The #1 Health and Wellness Check Software
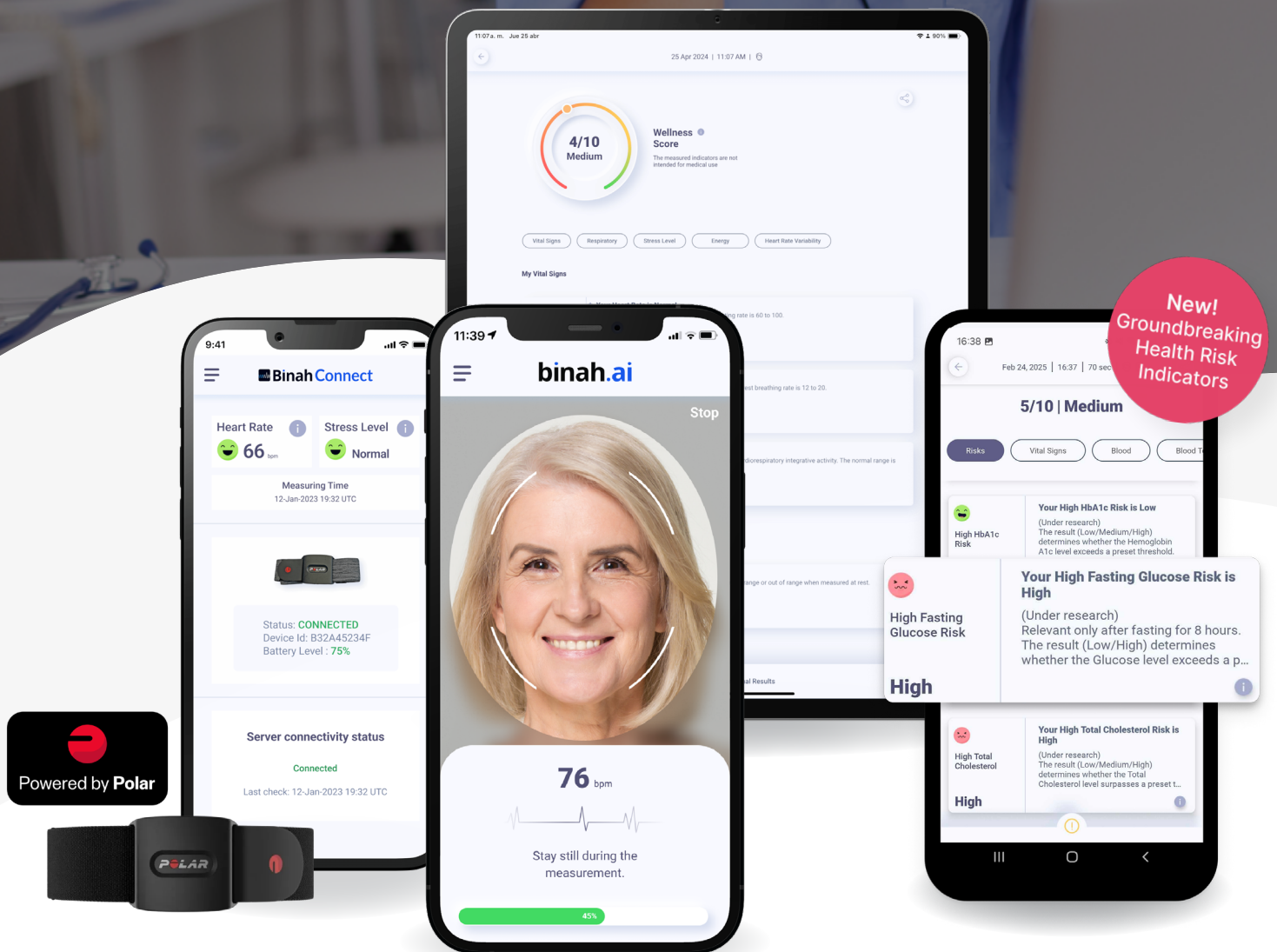
Making health data more accessible for better care at lower costs

New! Groundbreaking Health Risk Indicators

25 Apr 2024 | 11:07 AM |

4/10 Medium

Wellness Score
The measured indicators are not intended for medical use

Vital Signs | Respiratory | Stress Level | Energy | Heart Rate Variability

My Vital Signs

9:41

Binah Connect

Heart Rate ⓘ 😊 **66** bpm

Stress Level ⓘ 😊 **Normal**

Measuring Time
12-Jan-2023 19:32 UTC

Status: **CONNECTED**
Device Id: B32A45234F
Battery Level : **75%**

Server connectivity status
Connected
Last check: 12-Jan-2023 19:32 UTC

Powered by Polar

11:39

binah.ai

Stop

76 bpm

Stay still during the measurement.

