

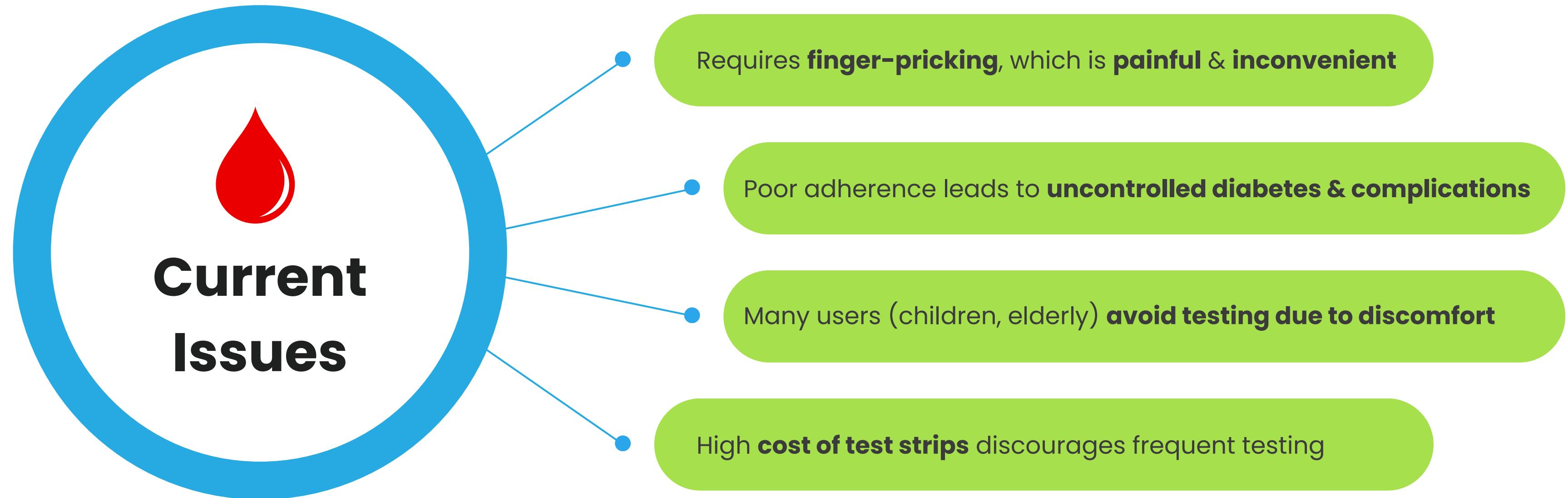
**Synop**

Glyco-iQ

"No Needles. No Pain. Just Smart Glucose Monitoring"

[Explore Now](#)

The Problem with Traditional Glucose Monitoring



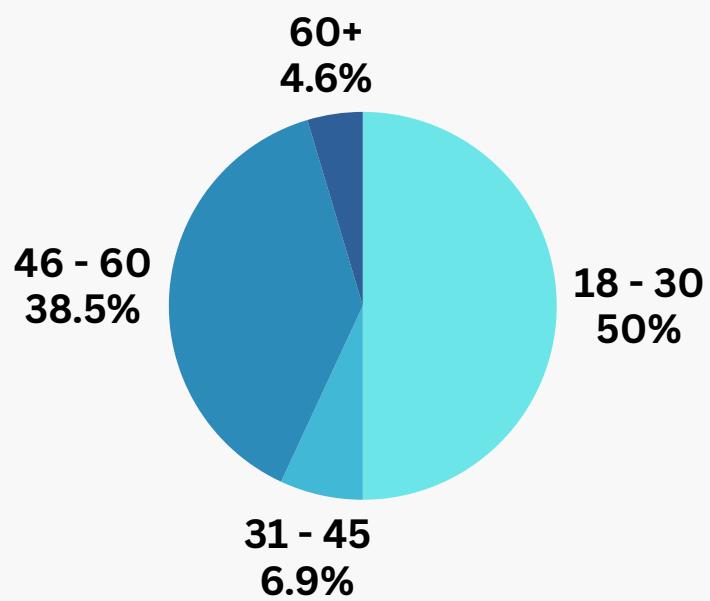
“There is an urgent need for a painless, non-invasive, and user-friendly solution”

