

Singapore develops mobile app to help diabetic patients monitor feet health

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The app has been tested by patients from Tan Tock Seng Hospital

A group of researchers, led by Nanyang Technological University (NTU), has developed a mobile application to educate individuals living with diabetes and their caregivers with knowledge of the disease and assist them in monitoring their day-to-day activities, which includes medication, physical activity, and their diet.

The app, WellFeet, was developed by the Centre for Population Health Sciences (CePHaS) at NTU's Lee Kong Chian School of Medicine, in consultation with clinicians from Tan Tock Seng Hospital and National Healthcare Group. It aims to help prevent a serious diabetes complication: diabetic foot ulcers, which occur in a third (34 per cent) of individuals living with the disease. In Singapore, about one in twelve Singapore residents have diabetes.

People living with diabetes are more prone to wounds on their feet that are hard to heal. When not monitored or treated well, diabetic foot ulcers can lead to lower limb amputation and an increased risk of death.

The app has been tested by patients from Tan Tock Seng Hospital and rigorously evaluated in a qualitative and quantitative study.

Following the feasibility tests, the NTU-led research team will fine-tune the app by potentially integrating AI and human health coaching to render more timely and personalised support. There are plans to make the app available publicly later this year.