

The POINT project

Pauline Wilson, Neil Baker, Kristien Van Acker, Norina Gavan, Esther Garcia Morales, Matthew Garafoulis, Stuart Baird, Caroline Teugels, Luc Hendrix, Meike Fransen

Citation: Wilson P, Baker N, Van Acker K et al (2018) The POINT project. *The Diabetic Foot Journal* 21(2): XX-XX

Article points

1. Podiatrists are important in the overall management of diabetic foot through prevention, management and remission
2. The presence and practice of podiatry is greatly varied worldwide with low and middle income countries often without appropriately trained health care professionals
3. A The point document guides multi-disciplinary teams as to which podiatric skills are needed to deliver evidence based foot care irrespective of the presence of podiatrists.

Key words

- Collaboration
- Competency
- Podiatry

Authors

Pauline Wilson is Xxx International Federation of Podiatrists and D-Foot international; Neil Baker is Xxx D-Foot international; Kristien van Acker is Xxx D-Foot international; Norina Gavan is Xxx International Federation of Podiatrists and D-Foot international; Esther Garcia Morales is Xxx D-Foot international; Matthew Garafoulis is Xxx International Federation of Podiatrists; Stuart Baird is Xxx International Federation of Podiatrists; Caroline Teugels is Xxx International Federation of Podiatrists; Luc Hendrix is Xxx D-Foot international; Mieke Fransen is Xxx International Federation of Podiatrists

The POINT project is a collaboration between D-Foot international and the International Federation of Podiatrists. The point documents create a standardised staged competency framework for the inclusion of podiatric skills worldwide in the management of diabetic foot disease. The presence of podiatrists with unique skill sets as part of the multidisciplinary diabetic foot team is well established in the literature. Many countries, especially those in lower- and middle-income regions do not have podiatrists available as part of their team. The point document, which is a multidisciplinary consensus, identifies the skills needed to provide podiatric skills across four levels irrespective of the presence of podiatrists. The point document provides guidance for three groups: firstly, for diabetic foot teams in identifying areas of strength and weakness; secondly, for teams without podiatrists to identify the podiatric skills needed; finally, for decision makers to be informed of the skills, which can be provided by podiatrists. The point document is now to be disseminated widely for local translation and implementation.

The POINT (podiatry for international diabetic foot teams) project is a collaboration between D-Foot International and The International Federation of Podiatrists (FIP-IFP). D-Foot international, formerly the Implementation arm of the International Working Group of the Diabetic Foot (IWGDF), is an international non-profit registered association, promoting the global profile of diabetic foot prevention and care through awareness, guidance, education, research and professional development (www.d-foot.org). It is a multidisciplinary network of clinicians involved in the management of diabetic foot disease with a network of over 150 countries around the world. FIP-IFP is an international membership organisation of podiatrists representing 28 countries. It has, for 70 years, promoted the practice of podiatry worldwide showcasing what podiatrists can offer in all areas of lower-limb and foot health.

The aims and objectives of this collaboration were to:

- Facilitate the introduction of a staged podiatry competency training framework in countries where diabetes foot care infrastructures currently exist
- In relation to the above, provide a standardised staged competency based framework for podiatry training on a regional/international levels
- Utilise the D-Foot-initiated foot care as an access point for development of podiatry in countries where podiatry does not formerly exist
- To explore definitions regarding differing levels of podiatry/diabetic foot care and to align the skill levels associated with each level.

The presence of diabetes continues to increase globally with an estimated 629 million people living with the condition worldwide by 2045 (International Diabetes Federation, 2017). Even

if the prevalence of diabetic foot disease remains stable, the number of people suffering from the condition will continue to increase due to the increase in numbers of people with diabetes (Susan et al, 2010). In 1989, the St. Vincent declaration, a joint initiative between the World Health Organization (WHO) and the International Diabetes Federation (IDF) included 5-year targets for improving outcomes in patients with diabetes including reducing amputation rate by half (Krans et al, 1992). Nearly 30 years later, the reality is that that with an increase in the prevalence of diabetes, the rates of ulceration and subsequent lower-extremity amputation continue to rise (Buckley et al, 2012). Patients with diabetes should receive best practice irrespective of geographical location (World Health Organization, 2002).

