



Empowering better decisions at lower costs with real-time health data

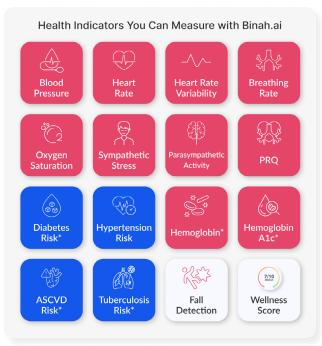


Power Your Offering with the #1 Software for Health and Wellness Checks

Binah.ai's award-winning Health Data Platform offers insurers an unparalleled advantage by transforming smartphones or tablets into health and wellness monitoring tools. Our software-based solution empowers insurers to unveil hidden health risks and remotely measure a comprehensive range of health and wellness indicators, including our chronic disease indicators and revolutionary bloodless blood tests. By opting to share their health data, policyholders can enjoy better, faster, and more personalized health and wellness services.

Make Underwriting More Efficient

Move beyond outdated legacy datasets and lengthy questionnaires for faster, smarter, and more cost-effective underwriting. Binah.ai's remote health check technology minimizes the need for dedicated hardware, cutting costs on equipment and personnel. Use remote checks to reduce



*Under research

reliance on questionnaires, triage STP applicants, uncover hidden health risks, improve dynamic underwriting and gain real-time insights into applicant health status.

Uncover Hidden Risks and Drive Proactive Prevention

Hidden health risks can lead to unexpected claims and higher costs for insurers. Binah.ai's health and wellness checks enable insurers and policyholders to proactively identify and address these risks. By allowing policyholders to measure and share real-time health data—including risks for chronic conditions like hypertension and diabetes—insurers gain deeper insights for timely prevention strategies that enhance policyholders' wellbeing and reduce long-term costs.

Shift from Claims Payer to Lifelong Wellness Partner

Keep your clients engaged on their wellness journeys by empowering them to conveniently track their health data anytime, whether on the go, during exercise, or even while asleep. With easy access via smartphones or tablets, clients can monitor their progress seamlessly. Leverage these insights to gamify wellness platforms, offer personalized recommendations, and reward healthy behavior. Build lasting relationships by helping clients mitigate health risks, ultimately leading to improved wellbeing and savings on premiums.

Boost Wellness Programs Engagement with the Binah Wellness Score

Empower your clients to get a user-friendly score designed to foster a proactive approach to health and wellness management. This score, based on Binah.ai's analysis of key metrics, serves as a tangible indicator of their overall wellness, encouraging users to track their progress and engage more actively with their health.

How Binah.ai's Technology Works

Binah.ai is delivered to organizations as a Software Development Kit, Binah SDK. It harnesses a unique technological mix of signal processing, advanced AI, and a proprietary set of algorithms developed and perfected in-house over nearly a decade to conduct health and wellness checks. The health and wellness indicators are measured using photoplethysmography (PPG), a well-established, non-invasive optical technique used for measuring physiological health parameters. Stress levels are calculated using the Baevsky Stress Index. Delivering consistent, high-quality results in under a minute, Binah.ai's technology supports all Fitzpatrick scale skin tones and is agnostic to sex.



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.

Spot Checks

With Binah.ai's SDK (Software Development Kit), organizations can empower anyone to take a health check in 35 to 60 seconds by simply looking at the camera of their personal mobile device.

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Contactless Spot Checks Using Devices' Camera

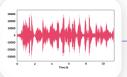
Contactless Cough Analysis Using Devices' Microphone

The user coughs into their device's microphone around 10 times, receiving



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.



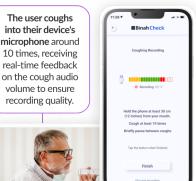
Al is then used to analyze the cough patterns, comparing them with spectrograms of tuberculosis (TB) patients.

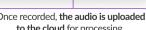


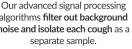
application via the SDK.

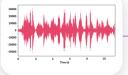


Continuous Checks











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



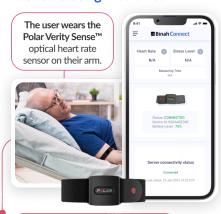
*Under research

Contact-based, Continuous Checks Using Wearables

For situations requiring continuous monitoring, Binah.ai integrates

with the Polar Verity Sense™ optical heart rate sensor, enabling

seamless health data collection and fall detection.



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.



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.