What Our Survey Reveals

- ✓ **Survey Participants:** 100+ respondents (aged 18–60+)
- ✓ **Challenges :** Pain from finger pricking, high cost, inconvenience.
- ✓ Majority prefer a painless, easy-to-use device.
- ✓ **Desired Features:** Accuracy, affordability, real-time monitoring.
- ✓ **Key Takeaway:** Strong demand for user-friendly, innovative solutions like GlycolQ.

[Survey Data](#)

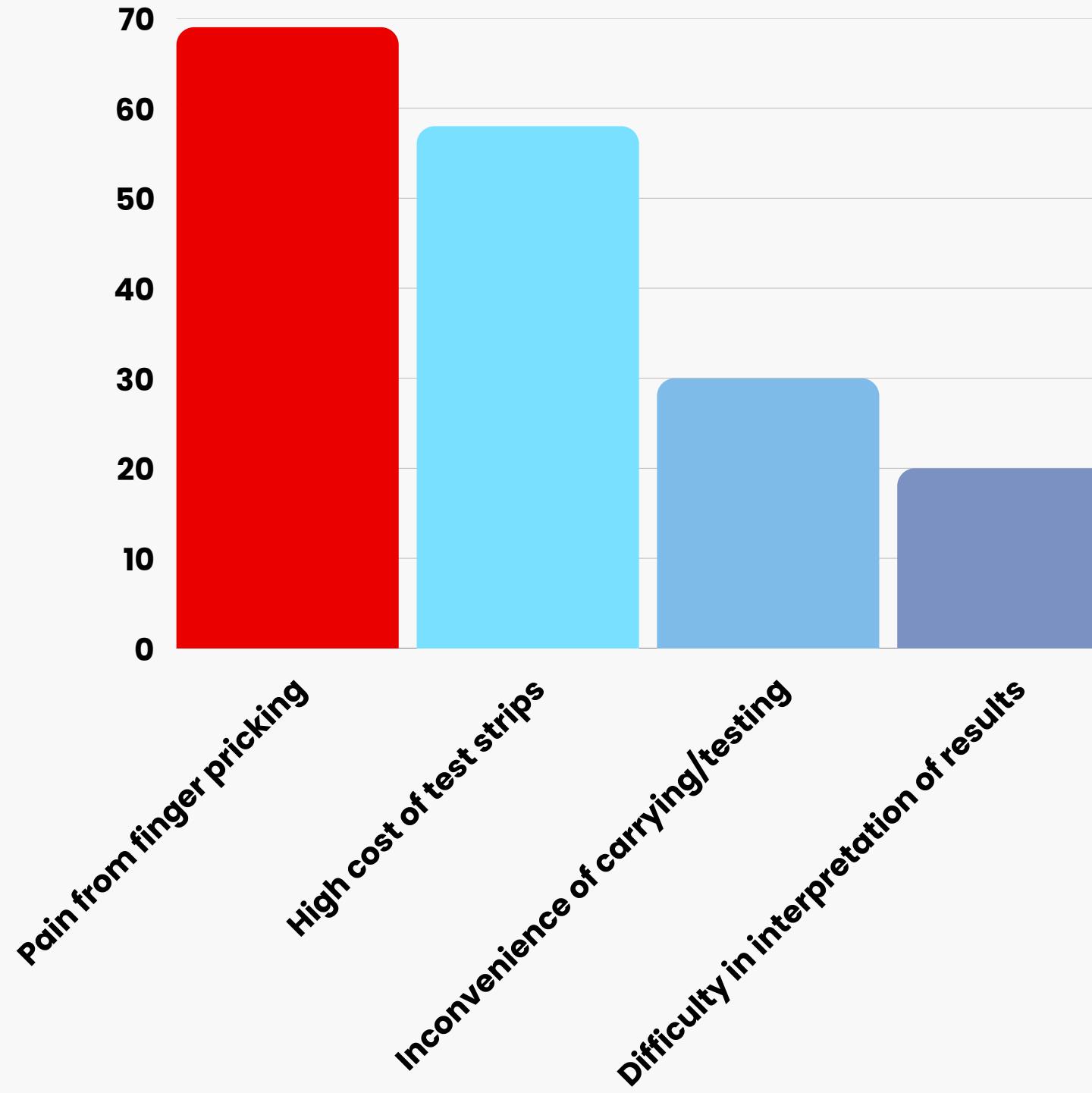
Target Audience



