

D-Foot International: A Global Movement For Limb Preservation

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Abstract: Every 30 seconds, a limb is lost to diabetes mellitus, yet the majority of the amputations are avoidable and surely preventable. D-Foot International is helping to change this reality across seven regions by creating a global movement that brings together health-care professionals, educators and policymakers. Through flagship programs such as *Train the Foot Healthcare Professional* and *D-Foot Awareness Day*, D-Foot International has taught and trained thousands, screened tens of thousands, and driven measurable reductions in amputation rates, morbidity and mortality. Its journey serves as a testament to what can be accomplished via coordinated actions: turning knowledge into life-saving practice. D-Foot International continues to evolve from a professional network into a global movement providing a platform for learning, leadership and limb preservation aimed at ending avoidable diabetes-related amputations.

Key words: *diabetic foot ulcer, lower-limb amputation, global health education, multidisciplinary foot care, train-the-trainer model*

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The fastest growing global health challenge of the 21st century is diabetes mellitus, with prevalence projected to increase substantially over the coming decades.¹ This rise is paralleled by an increasing burden of complications, with diabetes-related foot complications (DRFCs) having the highest morbidity and mortality rates. Approximately 19-34% of people living with diabetes mellitus (PLDM) may experience foot ulcers during their lifetime, and these remain the primary cause for lower-limb amputation.² The burden of DRFCs is disproportionately high in low-resource settings where health-care systems often are faced with limitations in infrastructure, trained health-care professionals (HCPs) and access to diagnostic and treatment services. Unfavourable and poor outcomes, including high rates of infection, amputation and death, are attributed to delays in presentation, inadequate screening and a lack of multidisciplinary care.³⁻⁵

In response to these challenges, global health efforts have increasingly focused on strengthening education, improving early detection and facilitating multidisciplinary collaboration.

Within this context, D-Foot International is a global organization dedicated to addressing DRFCs through coordinated efforts in clinical practice, collaboration and education. This article reflects on the organization's journey, examining its evolution, key initiatives and contributions.

Mission And Vision: Building A Global Network

D-Foot International was established with a core mission, "to end avoidable lower limb amputations due to diabetes worldwide". From its inception, D-Foot International recognized that addressing DRFCs requires more than clinical expertise alone. It requires a coordinated approach that incorporates clinical care, education, prevention and policy engagement. The organization's structure reflects its global vision, with representation across seven regions: Africa, South and Central America (SACA), North America and the Caribbean (NAC), Middle East and North Africa (MENA), Europe, South-East Asia (SEA), and Western Pacific (WP). This multi-regional framework allows context-specific adaptation of strategies while maintaining a unified global mission.⁶

Early initiatives concentrated on creating a cooperative network of HCPs dedicated to improving diabetic foot care. D-Foot International positioned itself as a platform for professional development and knowledge exchange through collaborations, education initiatives and networking with global stakeholders. This foundation sets the groundwork for further growth, expansion and impact.

Flagship Programs

The flagship programs of D-Foot International encompass capacity-building initiatives, such as *Train the Foot Healthcare Professional (TtFHCP)* and *D-Foot Awareness Day*, which are uniquely designed to address gaps in diabetic foot care. These initiatives adopt a cascade approach, equipping multidisciplinary health-care teams with practical skills in prevention, early detection and management of diabetes-related foot complications, while enabling them to disseminate this knowledge within their local health-care systems.⁶

The TtFHCP programs have played a crucial role in this regard. These programs are designed to equip and empower clinicians with practical skills in diabetic foot assessment, prevention and management, while simultaneously encouraging them to train others within their own local settings. Built on a structured educational framework, the program combines didactic lectures, hands-on practical sessions and case-based learning to ensure both theoretical understanding and clinical application. In addition, the programme emphasizes a multidisciplinary and team-based approach, often requiring participants to attend as ‘doctor–nurse pairs’ to reflect real-world clinical practice and promote collaborative care. Interactive components, including simulated scenarios, case discussions and problem-solving exercises, further reinforce clinical decision-making and contextual adaptation of knowledge. The TtFHCP initiative evolved from an earlier Train the Foot Trainer (TtFT) program (2012–2020), which reached 14 countries in the SACA region, 20 countries in the NAC region, 18 European countries, 13 WP countries, 12 French-speaking African countries

and 14 MENA region nations. Building on this foundation, the TtFHCP program (2023–2025) was conducted across six regions, encompassing 11 African countries, eight SACA countries, 12 WP countries, 10 European countries, five MENA countries and four SEA countries.⁷⁻¹⁶