The role of the podiatrist in the maintenance of mobility and good foot and lower-limb health is acknowledged in the literature (Brodie et al, 2001; Alcacer-Pitarch et al, 2011). The specific role of podiatrists in the management of the diabetic foot covers a broad range of practical skills throughout the disease process and is crucial to the effective management of the condition (Boulton et al, 2005; Sloan et al, 2010). The particular skills of podiatrists in the assessment of gait patterns and pressure reduction are pivotal in the prevention of ulceration in the neuropathic foot (Kim et al, 2012). Despite the evidence and guidance supporting the inclusion of podiatrists, there remains a great variance in diabetic foot management and practice worldwide (Abbas et al 2011; Holman et al 2012).

IWGDF produces evidence-based guidance to support clinicians and healthcare systems to strive for best practice in diabetic foot management every 4 years using the GRADE recommendations (Guyatt et al, 2011). Such guidance will only have an impact on clinical outcomes when it is implemented (Woolf et al, 1999). This guidance recommends the inclusion of podiatrists in the delivery of care for patients with diabetic foot disease. In the absence of suitably skilled podiatrists to deliver guidance based care the implementation of guidance becomes difficult. In countries where guidance has been fully incorporated, the profession of podiatry is well established.

The POINT team was made up of representatives from both organisations across a variety of

geographical and professional boundaries. The authors met to discuss the challenges in delivering good podiatric care to patients with diabetic foot disease in the absence of podiatrists or where podiatry has been under-developed. The authors also discussed the challenge of the myriad of different names and titles for podiatry globally. We give gracious acknowledgement to the Podiatry Competency Framework for Integrated Diabetic Foot Care (TRIEPodD-UK, 2012), which identified skills across six levels of podiatric practice needed in the UK. The authors utilised this document as a basis for the identification of skills and adapted it for practice in the international arena. The skills identified by discussion and aided by the TRIEPodUK document were wide ranging and covered the breadth of management of diabetic foot disease. Dependent on geographical location and resources, skills were performed by different members of the multidisciplinary diabetic foot team (MDT). Through MDT discussions, members achieved consensus on what constitutes podiatric input into the management of diabetic foot disease. The consensus and the resulting POINT document illustrates that the skills needed are more important than the profession delivering them.

Podiatrists are often heralded as the gatekeepers to the MDT and have a specific set of skills, which can identify those in need of targeted interventions (Rogers et al 2010, Paisley et al 2018). Data have shown that it is not just about the interventions given, but the delivery of interventions as part of a multidisciplinary team that leads to improved outcomes (Jeffcoate and Young, 2018; Paisley et al, 2018).

Unlike many healthcare professionals, the presence and practice of podiatry varies around the globe (Brockmann et al, 2009). This is of particular relevance in low- and middle-income countries where healthcare services are less developed yet 75% of the global population with diabetes live in these countries and the practice is podiatry is less developed (International Diabetes Federation, 2017).

The POINT document is an attempt to guide MDT's to which skills are needed in the delivery of evidence-based diabetic foot care irrespective of the inclusion of podiatry in individual teams.

The arguments for the delivery of diabetic

Page points

1. The role of the podiatrist in the assessment of gait patterns and pressure reduction are pivotal in the prevention of ulceration in patients with neuropathy.
2. The skills identified were wide ranging and covered the whole area of diabetic foot disease.
3. Multidisciplinary team working leads to improved outcomes.