45%

16:38 Feb 24, 2025 | 16:37 | 70 sec

5/10 | Medium

Risks | Vital Signs | Blood | Blood

High HbA1c Risk
Your High HbA1c Risk is Low
(Under research)
The result (Low/Medium/High) determines whether the Hemoglobin A1c level exceeds a preset threshold.

High Fasting Glucose Risk
Your High Fasting Glucose Risk is High
(Under research)
Relevant only after fasting for 8 hours.
The result (Low/High) determines whether the Glucose level exceeds a p...
High

High Total Cholesterol
Your High Total Cholesterol Risk is High
(Under research)
The result (Low/Medium/High) determines whether the Total Cholesterol level surpasses a preset t...
High

Tackling the Global Healthcare Crisis

Chronic diseases drive a staggering share of global healthcare costs, accounting for nearly 70%-80% in Europe and over 85% in the U.S. With increasing lifespans and medical staff shortages placing significant strain on healthcare systems, healthcare providers urgently need innovative, scalable solutions to enhance the prevention, management, and delivery of care. Additionally, empowering patients to take control of their health through regular monitoring and timely detection of potential issues is critical to sustaining long-term efficiency and improving outcomes.

Revolutionize Health Monitoring
with the #1 Software for Health and Wellness Checks

Binah.ai's award winning software-based Health Data Platform is the next stage in the evolution of AI-powered health and wellness monitoring, transforming camera-equipped devices into powerful, easy-to-use health monitoring tools. With Binah.ai's technology, healthcare providers can empower patients to self-monitor and share a comprehensive range of real-time health indicators including vital signs, bloodless blood tests, health risks and other health indicators, using smartphone cameras, wearable sensors, or health kiosks. With Binah.ai's continuous monitoring technology, providers and caretakers can also detect patients' falls and receive real-time alerts.

Health Indicators Providers and Patients Can Measure with Binah.ai

| Dynamic Idicators				Blood Tests	Risks				Other
Blood Pressure	Heart Rate	Heart Rate Variability	Breathing Rate	Hemoglobin*	ASCVD Risk	High Blood Pressure Risk	Low Hemoglobin Risk*	High HbA1c Risk*	Fall Detection
Sympathetic Stress	Parasympathetic Activity	PRQ	Oxygen Saturation	Hemoglobin A1c*	High Fasting Glucose Risk*	High Total Cholesterol Risk*	Tuberculosis Risk*	Heart Age	Wellness Score

*Under research

How Binah.ai's Technology Works

Binah.ai's software-based technology leverages advanced AI, computer vision, and deep learning, to extract and analyze health measurements using Photoplethysmography (PPG), a well-established, non-invasive optical technique used in hospitals worldwide. PPG works by emitting light into the skin and detecting changes in light absorption caused by blood volume fluctuations. These changes generate signals that reflect various physiological parameters.

For spot checks, Binah.ai's technology uses video to remotely capture PPG signals from the user's facial skin after a brief rest period to stabilize vitals. For continuous monitoring, PPG signals are transmitted via Bluetooth® from the Polar Verity Sense™. Binah.ai's proprietary models and algorithms then process these signals to deliver high-quality measurement results. Stress levels are calculated using the Baevsky Stress Index, while ASCVD Risk and Heart Age are derived based on the Framingham Risk Score. The technology supports all skin tones, genders, and adults aged 18 and over.

Robust Scientific Foundation Delivering Consistent High-Quality Performance

Led by our Chief Medical Officer, our team comprises experts with PhDs in medicine, engineering, deep learning, mathematics, physics, biotechnology, and more. Our award-winning technology has undergone rigorous testing both in laboratories and by independent third parties, such as Clinimark USA (now Element), the gold standard for clinical validation. It delivers consistent, high-quality results bolstered by our confidence level feature that ensures reliability. Binah.ai's technology is in the process of receiving regulatory approval as Software-as-a-Medical-Device (SaaMD) with FDA (USA).

