binah.ai
Health Checks Anywhere

www.binah.ai

The #1 Health and Wellness Check Software

Making health data more accessible for better care at lower costs

Tackling the Global Healthcare Crisis

Chronic diseases drive nearly 70% of global healthcare costs, placing significant strain on healthcare systems. As lifespans increase and staff shortages persist, healthcare providers urgently need innovative, scalable solutions to enhance the prevention, management, and delivery of care. Additionally, empowering patients to take a proactive 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 solution is the next stage in the evolution of 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 their smartphone cameras or a wearable sensor. 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

- Blood Pressure
- Heart Rate
- Heart Rate Variability
- PRQ
- Hemoglobin*
- Tuberculosis Risk*
- ASCVD Risk*
- Wellness Score
- Sympathetic Stress
- Parasympathetic Activity
- Breathing Rate
- Oxygen Saturation
- Hemoglobin A1c*
- Diabetes Risk*
- Hypertension Risk
- Fall Detection

*Under research

How Binah.ai's Technology Works

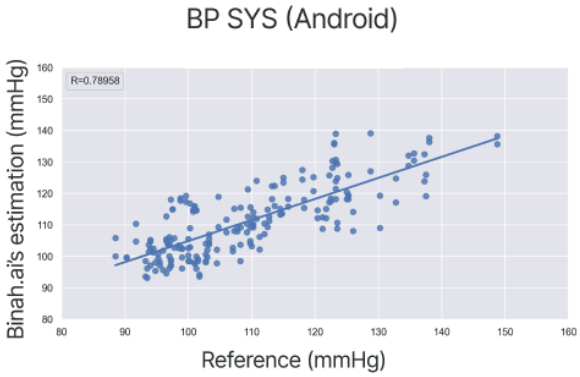
Binah.ai's software-based technology leverages advanced AI, deep learning and proprietary models and algorithms to extract health measurements using Photoplethysmography (PPG), a well-established and proven non-invasive optical technique used in hospitals around the world. The technique measures the changes in light absorption caused by variations in blood volume by emitting light into the tissue on the surface of the skin and subsequently detecting the light reflected back. The measured changes enable the assessment of various physiological parameters.

Our technology integrates computer vision, signal processing, and machine learning techniques to analyze PPG signals and deliver consistent, high-quality measurement results.

For spot checks, it uses video to remotely capture and generate PPG signals. For continuous checks, the PPG signals are continuously transmitted from the Polar Verity Sense™ via Bluetooth®. The PPG signals are then processed using Binah.ai's proprietary models and algorithms to generate measurement results. The technology supports all skin tones and genders.

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).



,

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.

Optimal Delivery for Health Data Privacy

Our technology is delivered as a Software Development Kit (SDK) that operates on the end-user's device. 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.

ISO 13485:2016

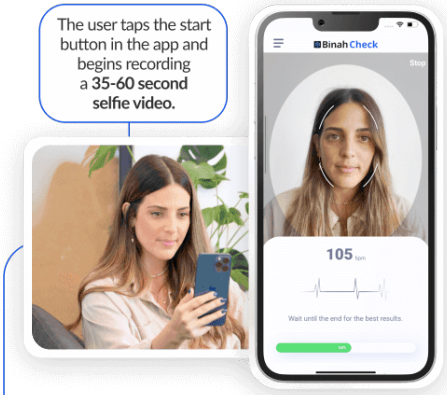
HIPAA COMPLIANT

GDPR Representation

Spot Checks

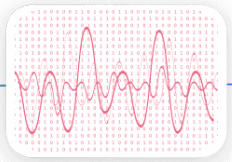
Contactless Spot Checks Using Devices' Camera

The user taps the start button in the app and begins recording a **35-60 second selfie video.**

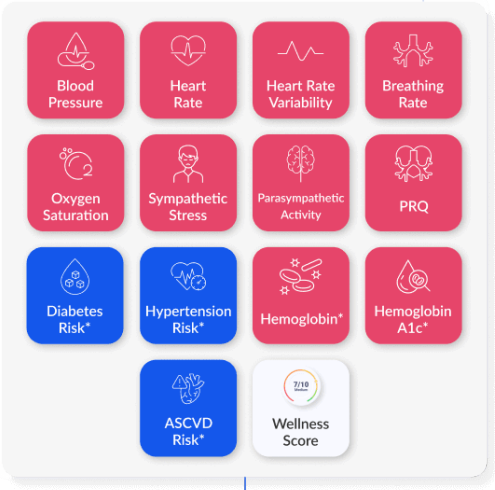


While the video is recording, Binah.ai generates a **remote photoplethysmography (rPPG) signal** from the live video.