Majority of respondents are aged 18-30, followed by 31-45 and 46-60

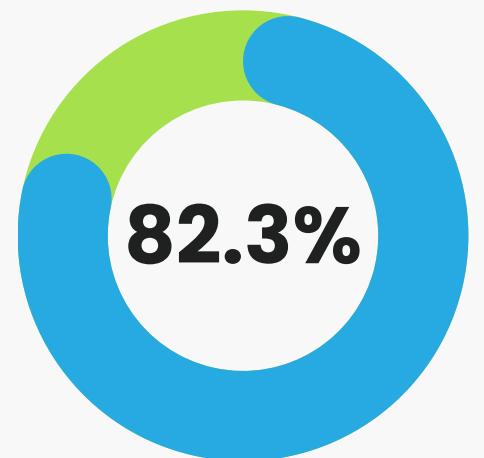


60.8% of survey respondents confirmed that diabetes is a significant health concern, highlighting the growing need for effective and accessible glucose monitoring solutions.



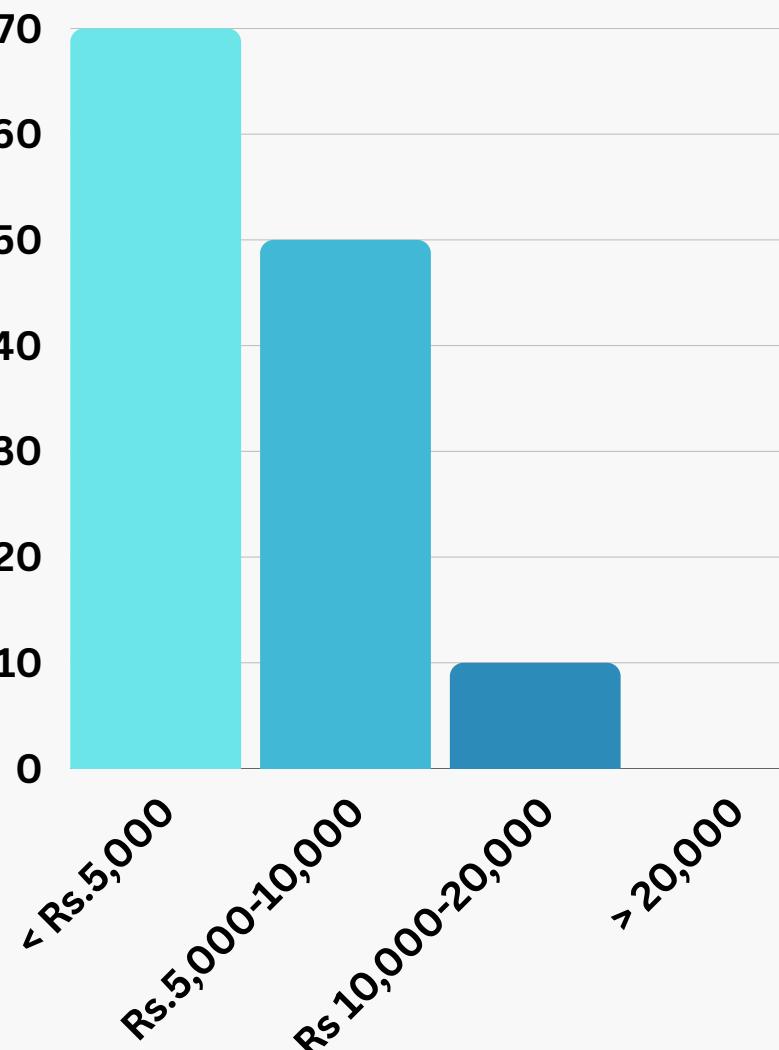
- ✓ **Pain** and **cost** are the biggest barriers to regular blood glucose monitoring.
- ✓ A non-invasive, affordable solution can encourage more people to check their glucose levels.