Box 1. The POINT document's practices across 13 separate domains of diabetic foot care.

| | | |
|--------------------------------|-----------------------|-------------------------------|
| Generic skills | Assessment /diagnosis | Dermatology |
| Diagnostic imaging | Pharmacology | Peripheral vascular disease |
| Charcot foot | Ulcer prevention | Surgery |
| Dermatology | Wound care | Painful peripheral neuropathy |
| Research /audit and leadership | | |

foot care in a multidisciplinary manner are well made and prevalent throughout the literature and guidance (Edmonds et al 1986; Apelqvist et al 2000; Krishnan et al 2008; Moore et al, 2014). There is a lot of evidence regarding the structure of MDTs and their geographical delivery (Moore et al, 2014). Such teams traditionally were hospital based with care focussing on the management of the acute foot episode of the disease (Edmonds et al, 1986; Driver et al, 2010; Mickan et al, 2005; Rogers et al, 2010; Chiu et al 2011). Prescriptive team models appear to be less relevant in modern practice due to the variety in healthcare settings, delivery and reimbursement models, which can vary widely (Basu and Hassenplug, 2012; Faulkner et al, 2012). The international drive towards integrated, person-centred healthcare means that an MDT no longer refer to teams based in the one location, but upon shared characteristics (Fitzgerald et al, 2009; Driver et al 2010; Chiu et al 2011).

The POINT document aims to be broad enough to implement across all types of teams irrespective of structure or location of care (Vyt, 2008; World Health Organization, 2017). Any decision on the individual design of teams are politically sensitive and are best made at local level where the individual team members are best placed to design services around the local population and service needs (Porche, 2006; Donaldson et al, 2014). The patient with diabetic foot disease is a challenge with multiple morbidities requiring the input from a large number of different professionals (Boulton et al, 2005; Bus, 2012). At different times in the journey of diabetes, different professionals will be at the forefront in the design and delivery of care, while still operating within the MDT (Plank et

al, 2003; Armstrong et al, 2013). Each location will have its own challenges even within the same region.

The consensus among the members of the POINT team is that while ideally all the skills identified are performed by health care workers with specific podiatric training the reality is likely to be much different. The POINT document includes practices across 13 separate domains of diabetic foot care (*Box 1*).

The document is designed to be as comprehensive as possible without being prescriptive about the way in which care should be delivered. As with most multidisciplinary discussions, the group reached a compromise identifying four distinct levels of care, which could be defined as podiatric practice globally. Each level in the document is an increase on the previous level in complexity of skill. This makes for a lengthy document because within each level there is further distinction between knowledge and skills. There is an implied understanding that individual practitioners at any level are aware of their own limitations of knowledge and practice. Practitioners currently practising within the arena may find this quite repetitive and such explicit detail unnecessary. The POINT team feel that this is imperative in order to prevent any confusion across language and cultural barriers. All skills identified at levels 2, 3, and 4 are in addition to those at level 1. Practitioners at levels 1 and 2 of practice should be supervised by those with higher levels of practice. Ideally, this supervision and support should be delivered by colleagues within the same team environment where the expertise is available locally.

In the opinion of the group, a country where podiatric practice is well established is likely to have practices towards levels 3 and 4 of the model although this may be dependent on the legislative frameworks in place.

The aim of the POINT guide to podiatric practice in the management of diabetic foot disease is three-fold:

- As a training and development tool for existing MDTs to assist them in identifying areas of strength and weakness. Acknowledging limitations within MDT practice is an important part of the reflective cycle for each team for quality improvement. Care should be delivered consistently across all domains of the model

- For areas where podiatric practice is not available as part of the current MDT to identify the skills needed in the absence of podiatrists. For these teams, the model may be of use in lobbying healthcare systems for increased resources. If a team is able to identify areas of need this can be addressed in future service and training planning
- The tool may be of use for decision makers to be informed of the range of skills required to deliver multidisciplinary diabetic foot teams, as well as the pivotal role which podiatrists can play in the overall management of diabetic foot disease. The POINT document may enable the identification of skills in the design of training programmes either at a local informal level or more formally at a regional or national level.

The POINT project team are aware that MDT foot practice is enhanced by the inclusion of podiatrists (Driver et al, 2010), but cognisant that in the absence of a definitive training syllabus for the role of diabetic foot specialist podiatrists, it can be difficult for diabetic foot MDTs to implement best practice.

This model is not designed to be a syllabus for training podiatrists, but a guide to the skills needed to deliver evidence-based care irrespective of professional or geographical boundaries. A glossary of terms is also included to aid comprehension across language and cultural barriers.

