Ongoing Research…

An investigation into the prescription procedures and choices involved in the provision of Total Contact Insoles (TCIs) for diabetic patients to reduce the risk of ulceration.

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- **Update on work done by Healy et al (2010) surveying podiatrists and orthotists across the UK**
- **Currently 54 participants have responded via a survey and structured interviews**
- **To highlight areas of consensus and differentiation in clinical practice**

Background

There are 588.7 million people living with diabetes worldwide in 2024 (Duncan, Magliano and Boyko, 2025). Diabetic Foot Ulcers (DFUs) are a common complication of diabetes. Approximately 25,980 ulcers occur per year in diabetic patients in the UK (most recent data 2022-2023) (NHS England, 2024).

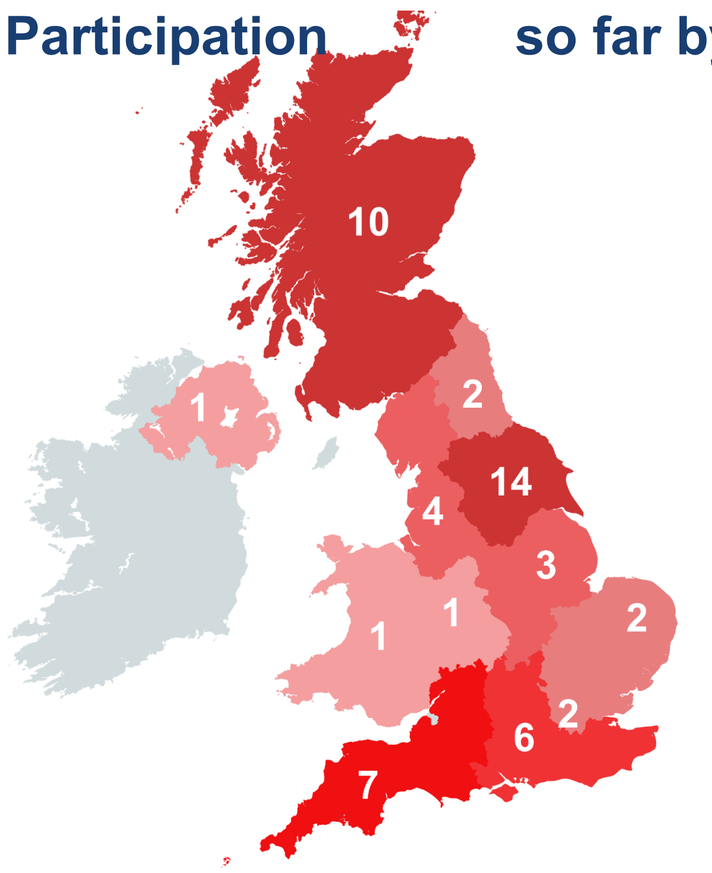
Ulcer formation commonly results from repetitive minor trauma, typically due to increased plantar pressure, friction and shear forces from ill-fitting footwear or gait abnormalities, or unnoticed injuries (McDermott *et al.,* 2022). Underlying peripheral neuropathy, foot deformity and peripheral vascular disease are usually responsible and contributing factor to ulceration and re-ulceration (Armstrong, Andrew J.M. Boulton and Bus, 2017).

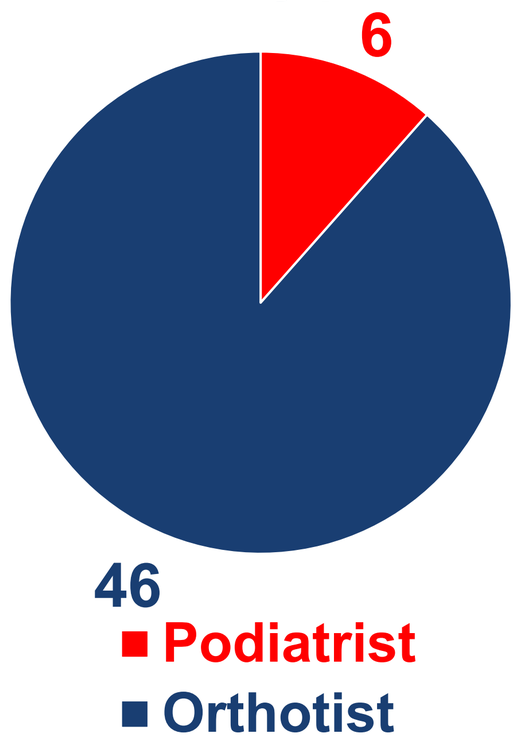
The cost of health care for ulceration and amputation in diabetes in 2014–2015 is estimated at between £837 million and £962 million; 0.8% to 0.9% of the NHS budget for England (Kerr *et al.,* 2019). With a projection of 852.5 million people living with diabetes worldwide by the year 2050 (Duncan, Magliano and Boyko, 2025) more needs to be done to prevent ulceration.

Total Contact Insoles are commonly prescribed with the goal of reducing plantar pressures (Chatwin *et al.,* 2021). Despite the use of plantar pressure analysis in the literature to evaluate offloading insoles, to the authors knowledge and research, there are currently no evidence-based prescription guidelines on which materials, depth and modifications are best to reduce ulceration risk or prevent first ulceration. Guidelines are broad and ambiguous: IWGDF guidelines in 2023 advise ‘When a foot deformity or a pre-ulcerative sign is present, consider prescribing custom-made footwear, custom-made insoles, or toe orthoses’ (Senneville *et al.,* 2023).

A systematic review and meta-analyses highlighted the difficulty in differentiating the effect of different insole features due to the heterogeneity of the available literature comparing devices (Collings *et al.,* 2020). The review was able to identify arch profile, metatarsal addition and apertures are beneficial for reducing plantar pressure. However, the question remains, how clinicians decide when to prescribe these or alternative features.

Participation so far by UK area and by profession:





Methodology

The main objective of the study is to evaluate the prescription procedures and choices that clinicians make when prescribing insoles for diabetic patients to reduce risk of ulceration. A particular emphasis on the materials, adaptions and shape capture methods is being used.

Study Design

This study employs a mixed-methods design comprising an online survey and optional structured interviews. The combined approach was selected to capture both the breadth and depth of clinical reasoning underpinning the prescription of Total Contact Insoles (TCIs) for diabetic patients to reduce risk of ulceration. The survey will provide quantitative and qualitative data on prescription patterns, with the structured interviews to explore clinicians’ decision-making in greater detail, addressing the known limitations of open questions in online surveys (Ball, 2019).

Participants

Participants are UK-based orthotists and podiatrists registered with the Health and Care Professions Council (HCPC). Inclusion criteria requires active involvement in the prescription or modification of stock or custom TCIs for diabetic patients. Recruitment is being undertaken nationally through professional bodies and networks, including the British Association of Prosthetists and Orthotists (BAPO), the Royal College of Podiatry, and clinical employers such as Blatchford and Steeper. Recruitment materials have been distributed via email newsletters, social media channels, and professional networking platforms (LinkedIn).

Reference List QR code:

Participate

To participate, please scan this QR code to complete the survey with will take no more than 10 minutes. Alternatively send me an email and I can send you the link. Even if you have completed the survey already, you can distribute it with your orthotist/podiatrist friends, colleagues or enemies!

← Complete the Survey if you prescribe insoles for Diabetic Patient’s

Send me an email →

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