

Google's Impact on Health

Helping everyone, everywhere,
live a longer healthier life

February 2025



Introduction

Google's mission to make the world's information universally accessible and useful is critically important within the realm of health.

Every day, people around the world turn to Google for information, resources, and support that help them make informed decisions and improve their lives.

At Google, we believe that technology has the power to democratize access to high quality health for everyone along their health journeys, and dramatically advance scientific endeavors. Our commitment is to bring high-quality health information to people everywhere, tackle critical health challenges, and create technology that, together with our partners, achieves our vision of billions of healthier people.

Google's technology and partnerships are impacting health across our four areas:

1. **Advancing cutting-edge AI capabilities** to enhance care, support clinicians, and accelerate scientific breakthroughs.
2. **Meeting people where they are** with reliable, high-quality health information and personal insights.
3. **Transforming organizations working in health** to meet future health needs.
4. **Building a thriving health ecosystem** by collaborating with and supporting researchers, developers, governments, and communities around the globe.

A message from Dr. Karen DeSalvo, Chief Health Officer



As we stand at the intersection of technology and health, I am filled with immense pride and optimism about the transformative role Google is playing in the health sector. In a world grappling with immense health challenges— the rise of non-communicable diseases, mental health crises, rising costs and information overload—our commitment to using technology, including AI, to improve health outcomes worldwide has only strengthened.

Health is a company-wide effort at Google. The global reach of our products, services and platforms — powered by our advanced technologies and coupled with our partnerships — helps billions of people to live longer, healthier lives. The capabilities of our multi-modal generative AI, which can process and understand different types of data such as text, images, and sounds, stand to unlock health for all people on a planetary scale.

At Google, we believe that technology has the power to democratize access to optimal health for everyone, support individuals along their health journeys, and dramatically advance medical science.

Our work is making a tangible impact from using artificial intelligence to elevate clinical care and prevent care team burnout, to providing credible health information, to supporting scientific discoveries and public health initiatives globally. We are not just imagining the future of health. We are actively enabling it.

In this report, you will find stories that bring to life ways our platforms, technology and partnerships are addressing some of the most pressing health challenges of our time. You will read about our partnerships with healthcare providers, researchers, life sciences organizations and public health, and how these collaborations are driving innovation to bring optimal health to all people around the world. We do all this work responsibly with privacy, safety and security by design. Protecting user data is a top priority at Google and privacy is built into every product. We are excited about the potential of AI to improve health outcomes for all, and want to do so responsibly.

Our work is only beginning. We are inspired by the resilience and ingenuity of the health and life sciences community and are honored to play a role in supporting their efforts. Thank you for taking the time to read this report. We hope it provides a meaningful snapshot of our impact and inspires you to join us in our goal to help everyone, everywhere live a longer, healthier life.

Executive Summary

Google is boldly reimagining health for billions worldwide - through cutting-edge technology, platforms, research and services - to create an empowering ecosystem for consumers and organizations, delivering personalized health experiences, driving global health innovation, and enabling access to information as a key determinant of health.

Advancing cutting-edge AI capabilities

Google is at the frontier of responsible AI advancements, partnering with researchers and organizations to advance global health opportunities such as cancer detection and personalized care.

1 Nobel Prize

Awarded to Google DeepMind's Demis Hassabis and John Jumper for the AlphaFold 2 AI system that accurately predicted the structure of nearly all known proteins.

Med-Gemini's 91.1% Accuracy

On U.S. medical exam questions. This multimodal research model can interpret 3D scans, answer clinical questions, and generate radiology reports.

99.99% Accuracy achieved in mapping human genetic diversity with google's DeepVariant and DeepConsensus

Meeting people where they are

Google's approach to health is to meet people where they are by seamlessly integrating health and wellness tools and information into everyday products like Search, YouTube, Maps, Fitbit, and Pixel, empowering users to manage their health on their own terms.

100s of millions of times a day people come to Google Search with health-related questions.

200 billion global views of YouTube's health-related videos, with 40% growth in 2023 alone.