Demand for Non-Invasive Solutions



80%+ of respondents expressed interest in a non-invasive glucometer

Willingness to Pay



Less than Rs. 5,000 emerged as the most preferred price range among survey respondents

60.8% of participants acknowledging **diabetes as a major concern**

Key preferences identified,

- A price range of **less than Rs. 10,000**
- **High accuracy**
- **Smartphone connectivity**

Glyco-iQ is poised to meet the growing demand for **affordable, user-friendly, and innovative** glucose monitoring solutions.



Uses Laser Technology

No blood, no pricking, no pain



Real-time Monitoring

Syncs with a mobile app via IoT



AI-powered Insights

Predictive analytics for better diabetes management



Affordable & Scalable

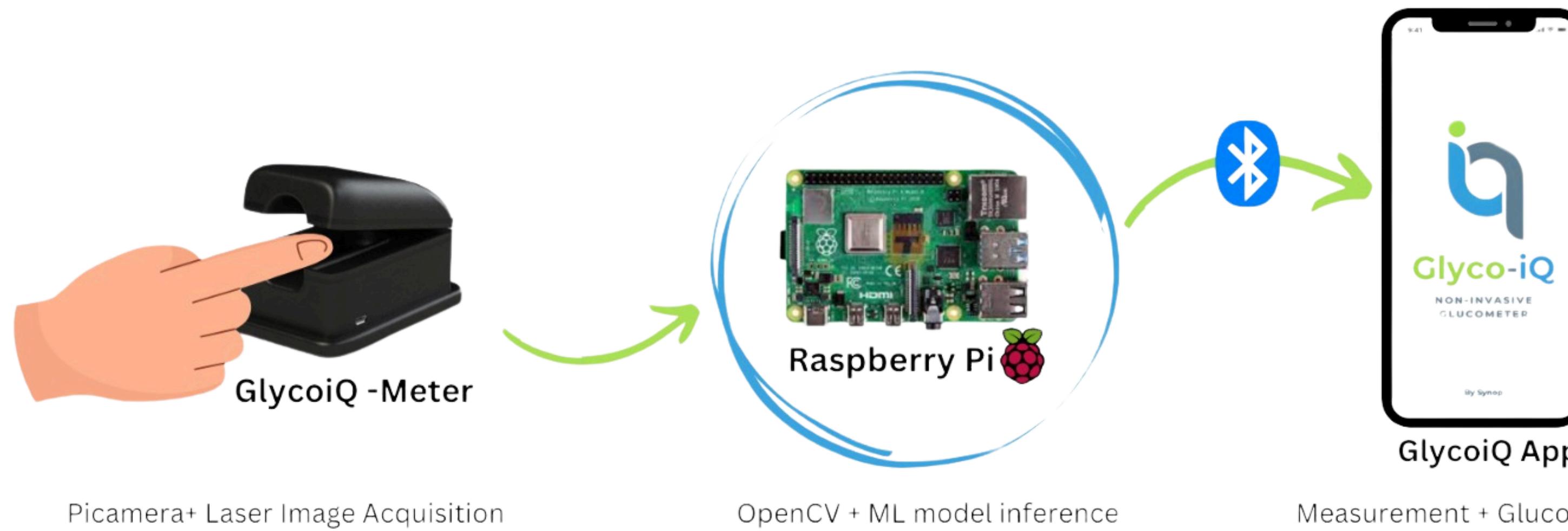
No recurring strip costs

Glyco-iQ

**A Smart,
Non-Invasive
Glucometer**

“A seamless, painless, and smart solution for glucose monitoring”