The preliminary impact data from the recent 2023-2025 TtFHCP conducted in SACA region (Colombia), WP region (Malaysia), Europe region (Slovenia), Africa region (Tanzania) and MENA region (Pakistan) showed an approximate of 800 FHCPs trained. Published impact data by Abbas and Hari (2025), including 15 centres across four regions demonstrated the program’s reach and impact. Following training, over 30,000 PLDM were seen across these centres, of whom 7,812 were screened for high-risk feet, identifying 4,640 PLDM with either peripheral neuropathy or peripheral arterial disease. A total of 11,875 diabetic foot ulcers outpatients were managed with 973 admissions and 70 major amputations (7.2% of admitted patients) and 27 deaths (2.8% of admitted patients). The educational cascade yielded 123–174 HCP education sessions per region, training 82–136 doctors and 27–600 nurses, alongside 75–236 patient education sessions delivered by trained HCPs.⁷⁻¹⁶

Importantly, after TtFHCP training, participants are encouraged to collect data, implement local foot care services and conduct training sessions upon returning to their respective institutions, thereby creating a cascade effect of knowledge transfer. This ‘train-the-trainer’ model guarantees sustainability and scalability, especially in settings with low resources. By integrating education with practical skill development and local implementation, the TtFHCP program serves not only as a training initiative, but also as a functional model for strengthening diabetic foot care systems and reducing preventable amputations. However, as acknowledged in the published paper, limitations include the lack of long-term retention data for clinical skills, heterogeneous data collection methods across centres and the absence of a control group for causality assessment.^{5,7}

The *D-Foot Awareness Week* campaign, which recently converted into the *D-Foot Awareness Day* campaign, exemplifies this approach, serving as a coordinated global effort aimed at promoting visibility of DRFCs and elevating early intervention strategies. The D-Foot Awareness Day is sectioned across the seven defined regions, with one global session that unites international experts, clinicians, researchers, policymakers and stakeholders in a unified platform to address key themes in diabetic foot care. Between 2023-2025, this campaign hosted a total of 115 specialists from all seven regions, reflecting the diversity of the global diabetic foot community. For the 2025 D-Foot Awareness Day, a total of 43 specialists participated with representation from all seven regions. The series of regional sessions are tailored to the local health-care context, addressing region-specific challenges and solutions. This dual structure of combining a global session with regionally adapted sessions is unique, providing a platform for context-sensitive dissemination of knowledge catering to a variety of professionals involved in diabetic foot care. By integrating advocacy with education and clinical engagement, the D-Foot Awareness Week campaign represents a strategic effort to bridge the gap between knowledge and practice. It highlights the importance of sustained public health messaging and reinforces the global commitment to reducing avoidable lower-limb amputations due to diabetes.^{17,18}

Education, Advocacy And Awareness

A defining feature of D-Foot International's approach has been its emphasis on education as the primary driver of change. Recognizing that many amputations are preventable through early detection and appropriate management, the organization has prioritized capacity building among HCPs. D-Foot International has created a comprehensive portfolio of educational events, including webinars and conference sessions. These platforms encourage the sharing of opportunities for continuous professional development (CPD) and facilitate the dissemination of emerging evidence and best practices.

The *Webinar Saturday* series, which has developed into a consistent and accessible global learning platform, covers a wide range of subjects in relation to DRFCs. The regularity of these webinars encourages CPD and successfully overcomes geographical barriers, enabling real-time interactions, case-based discussions and multidisciplinary engagement. Between 2023 and 2025, the Webinar Saturday series was strategically structured around key thematic areas aligned with major guideline frameworks, particularly those of the International Working Group on the Diabetic Foot (IWGDF). Topics were organized to reflect the core domains of diabetic foot care, including infection management, peripheral arterial disease, wound classification, offloading strategies and surgical interventions. This thematic approach ensured systematic coverage of essential clinical concepts while reinforcing evidence-based practice and guideline implementation across diverse health-care settings.¹⁹

Building on this foundation, the 2025–2027 webinar series has evolved into a more interactive and clinically immersive format, adopting a case-based 'Sherlock Holmes' approach to learning. In this model, real clinical cases are presented in a stepwise manner, encouraging participants to engage in diagnostic reasoning, interpret clinical findings and formulate management plans collaboratively. This approach emphasizes critical thinking, pattern recognition and problem-solving skills, reflecting the complexities of real-world diabetic foot care. By shifting from primarily didactic teaching to an inquiry-driven format, the series enhances learner engagement and facilitates deeper understanding of clinical decision-making processes.²⁰

This evolution of the Webinar Saturday series from the IWGDF guideline-based thematic approach to interactive case-based learning shows a progressive education approach that integrates evidence, clinical reasoning and experience. It strengthens D-Foot International's position in providing adaptable, high-impact education platforms that address the changing demands of HCPs and, ultimately, contribute to improved patient outcomes.