19 million+ Fitbit users Enrolled in the Irregular Heart Rhythm Notification feature, which monitors for AFib - the leading cardiac cause of stroke

Transforming organizations working in health

Google brings world-class security, cloud computing, AI & analytics, search, wearables, and real-time collaboration tools to help organizations harness the power of data to address their most critical needs - from care team burnout to medical innovation and patient engagement.

8/10 life sciences and healthcare companies are Google Cloud customers

Billion of data requests Over 10 billion API calls managed daily, along with 10s of billions of images-enabling efficient and secure management of health data.

21 million nurse handoffs Supported using Google's generative AI at HCA Healthcare, one of the largest health systems in the United States.

Building a thriving health ecosystem

Google is fostering a thriving ecosystem by providing developers, innovators, researchers, communities, and the public organizations with access to AI, data, and technology to create innovative solutions for global health challenges, ensuring impactful advancements for everyone, everywhere.

90% of Gen AI unicorns and 60% of funded generative AI startups are Google Cloud customers.

5 million people Across sub-Saharan Africa, Asia, and Southeast Asia impacted through solutions developed using Open Health Stack.

Millions of people Impacted in India, Thailand and Africa through low-cost AI-based diagnosis of TB, cancer, and retinopathy.

Advancing cutting-edge AI capabilities



Yossi Matias,
Vice President and Head of Google Research

AI is revolutionizing healthcare, and Google is at the forefront of this transformation.

We are living in a “golden age” for research—we witness how the “magic cycle” between research and real-world impact is shortening and broadening in scope, and how the impact of AI in health is moving from theory to reality at an accelerated pace. For years, our teams at Google Research and Google DeepMind have been solving some of the biggest challenges in health, from disease detection to empowering clinicians with tools that make diagnosis more precise and accessible. Since 2016, Google Research has published over 250 papers on AI in Health across top journals with over 40 papers in 2024 alone. Google DeepMind’s advancements, from AlphaFold’s revolutionary impact on protein folding and cutting-edge work in generative AI are accelerating the pace of impact across health and science. Together, these efforts lay the groundwork for more effective solutions in everything from preventive health to rare disease treatment.

The impactful AI in healthcare goes beyond the technology itself. Over the years, we’ve learned the value of working alongside healthcare providers, researchers, and organizations to ensure our tools address real clinical needs. I vividly recall a field visit to Thailand, where I witnessed firsthand the transformative power of AI in healthcare. During a clinic visit, I saw patients receive their diagnosis regarding diabetic retinopathy in under two minutes, a feat that was previously unimaginable. It was truly inspiring to see how technology could bridge the gap in healthcare access and improve patient outcomes - from seminal scientific research to impact on people through deployment and scaling through partnership. What’s clearly changing is the speed and scale with which we are able to take these breakthroughs and turn them into solutions with partners that genuinely help people. In the era of generative AI, we see how scientific breakthroughs in using language models for the medical domain are quickly tested by the industry to help improve healthcare at scale.

As we look to the future, we are excited about the potential of AI to transform how we approach health by making information smarter, more precise, and more personal. While still early days we are exploring AI’s potential in areas like genomics, diagnostics, and predictive analytics. We are building AI that’s not just novel in a lab setting, but truly transformative in the real world. And with the momentum we are building together, I believe we are on a path to make healthcare more effective, accessible and precise for all.

Our research helps pave the way for AI to revolutionize healthcare. We're committed to exploring cutting-edge technologies and developing solutions that improve diagnostics, treatment, and patient care worldwide.

**Nobel-Winning
AI Models and
Breakthroughs
in Science**

In a major breakthrough, Google DeepMind's Demis Hassabis and John Jumper became 2024 Nobel Laureates for their work on AlphaFold, a model that accurately predicts nearly all known protein structures. This achievement is accelerating research on treating diseases like Parkinson's and malaria, managing plastic pollution, supporting global food supplies, and much more, allowing scientists to make discoveries that were previously unimaginable, and potentially saving **hundreds of millions of years in research time**. AlphaFold has been accessed by **over two million researchers across 190 countries**, enabling rapid progress in disease research.

