chronic diseases, risk factors for chronic diseases, progress in health care, increased survival rates, and demographic changes [3]. A patient with chronic wounds has to lose a day's wage and pay travel expenses to receive care services in person, and the time of the appointment with the clinician is not even definite. Most of the referral cases are very unimportant and non-urgent and the cost of the service is high [4].

The onset of the COVID-19 pandemic in 2020 required healthcare providers to use technology to support a variety of care needs, including wound care. Therefore, new opportunities have presented themselves to shift from traditional face-to-face visits for specialty wound care to telehealth visits [5]. The development of emerging digital technologies has provided unique opportunities to offer virtual care in the healthcare system worldwide to improve health service delivery [6]. To address both the present and future needs of wound care, digital transformation can be incredibly helpful. It can aid the transformation of patient care approaches, catering to both cross-disciplinary care, and remote consultations, all of which have become necessities during the COVID-19 pandemic [7].

Various models for healthcare delivery have evolved over the past few years. There is more focus on preventive medicine, primary care, and providing services in patients' own homes. This has caused health care to shift from a traditional hospital-based approach toward a more unified system [3]. Incorporating telehealth into the delivery of wound care has great appeal for patients, family caregivers, and health care providers. Remote care helps patients and family caregivers to avoid time-consuming and expensive trips from home to see the wound specialist. At the same time, it allows providers to manage their patients in their own homes. Potentially, virtual care can improve access to wound care and its outcomes and reduce the challenges of face-to-face visits [5].

Virtual care is broadly defined as using technology that supports healthcare activities not provided in-person, including videoconferencing (telemedicine, telehealth), telephone (telehomecare, nurse call centers), e-mail, and text messaging [8]. Providing patient-initiated synchronous and asynchronous pathways can increase patient involvement and facilitate person-centered care. Video consultations can increase collaboration and knowledge sharing among health professionals and promote timely interventions and optimal care plans [7]. Insights into virtual care as a care model have led to several areas for research, including cost-effective ways to expand Internet access while maintaining patient confidentiality, the need for providers to be trained in virtual care platforms, and the development of teamwork, all of which improve the integration of virtual care [8].

However, the adoption of telehealth may facilitate future sustainable use and pave the way for innovation in wound care delivery, including the use of hybrid models and strategies for training and collaboration with providers to deliver complex care. Evidence on virtual care models for patients with chronic wounds is weak, and virtual care appears to currently have a limited place in chronic wound management [5]. Improving the healthcare system requires the use of innovative models of care at a global scale. In addition to facilitating faster evaluation and treatment of wounds,

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this method of care may reduce the challenges caused by face-to-face visits, including the loss of patient and family time and costs resulting from face-to-face visits. Despite the overall benefits of the shift to virtual care for patients with chronic wounds, awareness of how to provide care in this way is insufficient in wound management. Therefore, health system managers and policymakers should plan to increase the effectiveness of wound care services and systems and decision-making in this area, and clinical research should be directed to identify and accurately evaluate virtual care models and their consequences for patients with chronic wounds.

Declarations

Conflict of interest The authors declare no competing interests.

References

1. Olsson M, Järbrink K, Divakar U et al (2019) The humanistic and economic burden of chronic wounds: a systematic review. *Wound Repair Regen* 27(1):114–25
2. Martinengo L, Olsson M, Bajpai R et al (2019) Prevalence of chronic wounds in the general population: systematic review and meta-analysis of observational studies. *Ann Epidemiol* 29:8–15
3. Gethin G, Probst S, Stryja J et al (2020) Evidence for person-centred care in chronic wound care: a systematic review and recommendations for practice. *J Wound Care* 29(Sup9b):S1–S22
4. Chakraborty C, Gupta B, Ghosh SK (2020) Mobile telemedicine systems for remote patient's chronic wound monitoring. *Virtual and mobile healthcare: Breakthroughs in research and practice: IGI Global*. p. 977-1003
5. Kostovich CT, Etingen B, Wirth M et al (2022) Outcomes of telehealth for wound care: a scoping review. *Adv Skin Wound Care* 35(7):394–403
6. Babaei N, Zamanzadeh V, Valizadeh L et al (2023) A scoping review of virtual care in the health system: infrastructures, barriers, and facilitators. *Home Health Care Serv Q* 1-28
7. MILNE J (2021) Establishing the benefits of digital consultation pathways in wound care. *Wounds UK* 17(4)
8. Rush KL, Burton L, Smith MA et al (2021) News article portrayal of virtual care for health care delivery in the first 7 months of the COVID-19 pandemic. *Telemed Rep* 2(1):108–17

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