

ADVANCEMENTS IN AI FOR DIABETES

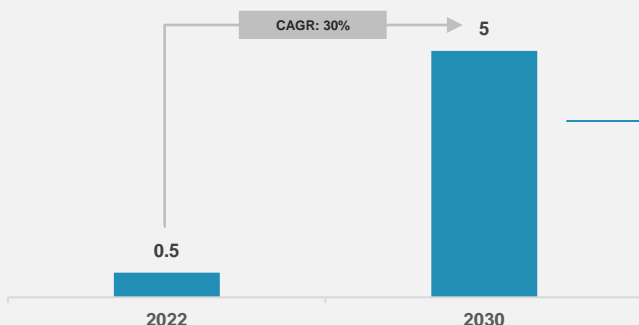
CURRENT AND FUTURE LANDSCAPE OVERVIEW

The WHO reports a staggering increase in global diabetes prevalence, **projected to surge from 420 million to 620 million**, which is anticipated to drive growth in the AI diabetes management and diagnosis market. While **current AI integration focuses on self-management and monitoring**, the future outlook emphasizes **early diagnosis and prediction to prevent critical issues**

MARKET SIZE OF AI IN DIABETES MANAGEMENT

The exceptional growth of AI in diabetes management is anticipated by 2030, driven by various factors such as the escalating burden of the condition, increasing demand for personalized devices, and governmental support

AI diabetes management market expected growth (In USD Bn)



Market drivers responsible for expected growth in AI for diabetes management market:

- **Rising Diabetes Prevalence:** Worldwide diabetes incidence is expected to rise from 422 million in 2014 to 642 million by 2040 as per a WHO report
- **Demand Surge for Personalized Diabetes Management:** Managing diabetes requires continuous monitoring and lifestyle adjustments. The growing demand for AI-driven personalized solutions empowers individuals to better control their condition
- **Government Backing for Diabetes Management Initiatives:** Worldwide governments are investing in initiatives to enhance diabetes management, including funding research and development of AI-based solutions designed for diabetes

Key players



CURRENT LANDSCAPE OF AI IN DIABETES

Currently, the scope of AI in diabetes is mainly limited to the monitoring and managing of the glucose levels through continuous glucose monitors (CGMs) by players such as Abbott, Dexcom, and Medtronic



Dexcom G6



Guardian Connect



FreeStyle Libre



OmniPod 5



Control IQ



CamAPS FX

- Multiple **FDA-approved AI-based CGMs are available in the market that track glucose levels in real-time** via a small under-skin sensor, offering immediate data on blood sugar trends
- They aid individuals with diabetes in promptly adjusting insulin, diet, and activity, empowering proactive blood sugar management and lowering diabetes-related complication risks
- **Closed-loop insulin systems**, also known as artificial pancreas systems, are integrated with CGMs to automate the regulation of insulin delivery
- **These systems utilize CGMs to measure blood sugar levels in real-time and determine the appropriate amount of insulin needed.** They automatically administer insulin through an insulin pump, creating a closed loop of communication between glucose levels and insulin delivery

FUTURE LANDSCAPE OF AI IN DIABETES

The future landscape of AI integration into diabetes aims to tackle the diagnosis and prediction of the onset of diabetes in a patient before the condition becomes significant enough to affect them. Some of these technologies are mentioned below:

ECG-based Prediction

- ECG can potentially be used to detect the onset of diabetes by identifying cardiac abnormalities and autonomic nervous system dysfunction associated with the condition

Voice-based Detection

- Scientists devised an innovative approach to detect diabetes through voice samples. In a study involving 267 participants and 18,465 recordings, notable distinctions were found in the voice samples of individuals with and without diabetes
- The study achieved prediction accuracies of 75% for women and 70% for men

NOTABLE PLAYERS AND PRODUCTS

Klick Labs

- Researchers from **Klick Applied Sciences** created a precise model using short voice clips from smartphone recordings, distinguishing changes in pitch and voice strength as crucial indicators for diabetes diagnosis

Fitterfly's JEDi

- Fitterfly has launched **JEDi**, an advanced empathetic conversational coaching AI designed to provide state-of-the-art coaching and support for individuals dealing with diabetes
- The AI platform utilizes advanced technology to offer personalized guidance and assistance. Its empathetic nature aims to enhance the user experience in managing diabetes

Right from understanding key issues to advising you through the right set of insights and recommendations, Aranca Research, consolidation, and insightful analysis to aid in-depth understanding of therapy and effective decision-making

HOW CAN ARANCA HELP?

01

Current and Future Landscape: Current treatments and latest pipeline landscape assessment for a particular therapy area

04

Humanistic, Economic Burden, and Unmet Need Analysis: Impact of a disease on the patient's mental and economic well-being

02

Diagnosis and Treatment Paradigm: Analysis of diagnosis and treatment algorithm adopted in clinical practice

03

Health Technology Assessment: Analysis of various HTA decisions published by various countries

Connect with us



info@aranca.com



www.aranca.com/contact-us.php



www.linkedin.com/company/aranca