**AI Models for
Global Health**

Our AI models are reaching communities around the globe in an effort to improve health for everyone everywhere. In India, which has one of the highest tuberculosis rates in the world, our bioacoustic AI model is enabling the development of tools that can screen tuberculosis through cough sounds, with the potential to screen **35 million people**. Google Research's AI is also working to close maternal health gaps by making ultrasounds accessible to midwives, helping detect pregnancy complications early in a world where every two minutes, a woman dies during pregnancy. In breast cancer detection, Google's AI helps radiologists detect cancer more accurately, and advances early detection together with our partners. By advancing AI to overcome barriers in healthcare access, we can transform how millions receive the diagnosis and treatment they need.

**Med-Gemini:
Clinical
Accuracy and
Multimodal
Capabilities**

Google is at the forefront of research in advancing human-centered generative AI in health that delivers best-in-class performance safely and responsibly. Google's Med-Gemini model has achieved **91.1% accuracy** on U.S. medical exam questions. Med-Gemini, currently available for research purposes only to trusted testers, has the ability to; interpret 3D scans, answer clinical questions, and generate radiology reports. Med-Gemini holds the potential to support researchers, developers and specialists in fields like radiology, dermatology, and pathology, changing how complex medical information is synthesized and applied in real-world settings.

**AMIE:
Advancing
Diagnostic
Dialogue and
Empathy in
Healthcare**

We are researching the future of diagnostic AI with the Articulate Medical Intelligence Explorer (AMIE), a research system designed to responsibly explore the art of the possible in diagnosis and treatment dialogue. Our research aims to understand how we might combine clinical reasoning with conversational empathy - and how engaging in real-time, multi-turn discussions might help patients and clinicians navigate complex conversations. By studying the intricacies of medical conversations, diagnostic challenges, and a range of specialties; we are exploring whether AI systems can ask questions that reduce diagnostic uncertainty and provide clear, compassionate responses—all qualities essential to effective patient care -- while remaining safe and supervised by a responsible clinician. While still in its research phase, we hope to safely demonstrate ways in which conversational AI might improve care quality and experiences for patients and clinicians alike.

Meeting people where they are



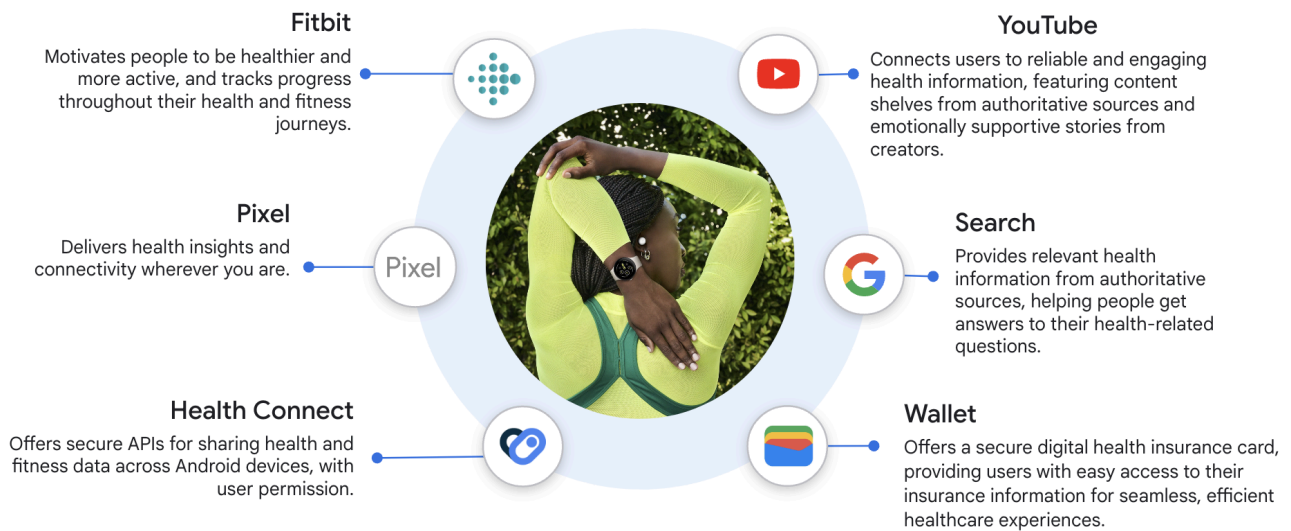
Garth Graham,
Director and Global Head
of Healthcare and Public
Health at YouTube



Cait O'Riordan,
VP of Product Management
at Google Search



Rishi Chandra,
VP of Product,
Health and Home



At Google, we are constantly finding new ways to meet people where they are on their health and wellness journey, whether that's through Search, YouTube, or our wearables and devices.

