

Testing at the Point-of-Care Helps Save Sight for Parkview Health Patients

LumineticsCore™ (formerly IDx-DR) in a Medical Care Facility

Parkview Health Identified a Point-of-Care Gap for People with Diabetes

Today, more than 34 million Americans (approx. 1 in 10)¹ live with diabetes and the complications from the disease, including preventable vision loss.

Traditionally people with diabetes are required to schedule two appointments to manage their diabetes care; one with a provider who facilitates diabetes management, then a second referral appointment to an eye care specialist to get their recommended annual eye exam for diabetes². This two-appointment process can be taxing for patients and create greater divides in healthcare disparities.

Increased costs, lack of access, and transportation issues can cause serious barriers and deter high-risk patients from getting the care they need.³ Those living with diabetes related eye disease might not follow up with the specialist until it is too late to reverse vision loss and damage to the eyes. When symptoms are present, oftentimes, the damage cannot be reversed.

Parkview Health is Focused on Patient Care

Parkview Health is headquartered in Fort Wayne, Indiana, with clinics serving northeast Indiana and northwest Ohio.

Parkview Health is committed to making healthcare accessible to their entire population (more than 895,000) regardless of where the patient lives, their health status, or their ability to pay. Part of the community health system's service area includes rural communities where many of its patients drive more than an hour to get medical care and treatment. With this in mind, physicians are constantly trying to get every pertinent test completed during a single visit, without requiring repeat visits to additional providers.

In 2021, Indiana ranked 34th in the country for the prevalence of diabetes and Ohio ranked 37th.⁴ Both Indiana⁵ and Ohio⁶ are currently outpacing the national average of people with diabetes in gender, age, and income who are primarily underserved due to their location. With the lack of point-of-care tools, comprehensive diabetes care has been an area in need of drastic improvement and newer solutions.

Parkview Health 2021

3

lab and endo facilities providing LumineticsCore exams at the point-of-care

326

patients tested for diabetic eye disease using LumineticsCore in 2021

86%

of patients were provided a diagnostic result with LumineticsCore at the point-of-care

46%

of patients tested positive for diabetic retinopathy

All Eyes on Outcomes

To improve patient outcomes and increase health equity, Parkview Health has brought Digital Diagnostics' FDA cleared artificial intelligence system, LumineticsCore⁷ to the point-of-care.

LumineticsCore can help improve comprehensive diabetes management through the autonomous detection of diabetic retinopathy (including macular edema). The LumineticsCore exam is pain free, easily integrates into the medical testing process, and can be completed without an extra visit to a specialist or the

need for specialist over-read. By identifying possibly blinding changes in the eye due to diabetes, specifically diabetic retinopathy (including macular edema), the patient can be referred for treatment to prevent or lessen the chance that they lose their eyesight.

AI Diagnosis to Help Reach the Underserved

Northeast Indiana and surrounding areas receiving low to poor diabetic care and sitting above the national average for those living with diabetes.

The data collected by LumineticsCore indicates the need for artificial intelligence in the healthcare journey to enhance patient experience. By bringing simple, timely, and accurate technology to the patient at the

point-of-care, Parkview Health has created better opportunities for health equity across the area, which integrates seamlessly into the mission of Digital Diagnostics.

The Value of Point-of-Care AI Retinal Testing

1. LumineticsCore is a complete service and includes image acquisition guidance and image quality checks as well as individualized per-patient results at the point-of-care
2. LumineticsCore can utilize existing clinic operations to reduce staff burden
3. Point-of-care diagnostics improve the ability to deliver comprehensive diabetes care management



Parkview Health and the communities they support serve as a microcosm of the outcomes Digital Diagnostics is recording in health clinics and facilities across the United States.

Increasing the use of LumineticsCore can help save the eyesight of countless people and can bring access and equity to those living with, or those who may eventually live with, diabetes and its side effects like diabetic retinopathy. Expanding the reach of LumineticsCore, can improve patient experience by providing more care management options, detecting preventable health issues such as diabetic eye disease, and giving physicians the ability to map out next steps for continued care well in advance.

Parkview Health is now capable of taking the LumineticsCore system outside of their facility to test for diabetic retinopathy in the offices of employers across the area. This helps provide pertinent checkups for those diagnosed with diabetes without them ever having to leave their places of work. Parkview Health serves as an example of how the power of LumineticsCore and artificial intelligence play an integral role in the health of the local community.

Throughout 2021, Parkview Health brought LumineticsCore to the point-of-care for 326 people, across three different facilities. LumineticsCore provided an immediate diagnostic result for 86.5% of the patients that were examined, with 46.0% of patients testing positive for diabetic retinopathy. These results, paired against the national average of a 5.4% diabetic retinopathy prevalence⁸, illustrate the significant need for solutions that can improve patient access to the eye exam for diabetes.



Digital Diagnostics' first FDA De Novo cleared product is the AI diagnostic platform, called LumineticsCore. LumineticsCore detects diabetic retinopathy (including macular edema) at the point-of-care without physician oversight and is deployed across the globe in healthcare settings.

Visit digitaldiagnostics.com to learn more about the Digital Diagnostics platform.

Statistics About Diabetes | ADA. (n.d.). [Www.diabetes.org. https://www.diabetes.org/about-us/statistics/about-diabetes](https://www.diabetes.org/about-us/statistics/about-diabetes)

12. Retinopathy, Neuropathy, and Foot Care: Standards of Medical Care in Diabetes—2022. (2021). *Diabetes Care*, 45(Supplement_1), S185–S194. <https://doi.org/10.2337/dc22-s012>

Taber, J. M., Leyva, B., & Persoskie, A. (2015). Why do People Avoid Medical Care? A Qualitative Study Using National Data. *Journal of General Internal Medicine*, 30(3), 290–297. <https://doi.org/10.1007/s11606-014-3089-1>

Explore Diabetes in the United States | 2018 Annual Report. (2018). America's Health Rankings. <https://www.americashealthrankings.org/explore/annual/measure/Diabetes/state/ALL>

Explore Diabetes in Indiana | 2019 Annual Report. (n.d.). America's Health Rankings. <https://www.americashealthrankings.org/explore/annual/measure/Diabetes/state/IN>

Explore Diabetes in Ohio | 2021 Annual Report. (n.d.). America's Health Rankings. Retrieved March 11, 2022, from <https://www.americashealthrankings.org/explore/annual/measure/Diabetes/state/OH>

Abràmoff, M. D., Lavin, P. T., Birch, M., Shah, N., & Folk, J. C. (2018). Pivotal trial of an autonomous AI-based diagnostic system for detection of diabetic retinopathy in primary care offices. *Npj Digital Medicine*, 1(1). <https://doi.org/10.1038/s41746-018-0040-6>

Diabetic Retinopathy Tables | National Eye Institute. (n.d.). [Www.nei.nih.gov](https://www.nei.nih.gov). Retrieved March 11, 2022, from <https://www.nei.nih.gov/learn-about-eye-health/outreach-campaigns-and-resources/eye-health-data-and-statistics/diabetic-retinopathy-data-and-statistics/diabetic-retinopathy-tables>