As practitioners with an interest in the management of the diabetic foot, many of whom work in multidisciplinary teams, the authors know that the benefits of team working extend beyond the clinical outcome. Informal learning and networking that occurs between team members is valuable to the patient experience, as well as to the strengthening of relationships between team members (Li et al, 2009). It has been well documented that a well-co-ordinated team that communicates well leads to better patient outcomes (Coulter et al, 2013). Andrew Carnegie said: “Teamwork is the ability to work together toward a common vision — the ability to direct individual accomplishments toward organisational objectives. It is the fuel that allows common people to attain uncommon results” (Mercer and Myers, 2013). The

POINT team and both organisations share the common vision for the inclusion of podiatry across the globe in the management of this condition, which places a large burden on both patients and societies. Together, the inclusion of podiatrists as gatekeepers to MDTs can be promoted. Dissemination and implementation of this document is now a priority for both organisations. The first step has been to reach consensus, now the challenge really begins. ■

- Abbas ZG, Lutale JK, Bakker K et al (2011) The ‘Step by Step’ Diabetic Foot Project in Tanzania: a model for improving patient outcomes in less-developed countries. *Int Wound J* 8(2): 169–75
- Alcacer-Pitarch B, Siddle HJ, Buch MH et al (2011). Foot health needs in people with systemic sclerosis: an audit of foot health care provision. *Clin Rheumatol* 30(12): 1611–5
- Apelqvist J, Larsson J (2000) What is the most effective way to reduce incidence of amputation in the diabetic foot?. *Diabetes Metab Res Rev* 16(Suppl 1): S75–83
- Basu S, Hassenplug JC (2012) Patient access to medical devices — a comparison of US and European review processes. *N Engl J Med* 367(6): 485–8
- Boulton AJ, Vileikyte L, Ragnarson-Tennvall G, Apelqvist J (2005) The global burden of diabetic foot disease. *Lancet* 366(9498): 1719–24
- Brockmann M, Clarke L, Winch C (2009) Difficulties in Recognising Vocational Skills and Qualifications Across Europe. (In) *Assessment in Education: Principles, Policy & Practice* 16(1): pp97–109
- Brodie BS (2001) Health determinants and podiatry. *J R Soc Promot Health* 121(3): 174–6
- Buckley CM, O’Farrell A, Canavan RJ et al (2012) Trends in the incidence of lower extremity amputations in people with and without diabetes over a five-year period in the Republic of Ireland. *PLoS One* 7(7): e41492
- Bus SA (2012) Priorities in offloading the diabetic foot. *Diabetes Metab Res Rev* 28(Suppl 1): 54–9
- Chiu CC, Huang CL, Weng SF et al (2011) A multidisciplinary diabetic foot ulcer treatment programme significantly improved the outcome in patients with infected diabetic foot ulcers. *J Plast Reconstr Aesthet Surg* 64(7): 867–72
- Coulter A, Roberts S, Dixon A (2013) *Delivering Better Services for People with Long-Term Conditions. Building the House of Care*. The King’s Fund, London pp1–28
- Donaldson L, Rutter P, Henderson M (2014) *The Right Time, the Right Place: An Expert Examination of the Application of Health and Social Care Governance Arrangements for Ensuring the Quality of Care Provision in Northern Ireland. Social Services and Public Safety*. The Department of Health, Belfast
- Driver VR, Fabbi M, Lavery LA, Gibbons G (2010) The costs of diabetic foot: the economic case for the limb salvage team. *J Vasc Surg* 52(3 Suppl): 17S–22S
- Edmonds ME, Blundell MP, Morris ME et al (1986) Improved survival of the diabetic foot: the role of a specialised foot clinic. *Q J Med* 60(2): 763–71
- Faulkner E, Annemans L, Garrison L et al (2012) Challenges in the development and reimbursement of personalized medicine — payer and manufacturer perspectives and implications for health economics and outcomes research: a report of the ISPOR Personalized Medicine Special Interest Group. *Value Health* 15(8): 1162–71
- Fitzgerald RH, Mills JL, Joseph W, Armstrong DG (2009) The diabetic rapid response acute foot team: 7 essential skills for targeted limb salvage. *Eplasty* 9: e15
- Guyatt GH, Oxman AD, Schünemann HJ et al (2011) GRADE guidelines: a new series of articles in the Journal of Clinical Epidemiology. *J Clin Epidemiol* 64(4): 380–2
- Holman N, Young RJ, Jeffcoate WJ (2012) Variation in the recorded incidence of amputation of the lower limb in England. *Diabetologia* 55(7): 1919–25