Health is deeply personal, and the right information at the right time—whether it's a reliable answer to a health question or a real-time alert on your watch—can be incredibly powerful. Our team focuses on delivering tools that make health information accessible, actionable, and tailored to each person's needs.

Google's Search and YouTube platforms play an essential role in connecting people with trustworthy health information. Every day, millions turn to Google Search for answers to health questions, from understanding symptoms to finding healthcare providers. In tandem, YouTube provides a powerful channel for health education, where verified healthcare experts, organizations, and creators can share trustworthy, engaging health content.

Our wearables, like Fitbit and Pixel Watch, are designed to go beyond basic activity tracking to deliver truly meaningful health insights. From tracking and analyzing physical activity, heart rate and heart rhythms to measuring sleep quality and detecting unexpected events like loss of pulse, these devices allow people to understand their daily health habits and get insights into their bodies in ways that were once only possible through clinical settings. With projects like the Wearables for Metabolic Health (WEAR-ME) pilot study, which paired behavioral and biometric data from Fitbit devices with health insights from Quest Diagnostics' laboratory tests, we're exploring how to build tools that can help people assess, maintain, and improve their metabolic health. This approach to predictive health could enable a future where people can take proactive steps to manage health risks before they become issues..

These products not only meet people where they are but also help build health literacy, empowering individuals to make informed choices. The future of health is both highly personal and dynamic. Together, these tools make health information accessible and actionable for everyone.

Authoritative Health Information to Everyone, Everywhere

From around the world, people seek health information across Google's platforms, from Search to YouTube to our devices, looking for answers to live healthier lives. People start their health journey with Google with health-related questions **hundreds of millions of times** a day. In 2023, YouTube's health-related content reached 200 billion views, a 40% increase that reflects growing demand for trusted health information. To meet these needs, we work with hospitals, universities, nonprofits, and medical experts to make credible information accessible through features like YouTube's [health content shelves](#) and Google Search's [Knowledge Panels](#), which elevate authoritative sources on topics from mental health to chronic conditions. We also feature [personal stories shelves](#) to let users connect with content from creators who share their lived experiences with certain mental and physical conditions. Google is continuously working on ways to make accessing information easier and more intuitive. We are enhancing mobile Search with visual tools to improve health literacy, enabling image-based searches through Google Lens in 150+ countries.

Wearables and Apps Ecosystem for Daily Health

Google's Fitbit and Pixel Watch are transforming personal health management. For example, over **10 million Fitbit users** are enrolled in Irregular Heart Rhythm Notifications, helping people stay ahead of health issues like Atrial Fibrillation —a [leading cause](#) of stroke. Pixel Watch goes further with [Loss of Pulse Detection](#), a first-of-its-kind feature, currently launched in Europe, which can call emergency services in cases of sudden pulse loss—a potentially life saving innovation. Pixel Watch also offers similar features such as [Fall Detect](#), contacting emergency services in case of a sudden fall.

Our devices also help motivate users to make healthy life choices that lead to long term positive outcomes. A [meta-analysis of 41 studies](#) found that Fitbit users increased daily steps and weekly physical activity, and improved BMI. Additionally, Fitbit-based programs are improving health outcomes for people with or at risk of chronic conditions; [research](#) showed that Fitbit users at risk of heart disease took an **average of 2,000 more steps daily**. In one of the largest studies of its kind, data from over 15,000 Fitbit users in the NIH All of Us Research Program revealed that those averaging 10,000+ daily steps had a [25–46% lower risk](#) of developing chronic conditions like obesity, depression, and type 2 diabetes.

Increasingly, personalized health signals from wearables and devices are helping drive insights for population health to tackle the world's most complex health challenges, empowering individuals and the healthcare ecosystem with information and insights.