In parallel, D-Foot International further solidifies its position as a global hub for diabetic foot care by actively participating in and organizing significant regional and international conferences. These include participation in global wound care congresses, diabetes-focused scientific meetings, and dedicated D-Foot International conferences held in collaboration with partner organizations. These conferences serve as high-level platforms for the exchange of scientific knowledge, presentation of emerging research and alignment of global practices in diabetic foot management. To date, D-Foot International has successfully convened three international conferences, each marking a progressive step in strengthening global collaboration and advancing multidisciplinary diabetic foot care. Building on the success of these conferences, D-Foot International is preparing to host its fourth international conference, which is expected to further strengthen global partnerships, showcase ongoing research and promote innovative strategies for the prevention and management of DRFCs.⁸⁻¹⁶

Collectively, these educational platforms reflect a strategic approach to capacity building that extends beyond traditional learning models. By combining virtual education, in-person training and international collaboration, D-Foot International has created a sustainable ecosystem for professional development. The emphasis on education reflects the fundamental principle that D-Foot International works upon: prevention begins with knowledge.

From Research To Implementation

In addition to its educational and advocacy initiatives, D-Foot International has increasingly positioned itself as a contributor to global research in diabetic foot care. Recognizing that sustainable reductions in diabetes-related amputations require robust and context-specific evidence, the organization has actively supported multicentre studies, implementation-focused research and global data collection initiatives across its seven regions.

A major milestone in this regard is the Global Cost Study on Diabetic Foot Ulcers, conducted across 36 countries and 51 centres, representing one of the most comprehensive multicentre datasets in diabetic foot care. The preliminary findings indicate that the mean cost per ulcer episode ranges from \$1,200 for low-income countries to \$18,000 for high-income countries (all figures in USD), with amputations doubling or tripling costs. This study provides critical insights into the economic impact of diabetic foot disease, highlighting the substantial health-care costs associated with delayed presentation, advanced disease and amputation. In addition to economic evaluations, D-Foot International also conducted research evaluating the implementation of the structured TtFHCP initiative. The findings provided important evidence on the feasibility and scalability of education-driven interventions in real-life settings.²¹

Partnerships And Policy

A further stage in the development of D-Foot International has been its increasing engagement with global health organizations and policy-oriented initiatives. Collaborations with international bodies, including major diabetes and wound care organizations such as the International Diabetes Federation, International Working Group on the Diabetic Foot, the Royal College of Podiatry and Foot in Diabetes UK and the Limb Preservation Alliance, have enhanced its ability to influence both clinical practice and health policy.²²

These partnerships have enabled the co-development and dissemination of educational and clinical resources, including concise, practice-oriented info-cards designed to translate guideline recommendations into accessible tools for frontline health-care providers. By simplifying complex clinical guidance into actionable formats, these resources support standardized approaches to diabetic foot care across diverse health-care settings. In addition, collaborative efforts have facilitated joint educational activities, international knowledge exchange and alignment with global best practices. Such partnerships also provide strategic platforms for advocacy, promoting the

integration of diabetic foot care into national health agendas and strengthening the recognition of diabetes-related foot complications as a priority within public health systems.

Lessons From The Journey: Challenges and The Way Forward

No global health initiative is without limitations and D-Foot International has several ongoing challenges which should be acknowledged. In terms of cascade training's sustainability, the TtFHCP initiative still remains completely dependent on D-Foot International's efforts. These need to be decentralized to allow self-sustaining programmes to emerge and evolve that are tailored to local contextual settings and each specific institute or clinic. Long-term predictability and scalability are threatened by funding reliance on industry sponsorships and short-term grants. These limitations do not invalidate D-Foot International's achievements, but rather highlight areas for honest, strategic improvements. Additionally, we have a persistent data gap which remains a significant concern, as amputation rates, healing times and quality-of-life measures are not systematically collected across all seven regions. Furthermore, D-Foot International's governance structure does not include a formal patient advisory committee, which means that the voice of PLDM is absent from strategic decision making. And lastly, regional activity is unevenly distributed, with Africa, WP and SEA region showing high engagement compared to other regions.

Based on these internal reviews and external consultations, D-Foot International is making strides on identifying strategic priorities for the coming years to tackle the foreseen challenging circumstances. Collectively, these strategic priorities will aim to develop a 'roadmap' for transitioning from a well-intentioned network to a measurable, accountable and sustained global force in the battle against DRFCs.

Conclusion

D-Foot International has significantly grown from a small network into a global movement across seven regions. Its educational programs, research contributions and advocacy efforts have substantially advanced diabetic foot care worldwide. However, to truly end avoidable lower-limb amputations due to diabetes, D-Foot International, together with other similar organizations, must move from describing activities to demonstrating impact through sustained and accountable action.

For more information on initiatives and membership, visit: <https://d-foot.org/>

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