Respiration Rate rPPG - 800+ Subjects
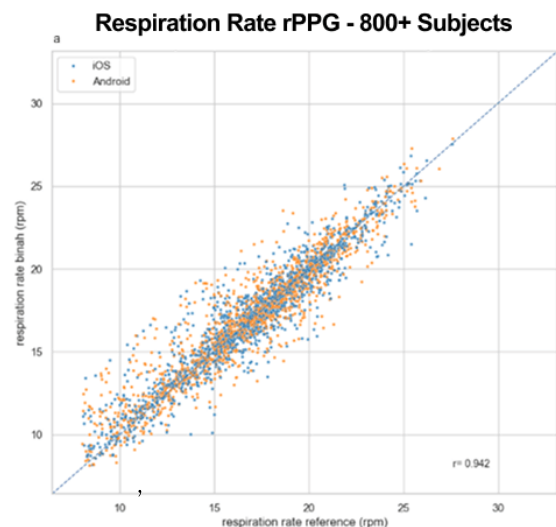
Uniquely Delivering Both Spot and Continuous Checks

Our comprehensive solution enables both spot checks, conducted via 35-60-second selfie videos or continuous checks using a Polar Verity Sense™ optical heart rate sensor, enabling providers to select the option that best suits their patients' needs.

Edge AI Architecture to Secure Health Data Privacy

Our technology is delivered as a Software Development Kit (SDK) that operates on the end-user's device, eliminating cloud-based risks and dependencies. This approach ensures the privacy of end-user data and enables a smoother HIPAA accreditation path. For continuous monitoring, results can be securely transmitted to the organization's cloud. **Binah.ai does not have access to end-user data.**

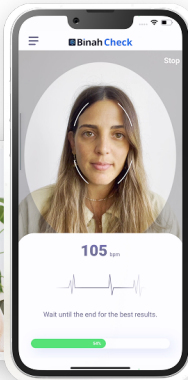## Certifications and Regulatory Approval

Binah.ai's technology is developed and tested against gold standard medical equipment with regulatory approval, and it is ISO 13485, GDPR and HIPAA compliant.
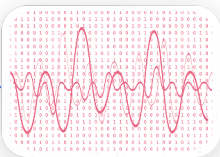
Spot Checks

Continuous Checks

Contactless Spot Checks Using Devices' Camera

After resting for 2-5 min, the user taps 'Start' and takes a **35-60-second selfie video**.

While the video is recording, Binah.ai generates a **remote photoplethysmography (rPPG) signal** from the live video.

The **rPPG signal is processed** in real time to remove noise and optimize the signal-to-noise ratio (SNR).

Binah.ai's **proprietary models and algorithms analyze the signal** to measure each health indicator.

|			
Blood Pressure	Heart Rate	Heart Rate Variability	Breathing Rate
Oxygen Saturation	Sympathetic Stress	Parasympathetic Activity	PRQ
Hemoglobin*	Hemoglobin A1c*	ASCVD Risk	High Blood Pressure Risk
Low Hemoglobin Risk*	High HbA1c Risk*	High Fasting Glucose Risk*	High Total Cholesterol Risk*
Tuberculosis Risk*	Heart Age	Wellness Score	

*Under research

Once the analysis is complete, the video recording stops, and **the final results are displayed** on the user's device. No images are saved, and Binah.ai does not have access to the data or results.
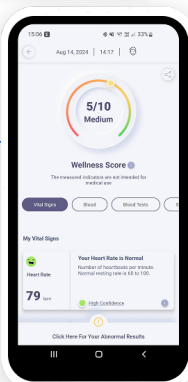
Contactless Cough Analysis Using Devices' Microphone

The user coughs into their device's microphone around 10 times, receiving real-time feedback on the cough audio volume to ensure recording quality.
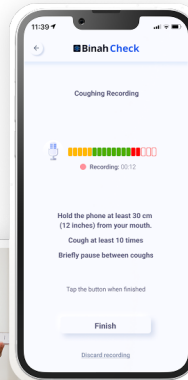
Once recorded, **the audio is uploaded to the cloud** for processing.

Our advanced signal processing algorithms **filter out background noise and isolate each cough** as a separate sample.
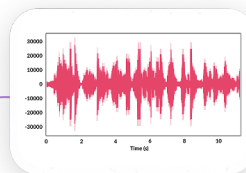
AI is then used to analyze the cough patterns, comparing them with spectrograms of tuberculosis (TB) patients.