Supporting People in Moments of Crisis

In times of immediate need, it's critical to get access to reliable support as quickly as possible. That's why on Google Search, we provide access to support like suicide hotlines and domestic violence resources across multiple countries and languages. Our [First Aid Info Shelves](#) provide quick, easy-to-follow instructions and resources for a variety of first aid topics including CPR, heart attacks, and more, available in multiple countries and languages. We've expanded our coverage with 20 additional countries and territories, helping more people connect with local resources when they need it most.

Bringing Mental Health Support Within Reach

Google is investing in making mental health resources accessible and trustworthy for everyone. For example, through the [Google Teen Mental Health Initiative](#), in collaboration with Selena Gomez, we have committed \$25 million to support mental health training for high school students. We are also backing AI-driven tools like ReflexAI's [HomeTeam](#), which assists veterans and families in navigating important conversations around mental health, and supporting the [BEACON](#) initiative in Illinois to improve access to behavioral health resources for children across the state. We're proud that the impact of this work has been recognized beyond Google, including ReflexAI's recognition as [Fast Company's](#) 2024 "World Changing Idea in Data & AI."

Transforming organizations working in health



Raj Pai,
VP, Product Management, Cloud AI



Healthcare generates 30% of the world's data, but much of it remains siloed and underutilized, making it challenging for providers and researchers to get a clear view of patient health.

At Google Cloud, we are focused on changing that by building secure, scalable infrastructure that enables healthcare and life sciences organizations to turn their data into actionable insights, fueling smarter decisions, streamlined care, and advanced research. Security and privacy are central to everything we build. In healthcare and life sciences, data protection isn't just essential, it's mission-critical, and our infrastructure is designed to meet and exceed those high standards. From zero-trust security frameworks to advanced privacy tools, we are committed to keeping health information safe while empowering organizations to use it effectively.

All of the amazing healthcare AI capabilities we see emerging—generative, predictive, or diagnostic—rely on high-quality, securely managed, curated data. Our goal is to create an integrated, multimodal data and AI foundation that supports insights that are actionable by both humans and virtual agents. Imagine a future where health systems can predict disease outbreaks weeks in advance by analyzing community health data, or where AI-driven insights guide clinical trials in real time to accelerate cures for complex diseases. A data-driven foundation opens new doors in personalized medicine, proactive care, and scientific innovation.

By building a connected health ecosystem, we aim to bridge data from multiple sources—including wearables like Fitbit wearables and Pixel Phones—directly into healthcare workflows. With tools like Health Connect, users can securely share personal health data with providers, empowering clinicians to monitor conditions like atrial fibrillation and identify trends in physical activity and provide personalized, proactive care.

As we look toward the future, we are excited about how secure, accessible data can shape a new era of innovation. By supporting organizations working in health with infrastructure that brings data to life, we are helping to create a health system that is more responsive, informed, and capable of delivering transformative outcomes on a global scale.

Google's suite of products—AI, cloud computing, analytics, Search, YouTube, wearables & devices, and more—empowers health and life sciences organizations to securely manage complex data, drive breakthroughs, and transform patient, clinician, and researcher experiences, including at organizations like:



A Data Backbone for Health & Life Sciences

Our customers use Google Cloud to securely store their private data of over **50 million patients** in the US alone, connecting diverse data formats to streamline workflows and support informed decisions. With over **10 billion API calls and tens of billions of images** processed daily, Google's Cloud Healthcare API enables organizations to securely connect siloed data for a complete health view. By integrating patient data across systems, Google's Healthcare Data Engine enables a seamless view of patient health, driving better decision-making and operational efficiency. More than **60% of the world's 1000 largest companies** and **8 out of 10 of the top healthcare companies** trust Google Cloud, underscoring its role as a critical data backbone in healthcare. Hackensack Meridian Health, for example, migrated three petabytes of clinical data to Google Cloud, achieving a 99% reduction in query times.