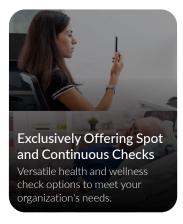




Why Binah.ai?

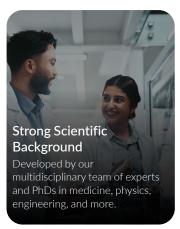


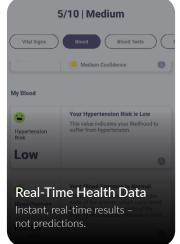


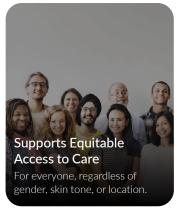


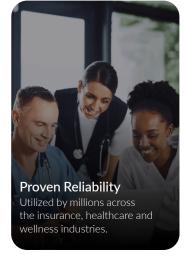




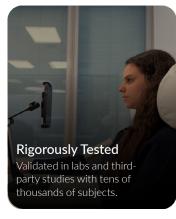


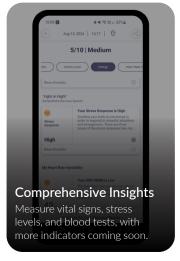












Optimal Delivery for Seamless Integration

Our technology is provided as an easy-to-integrate SDK (Software Development Kit), 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 8 and up and iPad 6th Gen and all iPad models released afterward with iOS 16.7 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





Insurance Applications



Augment self-reported health questionnaires with objective, real-time health data collected remotely Uncover hidden risks and improve risk management with real-time insights into client health statuses Make claims processing smarter and faster with historical health data shared by clients



Use remote, one-minute health and wellness checks to triage high and low-risk applicants

Boost engagement and support client wellbeing with a real-time monitoring solution, available 24/7

Get a 360° user profile with critical health data for better, more efficient, and value-added customer support

Flag Critical Health Risks with a Spectrum of Health Indicators

Parameter	Normal range (Age 18+)	Health issues associated with abnormal levels
Blood pressure How blood is pumped through the veins	Systolic: <120 Diastolic: <80	Heart attack, heart disease, stroke, kidney disease, poor cognitive function, dementia
Heart rate/ Pulse rate How many times a person's heart beats in 1 minute	60-100 bpm	Stroke, heart failure, Hypovolemia, Fever
Heart Rate Variability The variance in time between heart beats	Age 20-25: 55-105 Age 60-65: 25-45	Stress, risk of cardiac events, oncoming sickness, nutrition and sleep patterns
Oxygen saturation The amount of oxygen-carrying hemoglobin in the blood relative to the amount of hemoglobin not carrying oxygen	95% - 100%	Asthma, Bronchitis, COPD, congenital heart defects, congenital heart failure
Breathing rate The number of breaths a person takes per minute*	12-20 bpm	Anxiety, fever, heart problems, respiratory conditions including, COPD, asthma, and pneumonia
PRQ Heart rate divided by respiration rate, captures the complex state of cardio-respiratory interactions	5	Hyperventilation, cardiorespiratory issues
Hemoglobin	Men: 14 to 18 g/dL Women: 12 to 16 g/dL	Anemia, sickle cell disease, chronic kidney disease, hemato-oncology disease, cancer, Malutrition
Hemoglobin A1c	Normal <= 5.7 % Prediabetes risk 5.7-6.4 % Diabetes risk > 6.4 %	Pre-diabetes, diabetes, metabolic syndrome, heart disease, kidney damage, eye damage, liver disease
Sympathetic stress (Baevsky Stress)	Low - Normal	Stress, risk of cardiac events, oncoming sickness, nutrition and sleep patterns
Stress response (SNS Zone)	Low - Normal	Stress, risk of cardiac events, oncoming sickness, nutrition and sleep patterns
Recovery Ability (PNS Zone)	Normal - High	Stress, risk of cardiac events, oncoming sickness, nutrition and sleep patterns
Diabetes Risk	Low	Diabetes, heart disease, kidney damage, eye damage, liver disease
Hypertension Risk	Low	Heart attack, stroke, heart disease, kidney damage, poor cognitive function, dementia, pregnancy complications



Enable Seamless Health and Wellness Checks

Scenario #1

Underwriting / Onboarding

General Health Assessment

Remote self-assessment





Agent enablement

Easily assess general health status by sending candidates a link to perform a 1-minute scan or empower agents with a real-time assessment tool

Instant Digital Scan







Reduce churn and time wasted on health checks, and enhance questionnaires with objective, real-time health data

Analysis





Advanced algorithms create individual insights

Decision Making





Make smarter and faster decisions for each policy

Scenario #2

Wellness Programs

Initial Health Screening





Send clients a link to take a 1-minute health scan or have clients scan themselves using the insurer's app

Help Set Personal Health Goals





Boost Engagement



Help clients stay engaged with personalized recommendations based on health data and progress

Goal Achievement, Maintenance and Rewards



Reward goal achievement and health improvements, and empower clients to maintain a healthy lifestyle



Revolutionize Insurance with Real-Time Health and Wellness Monitoring



Digital Transformation: Streamline underwriting and claims processes with automation and support a 360-view of customers for an enhanced digital experience.



