

Early Detection and Improved Access: Remote Diabetic Foot Monitoring as Part of a Diabetes Care Model

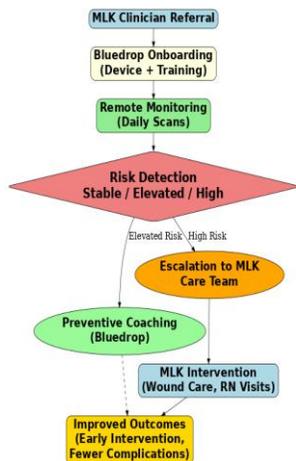
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Background

The MLK Community Healthcare's Diabetes Management Program is NCQA-accredited and features a dedicated team of doctors, nurses, pharmacists, dietitians, social service specialists, and care managers to assist you in managing diabetes. We offer personalized plans, regular check-ins, nutrition classes, and access to community resources for comprehensive support on to patients on their health journey. MLKCH has partnered with Bluedrop to monitor individuals in Diabetes Management who are at risk of diabetic foot complications. MLKCH and Bluedrop work together to detect risks as early as possible to intervene before these risks result in costly issues.

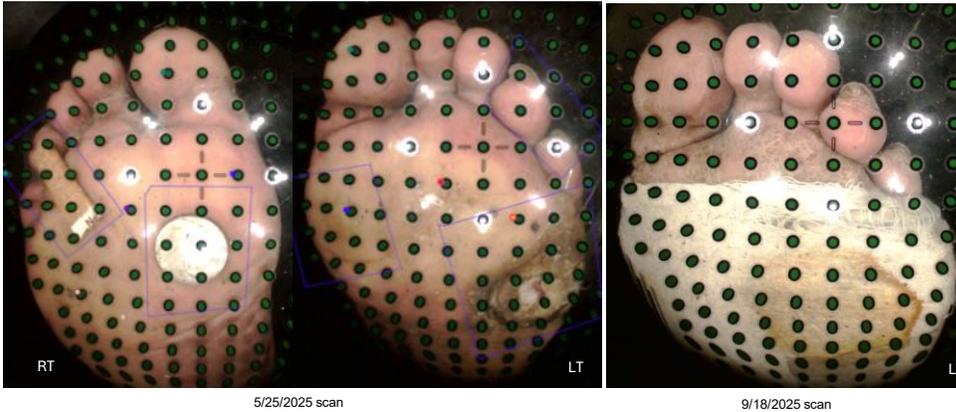
Methods

Enrollment | Individuals with diabetes, peripheral neuropathy and a history of DFU (including varying levels of amputation) were referred by MLKCH to Bluedrop. A foot scanner was delivered to their home, and individuals received ≥ 1 onboarding call to set-up scanner and communicate program expectations (use 3 times / week or more). **Monitoring** | During the program, if individuals did not scan for 3 consecutive days, they were reminded by SMS or phone, depending upon their elected preference. As individuals scanned, we analyzed the image and temperature data to assess risk based on a pre-defined clinical policy and inspection protocol developed using generally accepted standards. Analysis resulted into risk classifications of **Stable – Monitor and Document Change, Elevated – Preventative Remote Coaching According to Policy, and High – Notify Patient to Protect, Escalate to MLKCH Care Team for Clinical Intervention. When escalated, the MLKCH Care Team would engage with the patient to provide clinical intervention and notify Bluedrop of action.**



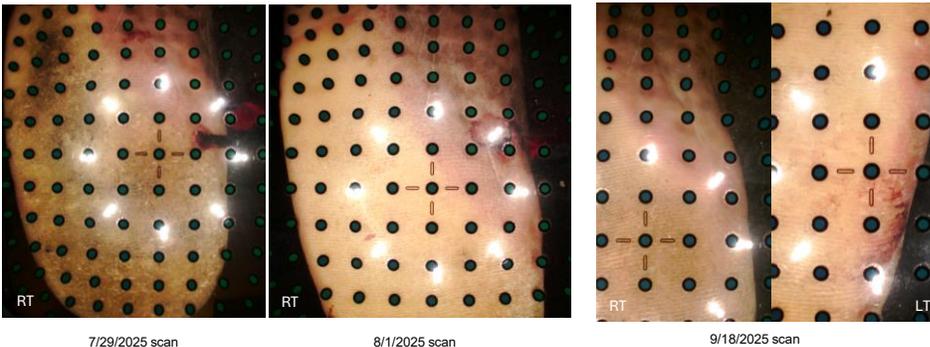
Select Cases to demonstrate the dual value of early detection and patient convenience; engaging high-risk patients where they are and preventing small issues from becoming severe complications.

