

# Diabetic Foot Amputations: Engagement Still Needed to Improve Outcomes

Alfred Gatt, PhD<sup>1</sup>, Cynthia Formosa, PhD<sup>1</sup>,  
and Nikolaos Papanas, MD, PhD<sup>2</sup>

## Editorial

Type 2 diabetes mellitus and its complications have been a significant global health concern, with foot ulceration being one of its most detrimental complications.<sup>1</sup> Europeans sustain 100 000 diabetic foot amputations per year: 5% and 17% of patients with diabetic foot ulcers require major (above the ankle) and minor (below the ankle) amputations, respectively, within 1 year of ulcer development.<sup>2</sup> Experts warn that this amputation crisis will become worse. Already, every 20 s a limb is lost in the world due to diabetes. Moreover, every 1.2 s someone develops diabetic foot ulceration and every 7 s someone dies from diabetes.<sup>2,3</sup> Amputations may lead to re-amputations and death.<sup>4</sup> Hence, no wonder that patients with diabetes have been reported to fear major lower-limb amputations more than death.<sup>5</sup>

The aggravating clinical situation is reflected in the fact that European diabetic foot ulcer treatment market size was valued at \$1.45 billion in 2021 and is expected to increase at a compound annual growth rate of 5.4% between 2022 and 2030.<sup>2</sup> As we have previously reported,<sup>5,6</sup> although routine screening for diabetes complications is recommended, to date this is still not standard practice among healthcare professionals in both primary and secondary care. A poor screening rate of <50% in most European countries indicates underscreening.<sup>5</sup>

It may take several weeks or months for diabetic foot ulcers to resolve, and if left untreated, they may lead to infection, necrosis and amputations.<sup>7</sup> Given this complexity and given the increasing prevalence of diabetes,<sup>8</sup> the burden on health care resources is formidable and needs to be averted.<sup>9,10</sup> We must reflect on our current practices, improve screening, and implement new ideas, technologies and practices. Wider availability of multidisciplinary foot clinics, prompt referral to specialists, immediate management of urgent situations, improved wound bed management, and, conceivably, artificial intelligence are vital.<sup>5,10-14</sup> Innovative collaborations, new legislation and new investment are indispensable. Without investment in research and innovative technology, larger sums of money will be spent in the coming years on increasing amputation rates. It is now time for clinicians, patients and diabetes associations to collaborate with local and European parliaments to promote such investment.

The International Journal of Lower  
Extremity Wounds  
2025, Vol. 24(1) 5–6  
© The Author(s) 2025  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/15347346251316041  
journals.sagepub.com/home/ijl



In conclusion, active engagement is needed to reduce diabetic foot amputations. Improved screening and organization of care, utilization of new technologies, but also new investment are absolutely necessary. It is important that we all work together in 2025 to show that amputations are preventable.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

## References

1. World Health Organization. *Diabetes*. World Health Organization; 2023. <https://www.who.int/news-room/factsheets/detail/diabetes#:~:text=Many%20people%20with%20diabetes%20develop>
2. Maguire B. Europe's amputation crisis, diabetes experts call for urgent new screening programs. Euractiv's Advocacy Lab; 2024. <https://www.euractiv.com/section/diabetes-cancer-hepatitis/news/europes-amputation-crisis-diabetes-experts-call-for-urgent-new-screening-programs/>
3. Armstrong DG, Boulton AJM, Bus SA. Diabetic foot ulcers and their recurrence. *N Engl J Med*. 2017;376(24):2367-2375.
4. Setacci C. Time is tissue. *J Endovasc Ther*. 2012;19(4):515-516.
5. Formosa C, Chockalingam N, Gatt A, Papanas N. Diabetic amputations in 2023 are still more frightening than death-act now before it is too late. *Int J Low Extrem Wounds*. 2023 Apr 20:15347346231171439.
6. Formosa C, Gatt A, Chockalingam N. A critical evaluation of existing diabetic foot screening guidelines. *Rev Diabet Stud*. 2016;13(2-3):158-186.

<sup>1</sup>Faculty of Health Sciences, University of Malta, Malta

<sup>2</sup>Diabetes Centre-Diabetic Foot Clinic, Second Department of Internal medicine, Democritus University of Thrace, Alexandroupolis, Greece

## Corresponding Author:

Nikolaos Papanas, Diabetes Centre-Diabetic Foot Clinic, Second Department of Internal Medicine, Democritus University of Thrace, Alexandroupolis, Greece.

Email: [papanasnikos@yahoo.gr](mailto:papanasnikos@yahoo.gr)