- International Diabetes Federation (2017) *IDF Diabetes Atlas* (8th edn.) International Diabetes Federation, Brussels
- Jeffcoate W, Young B (2018) Reducing amputation in diabetes: work from the West Country provides both evidence and a tool-kit. *Diabet Med* 35(1): 8–9
- Kim PJ, Attinger CE, Evans KK, Steinberg JS (2012) Role of the podiatrist in diabetic limb salvage. *J Vasc Surg* 56(4): 1168–72
- Krans HM, Porta M, Keen H (1992) Diabetes care and research in Europe: the St Vincent Declaration action programme, implementation document. In: *Diabetes Care and Research in Europe: The St Vincent Declaration Action Programme; Implementation Document*. Health Psychology Research, London
- Krishnan S, Nash F, Baker N et al (2008) Reduction in diabetic amputations over 11 years in a defined UK population: benefits of multidisciplinary team work and continuous prospective audit. *Diabetes Care* 31(1): 99–101
- Mercer DK, Myers S (2013) Theory into practice: a cry from the field for innovative leadership development. *Educational Considerations* 41(1): 2–5
- Mickan SM, Rodger SA (2005) Effective health care teams: a model of six characteristics developed from shared perceptions. *J Interprof Care* 19(4): 358–70
- Moore ZB, Corbett G, McGuinness LQ (2014) Exploring the concept of a team approach to wound care: Managing wounds as a team. *J Wound Care* 23(Suppl 5b): S1–S38
- Li LC, Grimshaw JM, Nielsen C et al (2009) Evolution of Wenger's concept of community of practice. *Implementation Science* 4(1): 11
- Paisey RB, Abbott A, Levenson R et al (2018) Diabetes-related major lower limb amputation incidence is strongly related to diabetic foot service provision and improves with enhancement of services: peer review of the South-West of England. *Diabetic Med* 35(1): 53–62
- Plank J, Haas W, Rakovac I et al (2003) Evaluation of the impact of chiropodist care in the secondary prevention of foot ulcerations in diabetic subjects. *Diabetes Care* 26(6): 1691–5
- Porche Jr RA (2006) *Doing More with Less: Lean Thinking and Patient Safety in Health Care*. Institute for Healthcare Improvement, Chicago, IL
- Rogers LC, Andros G, Caporusso J et al (2010). Toe and flow: essential components and structure of the amputation prevention team. *J Vasc Surg* 52(3 Suppl): 23S–27S
- Sloan FA, Feinglos MN, Grossman DS (2010) Receipt of care and reduction of lower extremity amputations in a nationally representative sample of US elderly. *Health Serv Res* 45(6 Pt 1): 1740–62
- van Dieren S, Beulens JW, van der Schouw YT et al (2010) The global burden of diabetes and its complications: an emerging pandemic. *Eur J Cardiovasc Prev Rehabil* 17(Suppl 1): S3–8
- Vyt A (2008) Interprofessional and transdisciplinary teamwork in health care. *Diabetes Metab Res Rev* 24(Suppl 1): S106–9
- Woolf SH, Grol R, Hutchinson A et al (1999) Potential benefits, limitations, and harms of clinical guidelines. *BMJ* 318(7182): 527–30
- World Health Organization (2017) *WHO Framework on Integrated People-Centred Health Services*. WHO, Geneva. Available at: <https://bit.ly/1xFqNWt> (accessed 24.04.2018)
- World Health Organization (1999) *Diabetes: The Cost of Diabetes (Fact sheet No. 236)*. WHO, Geneva. Available at: <https://bit.ly/2jjH7bs> (accessed 30.04.2018)