Reducing Administrative Burden

Google's AI and generative AI models, such as those offered through our Vertex AI platform, streamline clinical workflows, making it easier for clinicians and researchers to retrieve essential information and automate documentation. Vertex AI Search and medical summarization capabilities of MedLM (our family of medically-tuned models) allow for faster, more informed decisions across patient records. Our Medical Imaging Suite accelerates development of AI for medical imaging that can automate time-consuming tasks like labeling imaging data, helping radiologists interpret images more efficiently. Organizations like Commure use Vertex AI platform and MedLM to generate over **70,000 physician notes weekly**, reducing administrative tasks and improving efficiency. Using Google's AI services to summarize after call notes in their call centers, Highmark Health plan is saving approximately 20,000 hours annually, freeing member services advocates to focus on the member while improving both efficiency and the consumer experience. Moreover, Google Workspace connects care teams in real time, creating efficiencies that free up time for direct patient care and innovation. Meanwhile, YouTube, which is used by 48% of health professionals to access clinical content and resources, supports clinicians in staying current and improving performance with accredited content, like video-based surgical training, to build skills and confidence without added training demands.

Supporting Empowered and Remote Care

Through Google's wearables, devices, and connected platforms, such as Fitbit and Pixel, we help organizations to personalize care and empower the people they serve to manage their health at home. Health Connect and Fitbit's Web API enable providers to securely access patient wearable data, with user consent, supporting proactive care for chronic conditions like diabetes and early intervention for conditions like atrial fibrillation. Studies show that Fitbit use can increase physical activity, reduce blood pressure, and potentially save U.S. healthcare payers up to \$8.5 million over five years. YouTube and Search also help organizations reach patients where they are—offering easy-to-understand wellness programs, educational content, and guidance on their health.

Accelerating Drug Discovery and Research

Biological research today relies on processing vast amounts of data and applying AI to detect complex patterns. Google's advanced AI and computational power, AlphaFold 3 and Isomorphic Labs are transforming how we understand biology, enabling breakthroughs in medical research and applying AI to real-world drug design challenges. Through collaborations with partners like Ginkgo Bioworks, where Google Cloud supports a large-scale protein model trained on over **2 billion protein sequences**, and the Institute of Women's Cancers (Institut Curie, PSL University and Inserm) based in France, which is using deep learning to study tumor heterogeneity and predict treatment resistance, we are helping to advance precision medicine and bring new therapies to patients faster.

Spotlight on Partnerships

Google's partnerships with Apollo Hospitals, Humana, HCA Healthcare and Servier demonstrate how cross-product solutions can empower health organizations and improve patient outcomes. These collaborations leverage a combination of Google Cloud, AI, Search, YouTube, and wearable technology, creating innovative solutions tailored to each partner's unique needs.



Google partnered with Apollo Hospitals to help address India's healthcare challenges, where over 2 million tuberculosis cases occur annually, breast cancer mortality rates are more than three times those of the U.S., and rural areas are critically underserved. The Apollo 24|7 platform, built entirely on **Google Cloud**, enables secure telemedicine and data management, helping Apollo reach more people with virtual care. With over 800 health Knowledge Panels in English and Hindi, **Google Search** provides trusted, easy-to-understand information on common conditions, while Fitbit is integrated into Apollo's preventive care programs, allowing people to keep track of heart health, activity, and sleep. Apollo is working to provide 3 million AI-powered screenings for tuberculosis, lung cancer, and breast cancer, giving millions better access to preventive care. Apollo is the device manufacturer, while Google provides the technology.

Humana

To improve member experience, reduce costs, and enhance health outcomes across the US, Humana teamed up with Google to bring advanced AI and data analytics to its services. Humana uses **Google Cloud's** secure platform to streamline care processes, making it easier for members to access affordable, personalized healthcare. **Google's AI-powered tools** have the potential to enable Humana's customer service to respond faster and help members find the right provider at the right time. Moreover, **Fitbit** is supporting Humana's member health strategies by helping people live longer and healthier lives with Fitbit devices and services. And with **Google Wallet**, Humana's digital health insurance card gives members quick, secure access to their insurance information, simplifying healthcare at every step.



As one of the leading health systems in the U.S., HCA Healthcare uses **Google Cloud's Healthcare API** and **BigQuery** to securely manage and analyze data across 180 facilities. **Google's generative AI** helps HCA Healthcare clinicians with real-time documentation and support to help efficiently answer complex medical questions, freeing up more time for patient care. For smoother workflows, Google's AI solutions are being scaled to support 21 million nurse handoffs a year and provide accurate medical summaries, helping HCA Healthcare's care teams stay focused on what matters most. This partnership helps HCA Healthcare advance clinical excellence, support its clinicians and their focus on patient care, and tackle workforce challenges.