Tuberculosis Risk*

The results are sent to the application via the SDK. Binah.ai has no access to the data or results.
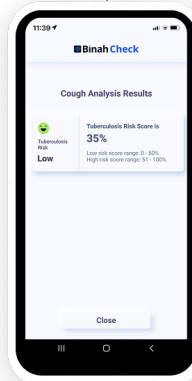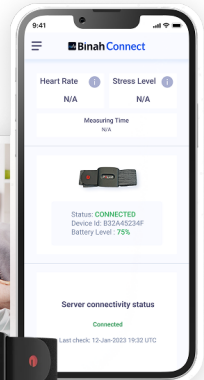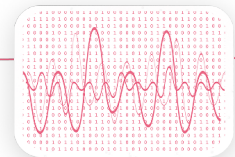
*Under research

Contact-based, Continuous Checks Using Wearables

The user wears the Polar Verity Sense™ optical heart rate sensor on their arm.
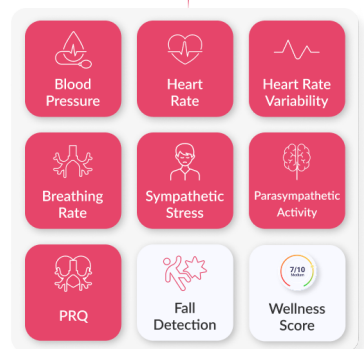
Photoplethysmography (PPG) signals are continuously transmitted to the Binah SDK via Bluetooth®.

The **PPG signal is processed** to filter out noise and enhance the signal-to-noise ratio (SNR).

The **optimized signal is analyzed using Binah.ai's proprietary models and algorithms** to measure each health indicator.

Blood Pressure	Heart Rate	Heart Rate Variability
Breathing Rate	Sympathetic Stress	Parasympathetic Activity
PRQ	Fall Detection	Wellness Score

The final results are sent to the customer's cloud using the Binah Connect app. Binah.ai does not access the data or results.
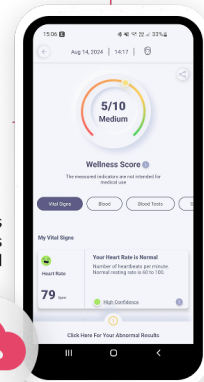
Binah.ai's customer's cloud

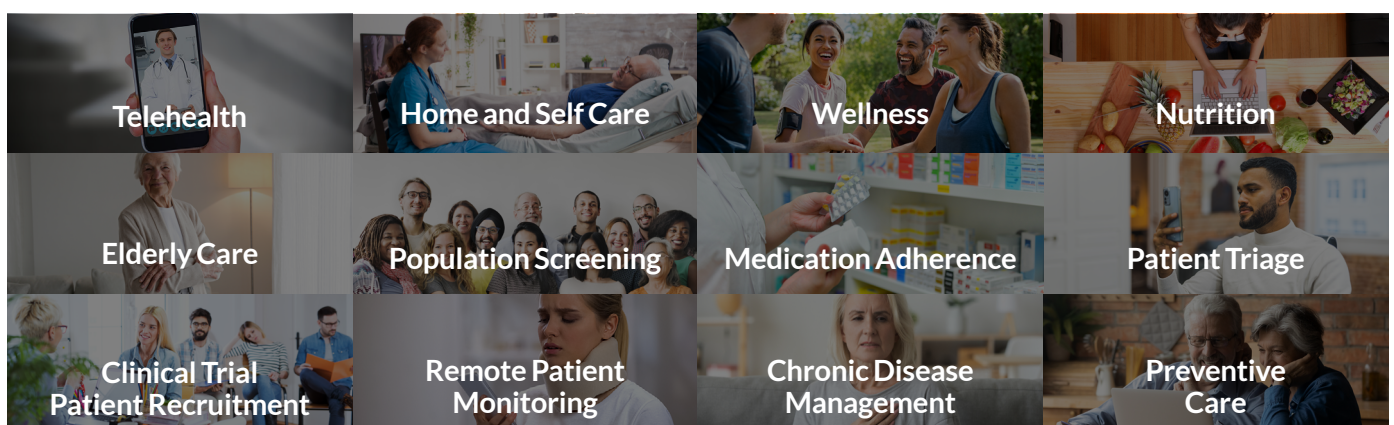## Benefits for the Healthcare and Pharma Industries

