

Case study on Logy.AI eye screening solution: Vidisha 5G use cases pilot launch on 13th January 2023

Overview of Logy.AI's AI eye screening solution

Logy.AI's AI-based eye screening solution has enabled hospitals, clinics, healthcare providers, and normal users to screen eyes for diseases like cataract. More than 70% of the cases of blindness in India are caused by cataract.

Anyone can perform an eye screening in less than two minutes on WhatsApp using the AI solution. The screening is easy to do, and the AI solution provides accurate results, ensuring that proper care is delivered to the user.

The screening solution requires the user to share the images of the eye captured through the smartphone with the chatbot on WhatsApp, which quickly shares the AI prediction with the user. Once the prediction is shared, the user is guided to receive the proper care. They can then book an appointment to see a healthcare professional if necessary.

Government's 5G use cases pilot launch at Vidisha

The district of Vidisha of Madhya Pradesh created history as it became the first district of the country to adopt advanced 5G use cases presented by startups on 13th January 2023. This was made possible through the collaboration between the government of the district and the Department of Telecommunications (DoT), and the Centre for Development of Telematics (C-DOT).

The implemented "5G use case promotional pilot" which has an aim of bringing about digital transformation in various socio-economic sectors of the society will be powered by Bharatnet Broadband. As a part of this initiative, Logy.AI's AI eye screening solution was one of the use cases for 5G/IoT demonstrated by startups in conjunction with C-DOT.

Eye screening camps organised in Vidisha:

By the end of February 2023, only a month after the implementation, the district had adopted the solution and conducted multiple camps.

Total number of screenings done (as on 1st March 2023):1700+ elderly citizens.

Total patients found positive to have cataract disease: 650+



Fig 1: Elderly people waiting at the screening camp organised in Vidisha on 19th Jan'23



Fig 2: Healthcare worker screening an elderly by Logy.AI eye screening solution on 19th Jan'23

Healthcare workers were able to screen elderly patients very easily using the Logy.AI eye screening solution.

User story

In the Vidisha district of Madhya Pradesh, Mr. Ramesh, a fifty-five-year-old man at the eye screening camp of the CHC, which was organized in collaboration with Logy.AI. He was facing problems with his vision. He underwent an eye screening carried out through Logy.AI's AI-powered eye screening solution which is supported by WhatsApp.

Soon, Ramesh was informed that he had a cataract in both eyes and needed urgent medical care to remedy the situation. He was instructed to visit his nearest healthcare provider to receive the appropriate treatment for his condition.

Expansion planned to new PHCs

The healthcare administration at Vidisha is satisfied with the AI solution and is looking forward to expand the solution to more PHCs/ CHCs

- PHC Barkheda Jageer (camp already organized here)
- PHC Mahi
- PHC Vardha

Estimated impact on the elderly population at Madhya Pradesh

Logy.AI's AI-driven eye screening solution has helped in the screening of over 1700 patients which included remote areas like Barkheda, Wardha, Nateran, Mahu, Tajkhajuri, among other associate public health centers in just over a month.

The number of screenings done and the accuracy of the AI solution was confirmed by the Vidisha administration on 24th February 2023. On the same day, it was deemed acceptable as a screening tool due to its 90%+ accuracy. The Vidisha Administration showed confidence in the AI solution and stated that the tool could be scaled so that accurate screening of patients, detection of cataract, and referral of patients to healthcare providers can be done.

Conclusion

Logy.AI's advanced AI-enabled eye screening solution has transformed the way care is provided to patients who use Digital Healthcare tools. The screening solution's impact is far-reaching which is demonstrated by the success of the tool in various geographic locations such as Himachal Pradesh and Madhya Pradesh.

With the rapid increase of 5G adoption across Himachal and Madhya Pradesh, with the help of organisations like CDOT. Digital AI solutions like Logy.AI shall be massively adopted to create impact at the grassroots.