Glyco-iQ



The Science Behind Glyco-iQ



Why We Chose 650nm Red Laser Imaging

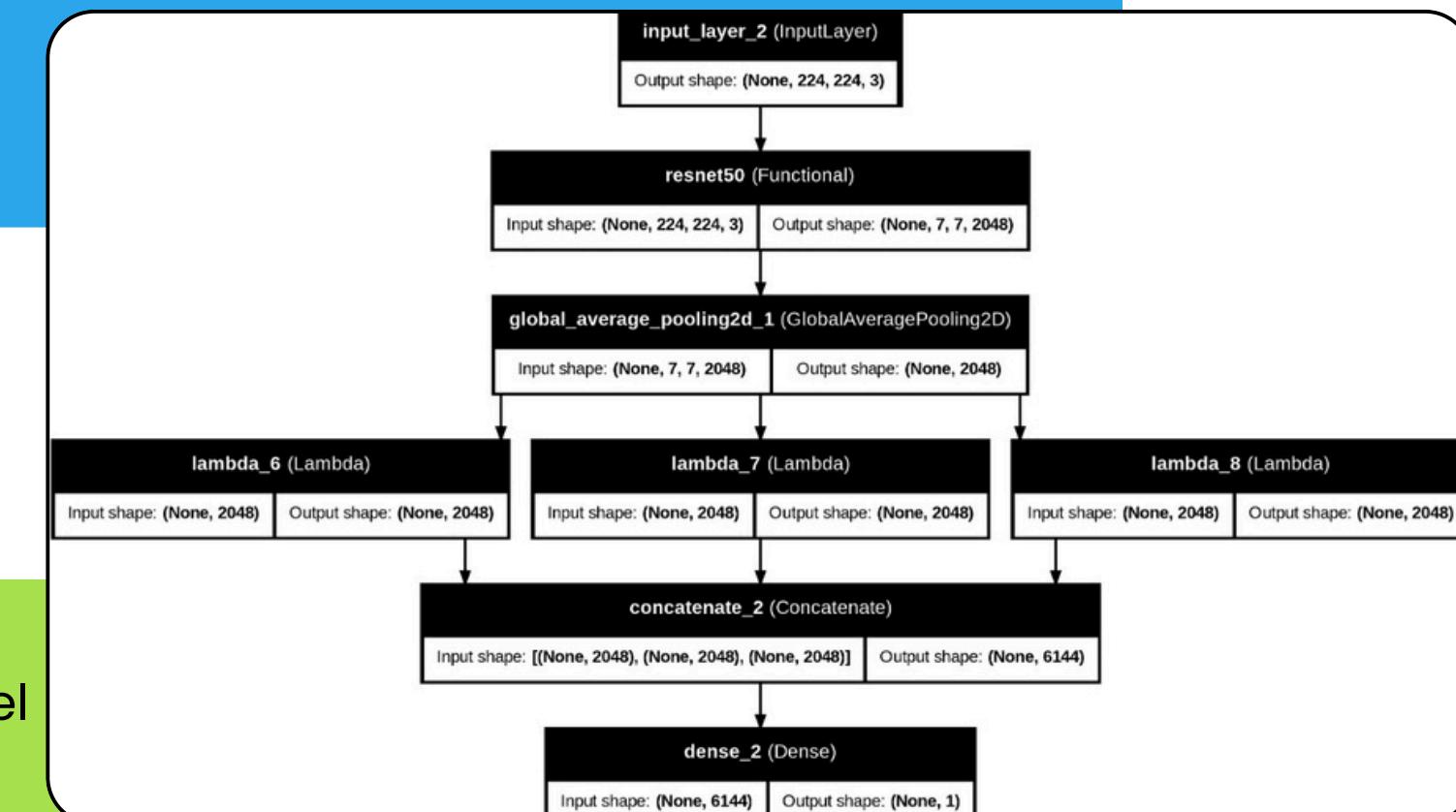
- **Near-Infrared Spectroscopy**: Rejected due to sensitivity to ambient conditions & skin tone variations.
- **Laser Imaging (650nm)**:
 - ✓ Uses a low-intensity laser to illuminate the fingertip.
 - ✓ Built-in camera captures scattered light for glucose analysis.
 - ✓ Neural network-based AI algorithm calculates glucose levels.