- **Bridge the gap in telemedicine** with comprehensive remote health monitoring
- **Enhance home care** by continuously tracking patient health remotely and reducing medical facility visits
- **Support data-driven decisions** (CDSS) with real-time patient health insights
- **Offer more personalized, preventive care** by identifying health risks early
- **Cut operational costs and save medical staff precious time**
- **Reduce the need for home monitoring devices** with smartphone-based health monitoring
- **Expand care access** to remote underserved populations with mobile health monitoring
- **Conduct efficient public screenings** to prevent epidemic outbreaks
- **Reduce fall-related injuries and costs** with real-time alerts and monitoring
- **Monitor key indicators** tied to a broad spectrum of diseases, including cardiovascular and respiratory conditions
- **Automate EHR data integration** for enhanced analytics and timely care
- **Boost patient engagement** with self-monitoring tools for health and wellness
- **Improve medication adherence** through regular health monitoring
- **Drive efficiency, inclusion, and trust** in clinical trial recruitment and research

Benefits for Patients

- **Self-monitor health effortlessly** with intuitive, easy-to-use tools
- **Avoid crowded waiting rooms** and risk of infection by managing health from home
- **Save time on travel** and access comprehensive health monitoring anytime using a smartphone
- **Gain smarter health insights** with historical data and trends
- **Receive timely preventive care** with up-to-date health insights shared by provider
- **Age in place with confidence** while keeping family members informed and reassured
- **Enhance self-care with real-time insights** that boost wellness engagement and improve satisfaction

Selected Use Cases for Health and Wellness Checks

Binah.ai's Health Data Platform unlocks and enhances a multitude of applications across the healthcare industry.

Telehealth | Home and Self Care | Wellness | Nutrition

Elderly Care | Population Screening | Medication Adherence | Patient Triage

Clinical Trial Patient Recruitment | Remote Patient Monitoring | Chronic Disease Management | Preventive Care

Why Binah.ai?

Unique Edge Architecture

Binah.ai's technology leverages edge computing, eliminating cloud dependencies and costs, and delivering stable performance, **even without the need for internet connectivity.**

Flexible Health Checks

As the sole provider of both spot and continuous monitoring as well as fall detection, our health and wellness checks are designed to adapt to your organization's needs.

Universal Accessibility

Our technology is designed for inclusivity, providing equal access regardless of gender, skin tone, or location and empowering healthcare providers to serve wider populations, including those in medical deserts. It has been successfully tested on individuals between the ages of 18 and 93.

Broad Compatibility

Binah.ai's solutions are compatible with smartphones, tablets, and other camera-equipped devices like digital kiosks. This allows your customers to conveniently self-monitor using devices they already possess or in medical facilities.

Proven Technology

Deployed across the healthcare, insurance and wellness industries, Binah.ai's technology is already benefitting tens of millions of end users worldwide.

Optimal Delivery for Seamless Integration

Our technology is provided as an easy-to-integrate SDK, complete with comprehensive documentation, reference applications, and continuous support from our customer success team, available to assist with your needs at any time.

Binah SDK (Software Development Kit)

- Supports: iPhone XP and up, iPad 6th Gen, and all iPad models released afterward with iOS 14 and up; Android 10 mobile devices
- Web Application Support: compatible with Safari and Google Chrome on iOS, and Google Chrome on android - no app needed
- Support for landscape and portrait orientations

Binah Connect - PPG Sensor Support

- Polar Verity Sense™ optical heart rate sensor

Health Checks Anywhere

Binah.ai provides the #1 AI-powered software for health and wellness checks, transforming smartphones and other camera-equipped devices into powerful health monitoring tools. Designed for healthcare, insurance, and wellness organizations, Binah.ai enables seamless, non-invasive monitoring of vital signs, health risks, stress levels, and blood tests in under a minute. With fast, simple, and affordable access to real-time health data, organizations can deliver personalized, preventive care at lower costs—accessible to anyone, anywhere, regardless of ethnicity, gender, or location.

For more information, visit www.binah.ai or contact us at info@binah.ai

Industries We Empower

| Healthcare | Insurance | Wellness | Pharma | Construction | Consumer Electronics/IoT | Retail | Nutrition | Mining |

Selected Partners

POLAR   accenture   endava   sdg group

Selected Customers

GENERALI   MetLife   AIA   STAR Personal & Caring Health Insurance The Health Insurance Specialist   LiveWell By ZURICH   momentum

Certifications

CERTIFIED ISO 13485:2016 COMPANY   HIPAA COMPLIANT   GDPR Representation

Selected Market Recognition

| Asia Insurance Awards 2023 | DIA DIAmond Award 2022 | CES Innovation Awards 2022 | CES Innovation Awards 2020 | GRAND CHAMPION NTT Data 10th Open Innovation International Contest 2020 | DOMAIN CHAMPION NTT Data 10th Open Innovation International Contest 2020 |