DIGITAL DIAGNOSTICS®

AI the right way.

Healthcare System Implements Autonomous AI Diagnostic Testing to Streamline Care During Wellness Checks and Preserve Vision for People Living with Diabetes

Improving Diabetes Care

Streamlining care for an underserved patient population

Patients with diabetes continue to be a nationally underserved patient population. The over 34 million Americans currently living with diabetes have become a healthcare community in crisis as their care needs are often overlooked. This can result in added complications such as debilitating, yet entirely preventable, vision loss from eye diseases such as diabetic retinopathy. Diabetic retinopathy impacts almost a third of adults living with diabetes over the age of 40 and is the leading cause of blindness for working-age adults in the U.S.

People living with diabetes who develop diabetic retinopathy (DR) suffer potential impacts to their vision – with 1 in 4 being more susceptible to going blind – yet the right diagnostic intervention can diagnose DR early to prevent vision loss or blindness.

AbsoluteCare is a value-based, integrated healthcare provider that has streamlined care by implementing early testing at the point-of-care during their members' routine diabetes wellness check using LumineticsCore®. This has helped avoid inconveniencing members with a second referral appointment to specialty care that requires more time away from work or family. Many patients choose to postpone or skip their eye exam for diabetes referrals altogether for those reasons, among others, leading to unchecked DR development and diabetes-related vision loss. AbsoluteCare recognized the need for intervention and a solution that would lower these risks.

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BEYOND MEDICINE

Impact Summary

In an already at-risk and underserved population:

1 in 4 👤👤👤👤

1 in 4 are susceptible to going blind unnecessarily due to diabetes

- ► Adding diagnostic testing at the point-of-care streamlined wellness checks
- ► Adherence to annual eye exams for people with diabetes increased

After just 90 days of LumineticsCore addition:

1 in 3 👤👤👤

1 in 3 patients living with diabetes had referrable levels of diabetic retinopathy

- ► Improved patient access occurred

AbsoluteCare adopts AI technology to prevent blindness

AbsoluteCare serves their member population across Baltimore and Prince George's County, Maryland; Philadelphia and Pittsburgh, Pennsylvania; New Orleans, Louisiana; and Cleveland and Columbus, Ohio, by providing whole-person care with an emphasis on social determinants of health alongside physical, behavioral, and transitional health care.

To improve diabetes care and mitigate the devastating impacts of diabetic retinopathy, AbsoluteCare adopted LumineticsCore, an AI diagnostic system to help broaden care access and advance their integrated care model. LumineticsCore is an artificial intelligence (AI) diagnostic system that autonomously diagnoses patients for diabetic retinopathy. The system enables providers to test patients at the point-of-care and help eliminate the need to refer patients to specialists for routine DR testing. With LumineticsCore, providers have immediate access to diagnostic results with no need for specialist overread or telemedicine callbacks.
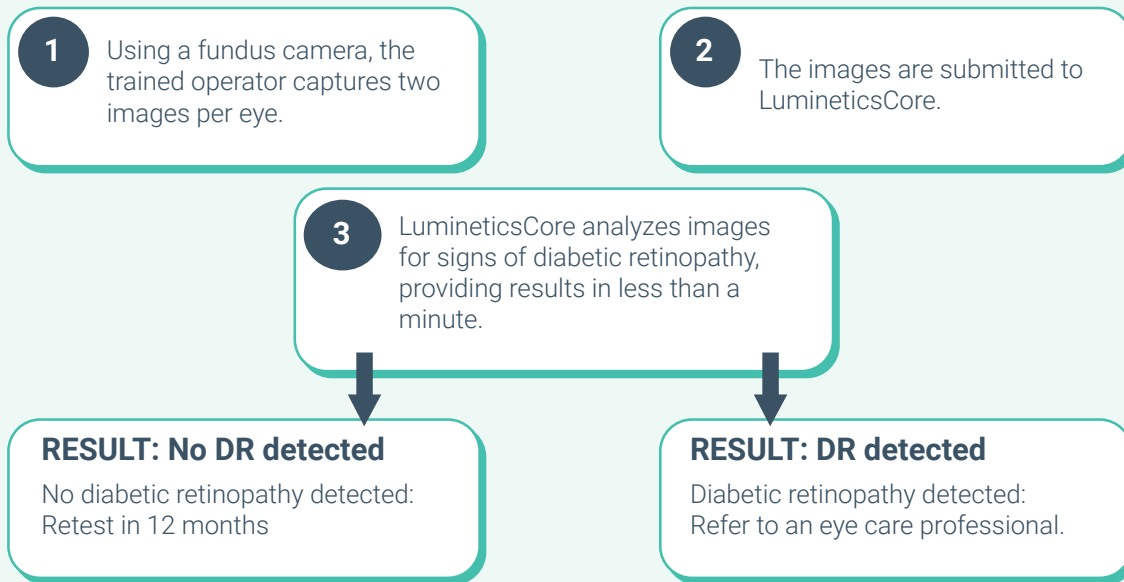
AbsoluteCare implemented LumineticsCore in their Baltimore, New Orleans, Pittsburgh, and Philadelphia locations in late March 2023.