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



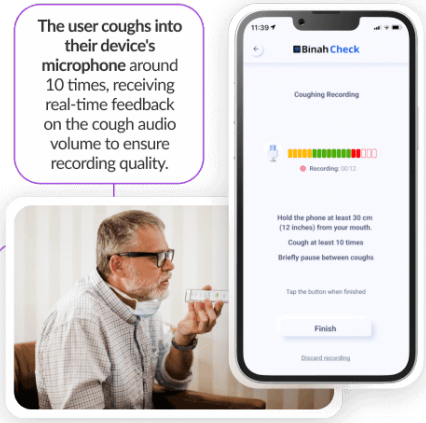
Binah.ai's **proprietary models and algorithms analyze the signal** to measure each health indicator.



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.

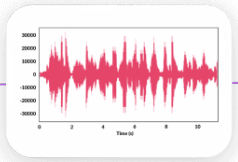
Contactless Cough Analysis Using Devices' Microphone

The user coughs into their device's microphone around 10 times, receiving real-time feedback on the cough audio volume to ensure recording quality.

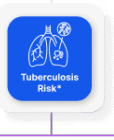


Once recorded, **the audio is uploaded to the cloud** for processing.

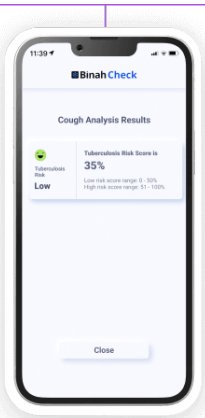
Our advanced signal processing algorithms **filter out background noise and isolate each cough** as a separate sample.



AI is then used to analyze the cough patterns, comparing them with spectrograms of tuberculosis (TB) patients.



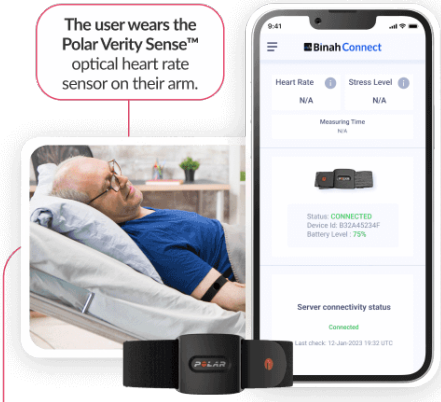
The results are sent to the application via the SDK. Binah.ai has no access to the data or results.



Continuous Checks

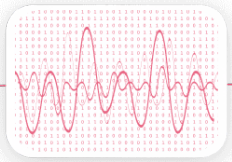
Contact-based, Continuous Checks Using Wearables

The user wears the **Polar Verity Sense™** optical heart rate sensor on their arm.

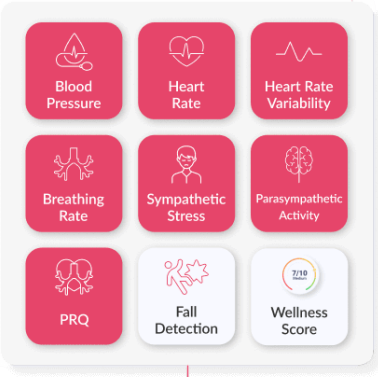


Photoplethysmography (PPG) signals are continuously transmitted to the Binah SDK via Bluetooth®.

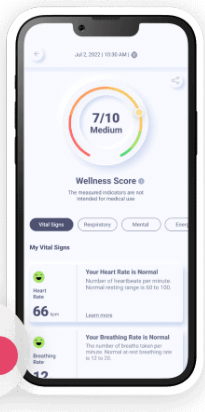
The **PPG signal is processed** to filter out noise and enhance the signal-to-noise ratio (SNR).



