Design of the user experience for a diabetic foot scanner

To integrate preventive foot temperature monitoring into the daily life of diabetes patients and their healthcare professionals

This project presents the design of a user experience for a foot temperature monitoring device. This product is developed to help people with diabetes detect foot ulcers at an early stage. These wounds, often caused by neuropathy and peripheral artery disease, can lead to amputations if not treated in time. The device uses temperature monitoring to alert users to potential issues before they worsen.

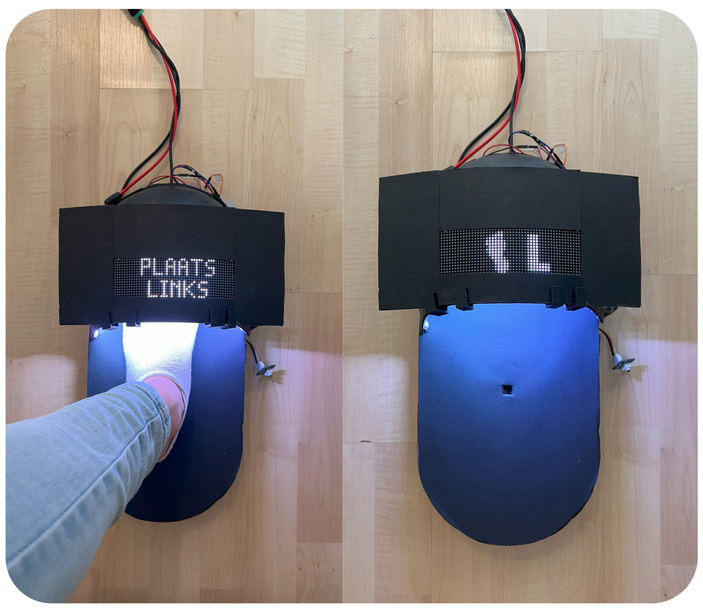
Unlike competitors such as VistaFeet and Podimetrics, Secuped measures not only the plantar side of the foot but also the sides, heel, and part of the top, offering more comprehensive coverage.

Key users include the patient, podiatrist, pedicurist, and POH diabetes. User journeys were created to illustrate stakeholder interactions, and interviews revealed specific needs, such as the desire for a guiding light to help patients position their foot correctly, enhancing confidence and safety.

Three main design focus areas

1 Physical interface

Features a 50x16 LED grid and LED strip. Multiple prototypes were tested to improve usability. Two final concepts: icon-based and text-based, were developed. Participants had a slight preference for the text version.

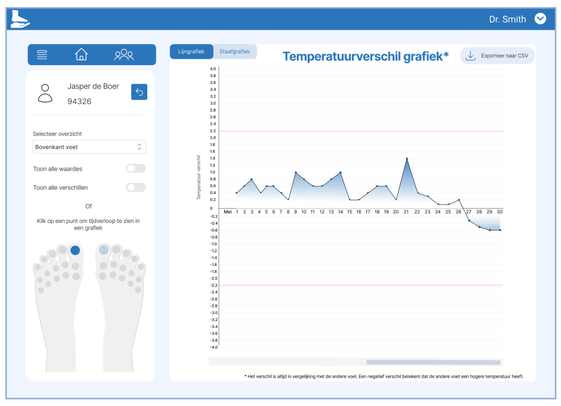


2 Patient app

Designed for smartphone or tablet use. Shows temperature data, usage reminders, and encourages patients to contact healthcare providers if elevated temperatures are detected.

3 Podiatrist platform

Provides a patient overview, alerts, and longitudinal data to support diagnosis and follow-up care.



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