Operational Efficiency: Reduce the time and costs associated with manual health assessments, eliminating the need for expensive equipment and outdated datasets.



Enhanced Risk Assessment: Use real-time and historical health data and trends to make more informed risk assessments.



Smarter Digital Twins: Enrich digital twins with a wealth of high-quality real-time health and wellness data to enhance predictive analytics and personalized insurance.



Revenue Growth: Expand outreach to under-served populations and remote locations, opening up new markets and opportunities.



Fraud Reduction and Claims Validation: Utilize real-time and historical health data to authenticate claims more effectively and combat fraud.



Short Time-to-Market: Seamlessly integrate Binah SDK into your branding, apps, or web applications within days for immediate savings.



Future-Proof Partnership: Establish a lasting partnership that continues to enhance your offering with numerous health and wellness indicators in the pipeline for the coming years.



Customer Convenience: Make measuring and sharing health data as simple as taking a selfie-video, streamlining insurance processes with less paperwork and fewer calls and offering unparalleled convenience to both prospects and clients.



Proactive Prevention: Encourage clients to actively monitor their health data, facilitating the early detection and prevention of potential health issues.



Engaging Wellness Programs: Elevate wellness programs with gamification and personalized suggestions based on real-time health data. Use this data to set measurable goals and motivate clients with incentives like dynamic underwriting.



Insurers Already Reaping the Benefits of Binah.ai's Technology

GENERALI Generali Deutschland, the German business unit of Europe's largest insurance Group

In today's challenging landscape, Generali has a clear vision – future-focused and looking for continuous innovation, while always putting the customer first. Recognizing that health awareness is at an all-time high due to the pandemic, and with a drive to support its own customers in monitoring health status, Generali wanted to create a wellness application from scratch. The insurance giant wanted to align this solution with the nationwide push from the German government for an increasingly digitalized healthcare system.

"With this new digital solution, we put advanced analytics and Artificial Intelligence to the service of our customers, in a way that is affordable, fast, and easy. A new tool to promote prevention, which, as we learnt during the current Covid emergency, is of paramount importance, and to protect our customer's life and health."

Giovanni Liverani, CEO of Generali Deutschland



momentum Momentum, one of South Africa's largest insurance companies

As a leading insurance company, Momentum has a broad vision to digitalize its value chain, and provide clients with intelligent, streamlined tools to monitor health vitals, improve insurance services, and early identify health flags, while getting better, real-insights into their clients' healthcare status. Momentum immediately recognized the potential of remote, video-based vital signs monitoring for their clients. This would provide a valuable stream of health data to them as a company, as well as offer customers and partners the tools to stay on top of their own health vitals and attain peace of mind.

"Binah.ai's technology provides our clients with a tool to measure key vitals and offers us alternative sources of health data to assist with early intervention and referral to our digital doctors if needed."

Margot Brews, Head of Health Risk

Management at Momentum, South Africa





Sompo Japan Nipponkoa Himawari Life Insurance, one of Japan's largest insurance companies

"In particular, we aim to develop new healthcare services which enable customers to understand their own health status (such as stress) and get advice, by utilizing Binah's technology: data format-agnostic/signal processing/machine learning, and proprietary algorithms with existing medical/ and health data. Binah.ai provides practical answers to critical information challenges, accelerating the path from data to insights. Binah's combination of signal processing, machine learning, and a proprietary, comprehensive back-end AI framework delivers best-in-class models in terms of accuracy, performance and stability."

Sompo Japan Nipponkoa Himawari Life Insurance

https://www.sompo-hd.com/~/media/hd/en/files/news/2020/e_20201009_2.pdf





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



















Insurance

Wellness

Healthcare

Pharma

Construction

Consumer Electronics/IoT

Retail

Nutrition

Mining

Selected Partners









Selected Customers













Certifications







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