"Think of it as a smart selfie of your finger that reveals glucose levels with NO pricking!"



Custom Machine Learning Model

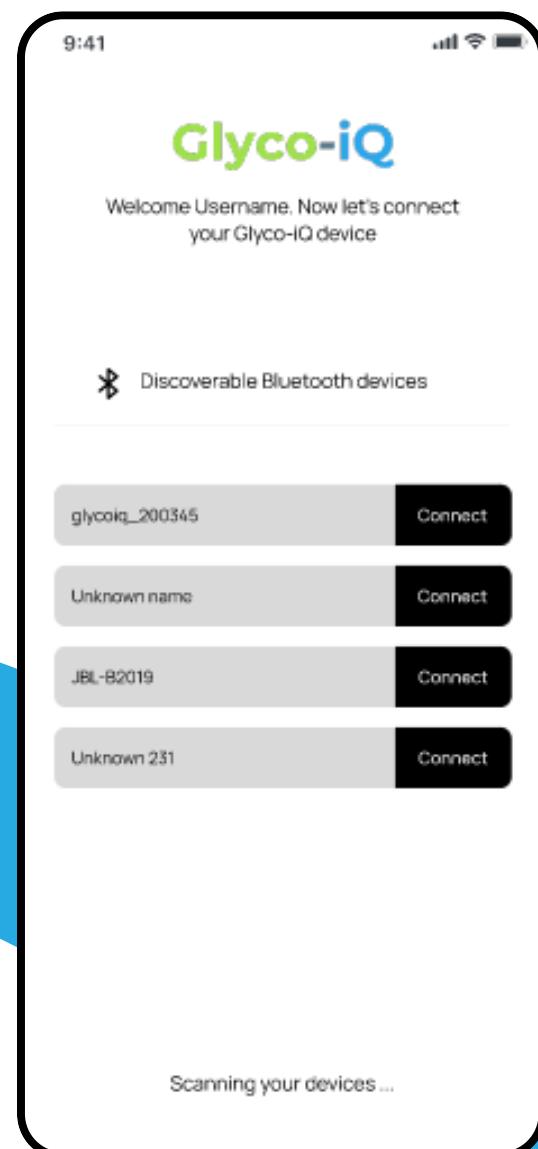
- **Input Layer:** Preprocessed fingertip laser image (128x128 RGB)
- Trained with labeled fingertip laser images & optimized for accuracy
- **Accuracy Benchmark :** Validated against traditional glucometers to ensure reliability.
- **Lightweight for fast inference :** Designed to run on edge devices like Raspberry Pi (optimized with TensorFlow Lite).