In the following three months, **they were able to complete more than 150 exams, with 45% of those exams testing positive for DR.** This large percentage of the member population being at risk for vision loss without early diagnosis clearly demonstrates the benefit of autonomous AI exams in the primary care setting.

LumineticsCore allowed AbsoluteCare's providers to effectively determine if a patient was negative for DR, or if they should immediately seek the care of an eyecare specialist to treat the developing DR and halt its progression.

1 Using a fundus camera, the trained operator captures two images per eye.

2 The images are submitted to LumineticsCore.

3 LumineticsCore analyzes images for signs of diabetic retinopathy, providing results in less than a minute.

RESULT: No DR detected

No diabetic retinopathy detected: Retest in 12 months

RESULT: DR detected

Diabetic retinopathy detected: Refer to an eye care professional.

Technology and Healthcare

Technological innovation offers lasting benefits to providers and patients

AI has demonstrated effectiveness in healthcare, with beneficial and measurable impacts to healthcare administration, synthetic data, and diagnostics. It is a combination of multiple technologies that can be trained to mimic human intelligence and enable machines to act upon, and learn from, a large amount of data and information. It has helped improve the ways providers approach care models and care delivery and has allowed patients to participate more fully in their health journeys. In a recent report, Accenture estimated that AI applications could potentially generate $150 billion in annual savings for the U.S. healthcare system by 2026.

AI technology value spans the whole of healthcare, from patient experience, patient treatment, and provider capabilities and offerings, all the way through administrative tasks:

- AI can accelerate efficiency across healthcare by automating everything from patient care such as diagnostic testing to administrative tasks like billing or scheduling.

- AI helps save valuable time for healthcare professionals to focus on patient care.
- AI has the potential to improve patient outcomes with real-time analysis and provides immediate results for quick identification and treatment of disease.
- AI can provide quick patient testing and diagnosis, which can help prevent potentially costly mistakes such as a misdiagnosis or overlooking an existing condition.

AI has quickly become a transformative force in healthcare with the ability to help providers offer more robust care services in an efficient and effective way. With LumineticsCore, AbsoluteCare was able to leverage such technology to increase access for their members and have a positive impact on a commonly underserved or overlooked patient population.

LumineticsCore helped elevate the way AbsoluteCare serves their patient population

Adding the LumineticsCore diagnostic system throughout their treatment centers allowed AbsoluteCare to identify patients with diabetes who needed urgent and immediate specialty eyecare to manage their DR. It helped improve their care coordination and allowed them to work with other providers in their community and help specialists support members who needed support. They were able to offer comprehensive diabetes care and facilitate integrated care, which saved members time and addressed their health needs sooner. Annual eye exam referrals were no longer an impediment to identifying DR early because providers were able to test at the point-of-care, further saving member eyesight and preventing blindness.

LumineticsCore allows primary care to expand care services without interrupting existing workflow or bringing in added support. Users find adoption of the technology to be easy, requiring minimal training to get up and running to provide immediate benefits to their patients. The straightforward user interface is simple to navigate, while the system offers customized workflow integration solutions for healthcare facilities.

About AbsoluteCare

Headquartered in Columbia, Maryland, AbsoluteCare is a leading value-based integrated healthcare provider. We go beyond medicine™ to provide comprehensive and preventive care to the most vulnerable populations. AbsoluteCare offers health services using a risk-bearing, PCP-driven care model. We treat the most clinically complex members of the communities we serve—many of whom face behavioral health, substance use, and SDoH challenges. AbsoluteCare tends exclusively to the needs of the high-risk population who persistently represent a disproportionate amount of unnecessary utilization and cost, regardless of whether they are engaged with other PCPs. We deliver this care in our Comprehensive Care Centers as well as in the communities we serve. In our more than 20 years, AbsoluteCare has consistently achieved unprecedented outcomes by addressing medical and psychosocial issues, as well as life's hardships that exacerbate chronic health conditions and complicate access to care. AbsoluteCare currently operates in seven markets: Baltimore and Prince George's County, MD; Cleveland and Columbus, OH; New Orleans, LA; and Philadelphia and Pittsburgh, PA.

For more information, visit absolutecare.com.

About Digital Diagnostics

Digital Diagnostics Inc. is a pioneering AI diagnostics company on a mission to transform the quality, accessibility and affordability of global health care through the application of technology in the medical diagnosis and treatment process. The company, originally founded by Michael Abramoff, MD, PhD, a neuroscientist, practicing fellowship-trained retina specialist, and computer engineer, is led by him and co-founder John Bertrand.

Digital Diagnostics is paving the way for autonomous and assistive AI technology that is free of bias to become a new standard of care, contributing to democratizing health care and closing care gaps. The company works closely with patient advocacy groups, provider organizations, regulators, and other quality of care and ethics-focused stakeholders to enable the adoption of health care AI.