Case 1 | Prior ulcer site re-damaged



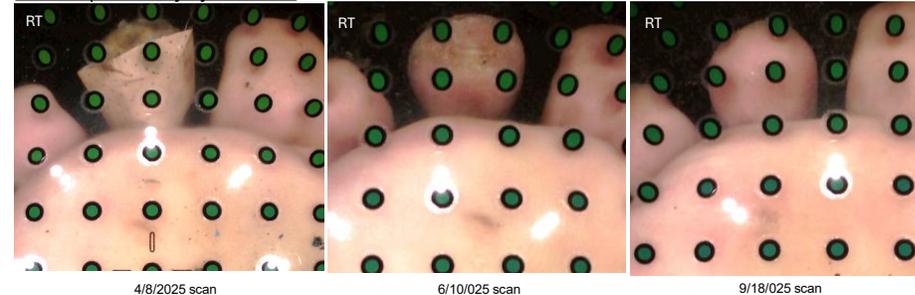
A patient in the program decided to take a barefoot walk on the beach on Memorial Day and scanned that evening. A coin and cigarette were found on the patient's right foot, while a prior scar site was severely aggravated. The Bluedrop specialist immediately notified the patient of the issue and sent an escalation report to the care team at MLKCH. Together, they collaborated to schedule the patient for a wound care visit and were able to intervene ahead of severe complication. The patient receives daily wound care from a visiting nurse and continues to scan to track the healthy foot. **Key Take Away: Early detection may have prevented hospitalization and amputation.**

Case 2 | Continuous identification and resolution of risk area



A patient scan revealed a bloody lesion, that was immediately communicated to the patient and escalated to the care team. The care team referred to wound care and after ~6 weeks, the area has healed. As is typical with these high-risk individuals, a new lesion has been identified, however, based on severity, the Bluedrop specialist has provided coaching to the patient without escalating to resolve. **Key Take Away: Continuous monitoring of higher risk patients provides timely insight to new risks and allows for non-clinical intervention, removing burden from care team.**

Case 3 | Minor injury resolved



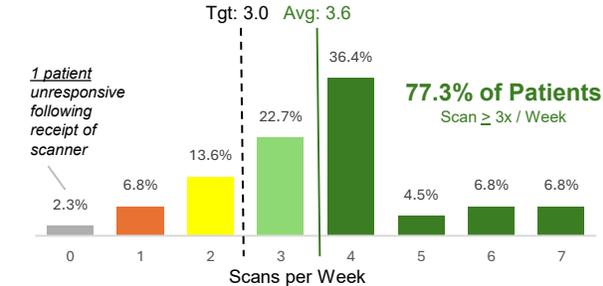
After identifying a bandage, the Bluedrop team contacted the patient and found they had stubbed their toe on the stove. Bluedrop notified MLKCH and the patient was treated. The issue has fully resolved. **Key Take Away: Minor injuries can escalate; consistent monitoring with purposeful notifications builds patient trust and endurance. In addition, resolving such issues may reduce risk of amputation and associated costs.**

Data¹

Study Group

	Count	Average Days Monitored
Patients Monitored > 30 Days	44	269
Active	38	263
Inactive	6	309

Compliance (Scans per Week – Target: 3 scans per Week)



Risk Detection Rates by Patient and Scans

	% Patients	% Scans
Observed Abnormality	100.0%	66.9%
Preventative Remote Engagements	100.0%	6.8%
Physician / Clinical Visit for Escalated Risk	31.8%	0.4%

Annualized Scans Per Patient: 186 Scans

Annualized Coaching Per Patient: 6.7 Engagements

Annualized Escalations Per Patient: 2.3 Escalations

Findings + Conclusions

Patients with foot risk due to diabetic peripheral neuropathy were assumed to require additional surveillance to proactively identify and address risks that may lead to complex, costly ulcers and amputations. The experience to date supports risks are more frequent (~67% of scans or ~2.4 risks/week) and generally are undetected by patients. We also see that a monitoring program that leverages both thermal and visual assessment allows for analysis of risk to determine if actionable; and if actionable, enables non-clinical intervention to address most risks (~94%), leaving only a small number (~6%) requiring clinical intervention. In addition, we've seen most individuals average at least 1 scan / week (~98%), which provides timely insight into risk. While prevention is challenging to determine, the observations to date suggest that high risk patients with history of ulcers or amputation have benefitted from the program. The specific cases presented demonstrate how early detection and intervention may impact patients.