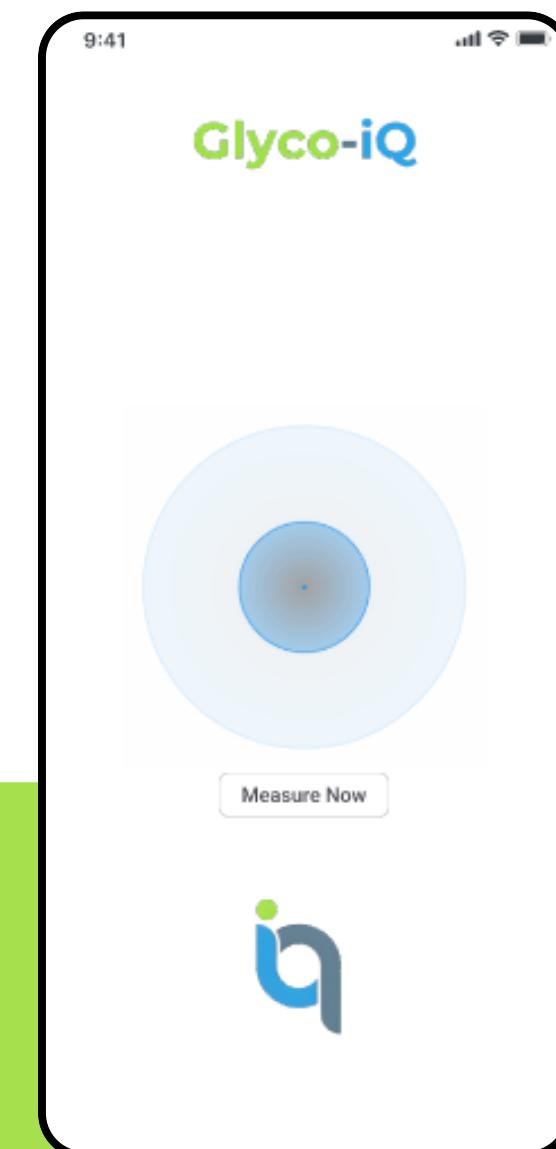
Architecture of the ML model



Interactive Mobile Application



**Connect to the
Glyco – iQ device via
Bluetooth or Wifi**

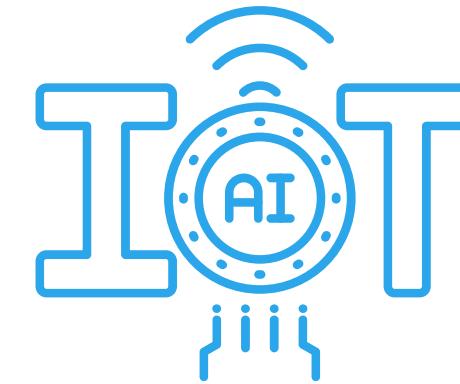


**Can start measuring
process just from a
button click**

**Able to read current
report and previous
reports also**



**Emergency alerts to the
relatives in case of
higher sugar strikes**



Real-Time Glucose Monitoring with IoT & AI

Real-time tracking – No manual recording required

Instant Alerts – Mobile notifications when glucose is too high/low.

Local DataBase– Access past records anytime

Data Security – End-to-end encryption ensures privacy

How Glyco-iQ Stands Out

Feature	Traditional Glucometers	GlycoIQ
Pain Level	High (finger-pricking)	None (laser-based)
IoT Integration	Limited	Full real-time tracking
Recurring Cost	High (test strips)	None
Emergency Alerts	No	Yes
User Experience	Inconvenient	Seamless & Smart

"GlycoIQ is painless, AI-powered, and cost-effective – unlike anything in the market."



Device Sales

One-time purchase (~Rs. 7,500 - 10,000 per unit)



B2B Sales

Selling in bulk to hospitals & insurance companies



Corporate Partnerships

Employers & wellness programs



App Subscription

*Premium AI insights & doctor consultations
(Rs. 100 - 200/month)*



Making Glyco-iQ a Sustainable Business

Ensuring Feasibility & Overcoming Risks

Risk	Impact	Solution
Accuracy Concerns	High	AI model refinement & real-world testing
Regulatory Delays	Medium	Early engagement with certification bodies
Manufacturing Cost	Medium	Bulk production & cost-efficient suppliers
Market Adoption	Medium	Awareness campaigns & clinical validation
Data Security	High	Strong encryption

How We Will Launch Glyco-iQ

Phase 1

Prototype Development -1 month

Phase 2

MVP Testing – 1 month

Phase 3

Regulatory Approval – 4 month

Phase 4

Market Launch – 1 month

Glyco-iQ

Transforming Diabetes Care



Why Glyco-iQ?

- ✓ **Pain-Free** – No blood, no needles, no discomfort.
- ✓ **AI & IoT Powered** – Real-time monitoring & insights.
- ✓ **Affordable & Scalable** – No recurring costs.
- ✓ **Ready for Market** – Prototype development underway.

"Join us in making diabetes management smarter, easier, and pain-free!"

Thank You

We are **Synop**



**Sineth
Jayawardena**



**Yehen
Asuramuni**



**Nilakna D.
Warushavithana**



**Oshadha
Nimantha**



**Pavithra
Weragoda**