

Bayosthiti AI and Narayana Health partner to build India's first AI-powered heart disease predictor

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Collaboration addresses a critical gap in cardiovascular diagnostics by training AI models on India-specific molecular data

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Bayosthiti AI, an innovator in artificial intelligence (AI)-driven healthcare and molecular diagnostics, has announced a strategic partnership with Narayana Health, one of the world's largest cardiac care networks, to develop AI models that predict cardiovascular disease in Indian patients.

The collaboration leverages RNA sequencing to read the active molecular instructions in cells, combined with gen AI to identify heart disease risk earlier and more accurately than conventional methods.

The study will analyse transcriptomic data (the complete set of active cellular RNA messages) from over 12,000 participants at Narayana Institute of Cardiac Sciences in Bengaluru.

Using Bayosthiti's proprietary BIRT™ technology, researchers will sequence complete RNA profiles from patient blood samples to train AI models. These models will be capable of detecting distinctive patterns of cellular activity that signal coronary artery disease (blockages in heart arteries) before traditional tests show abnormalities.

Coronary artery disease affects 65 million Indians and strikes at younger ages than in Western populations. Yet, diagnostic

tools remain largely calibrated to European and American patient data, creating what clinicians call the "Data Gap." Standard risk scores miss critical patterns in South Asian biology shaped by distinct genetic backgrounds and environmental factors, leading to late-stage diagnoses when intervention options narrow.

Bayosthiti AI and Narayana Health are solving this through molecular innovation and clinical scale.

"Just as Google Translate learned language patterns from billions of text examples, our AI learns disease patterns from millions of RNA expressions," said Dr Rishabh M. Shetty, Head of Business Development and Clinical Applications at Bayosthiti AI. "The transcriptome gives us a real-time readout of what the body is doing right now. Our models can spot the molecular conversation that precedes a heart attack, not just the aftermath, and can do so with the same level of accuracy and efficacy as invasive procedures or other current imaging gold standards."