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



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

*Under research

Benefits for Healthcare Providers

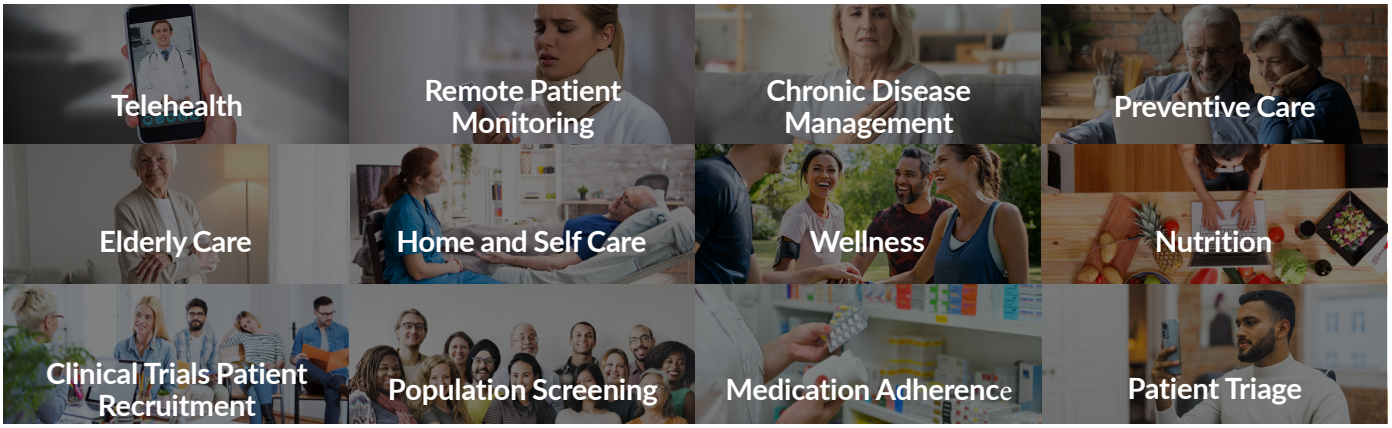
- **Bridge the gap in telemedicine** with comprehensive remote health monitoring
- **Enhance home care** by continuously tracking patient health remotely and reducing medical facility visits
- **Support data-driven decisions** (CDSS) with real-time patient health insights
- **Offer more personalized, preventive care** by identifying health risks early for tailored interventions
- **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 easy 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 data integration into EHRs** for enhanced analytics and timely care
- **Boost patient engagement** with self-monitoring tools for health and wellness
- **Improve medication adherence** through regular health monitoring

Benefits for Patients

- **Self-monitor health effortlessly** with intuitive, easy-to-use tools
- **Avoid travel and crowded waiting rooms** by managing health from home
- **Access comprehensive health monitoring anytime** using a smartphone
- **Gain smarter health insights** with historical data and trends
- **Receive more personalized preventive care** with up-to-date health insights shared by provider
- **Age in place with confidence** while keeping family members informed and reassured

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.



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 specific 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

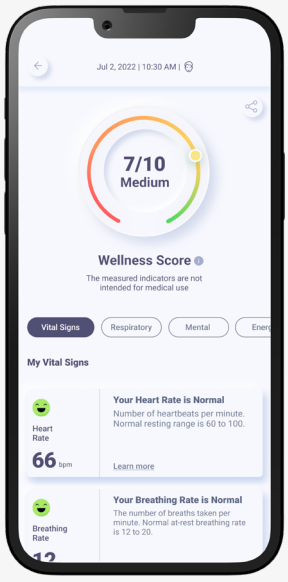
Binah.ai's solutions are compatible with smartphones, tablets, and other camera-equipped devices like digital kiosks. This allows your customers to conveniently self-monitor using devices they already possess or in medical facilities.

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 eam, available to assist with your needs at any time.



Binah SDK (Software Development Kit)

- Supports: iPhone 8 and up and iPad 6th Gen and all iPad models released afterward with iOS 14 and up; Android 8.1 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 offers the #1 software for health and wellness checks, turning smartphones and other camera-equipped devices into health monitoring tools. Empowering healthcare, insurance, and wellness industries, Binah.ai allows users worldwide to self-monitor and share a comprehensive range of health indicators, including non-invasive bloodless tests. 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 Health Insurance – The Health Insurance Specialist | LiveWell By ZURICH | momentum

Certifications

ISO 13485:2016

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