

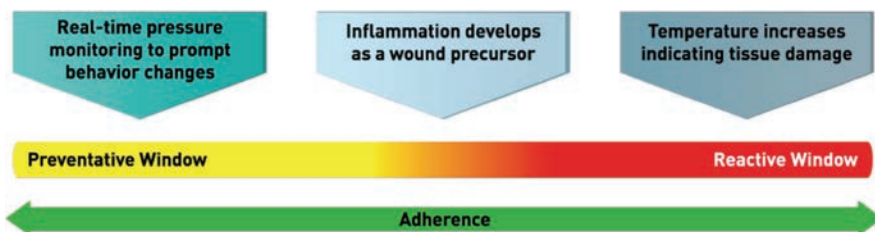
## Measure What Matters to Help Prevent Diabetic Foot Ulcers

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How many of you can think of a patient that came in with their first diabetic foot ulcer (DFU)? You worked diligently for months to successfully heal the wound only to have the patient come back a few months later with another DFU.

Unfortunately, this is not a unique situation as studies show that 25% of people with diabetes develop foot ulcers over their lifetime and 40% of foot ulcers reoccur in the first year.<sup>1,2</sup> 85% of diabetes-related lower extremity amputations are preceded by a foot ulcer and once a patient has even a partial amputation, their life expectancy drops to just five years.<sup>3</sup>

The Orpyx<sup>®</sup> SI Sensory Insoles with remote patient monitoring (RPM) were designed to help prevent diabetic foot ulcers by monitoring a patient's foot over the course of their disease progression, rather than for acute events only. They are custom milled specifically for the individual's foot and include embedded sensors that monitor physiological parameters key to foot health. Orpyx SI Sensory Insoles are



the only solution that remotely monitor plantar pressure to help prevent DFUs, patient adherence to adjust care plans, and plantar temperature to identify when there may be tissue damage. Using real-time audiovisual alerts, they empower the wearer to immediately take action, and resolve high-pressure areas that may lead to tissue breakdown.

The sensory data is uploaded to a cloud-based dashboard where the provider can remotely monitor the physiological data and make necessary treatment adjustments between office visits. When monitoring the physiological data, it is imperative to measure what matters while staying within the scope of what a healthcare provider is eligible to monitor. This includes:

- **Pressure:** studies show that pressure reduction is at the forefront of DFU prevention.<sup>3,4</sup> Orpyx SI Sensory Insoles measure areas of sustained plantar pressure and prompt behavioral changes to proactively prevent ulceration.

- **Adherence:** patient adherence and engagement are key in changing the behaviors that can cause DFU formation. A recent RCT published in a peer reviewed journal demonstrated an 86% reduction in diabetic foot ulcer recurrence when the Orpyx SI technology was worn 4.5+ hours per day.<sup>5</sup> The Orpyx SI Sensory Insoles measure the number of hours per day that the insoles are worn to help reinforce the education provided by the care team.

- **Temperature:** temperature is a late stage indicator of inflammation and potential tissue damage.<sup>4,6</sup> This system monitors temperature to detect when there is a 2.2° C variance between contralateral areas. For patients with only one foot, it measures two different areas of the same foot, averaging the temperature of the entire foot.

If you are worried about overburdening clinic staff, the Orpyx SI Sensory Insoles are now available through NavCare Connect, a HIPAA-compliant RPM and care management platform, allowing healthcare providers to fully outsource the RPM through this turnkey solution. NavCare's services minimize staffing needs and provide the documentation needed for RPM CPT billing

as appropriate. Orpyx SI qualifies for HCPCS A5514 and CPT 99453, 99454, 99457, 99458, and 99091.

For more information on how to measure what matters to help prevent DFUs and amputations, please contact Orpyx at 403-460-0216, [info@orpyx.com](mailto:info@orpyx.com), visit [www.orpyx.com](http://www.orpyx.com), or click here.

<sup>1</sup> Cavanagh PR, Lipsky BA, Bradbury AW, Botek G. Treatment for diabetic foot ulcers. *Lancet* 2005; 366(9498): 1725-35

<sup>2</sup> Armstrong, DG, Boulton AJM, Bus SA. Diabetic Foot Ulcers and Their Recurrence. *N Engl J Med* 2017;376:2367-75

<sup>3</sup> Singh N, Armstrong DG, Lipsky BA. Preventing Foot Ulcers in Patients with Diabetes. *JAMA*. 2005;293(2).

<sup>4</sup> Alavi, Afsaneh & Sibbald, Ronald & Mayer, Dieter & Goodman, Laurie & Botros, Mariam & Armstrong, David & Woo, Kevin & Boeni, Thomas & Ayello, Elizabeth & Kirsner, Robert. (2014). Diabetic foot ulcers Part I. Pathophysiology and prevention. *Journal of the American Academy of Dermatology*. 70. 1.e1-1.e18. 10.1016/j.jaad.2013.06.055. )

<sup>5</sup> Abbott CA et al. Innovative intelligent insole system reduces diabetic foot ulcer recurrence at plantar sites: a prospective, randomised, proof-of-concept study. *The Lancet Digital Health*. Vol.1 October 2019

<sup>6</sup> Bharara M, Schoess J, Armstrong DG: Coming events cast their shadows before: detecting inflammation in the acute diabetic foot and the foot in remission. *Diabetes Metab Res Rev* 2012;28(Suppl 1):15-20.