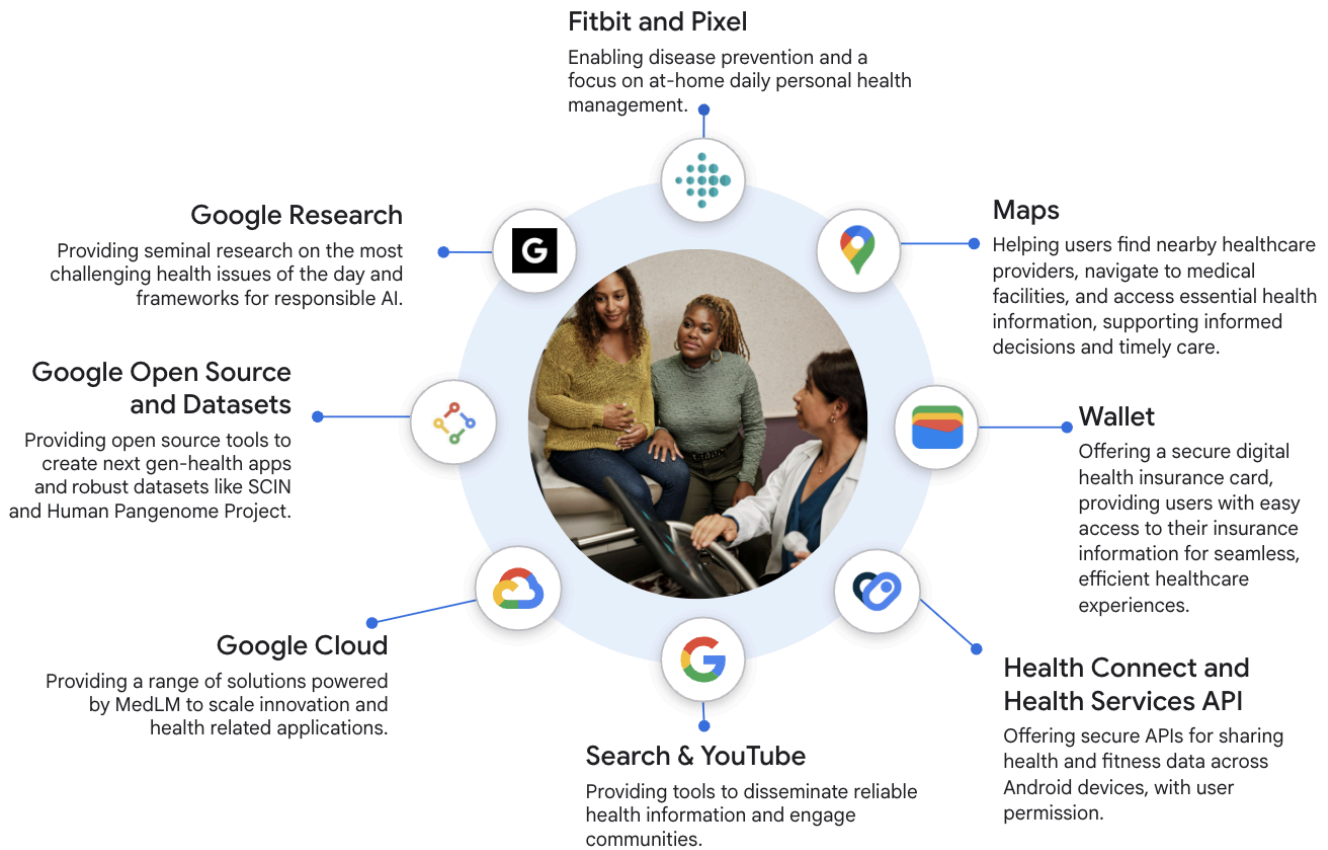


Servier is a global pharmaceutical company governed by a foundation, driven by therapeutic progress to serve patient needs. They are partnering with Google Cloud to use its AI and data capabilities for drug discovery, disease prevention and improved treatment adherence across the entire pharmaceutical value chain. These span various stages of drug development, from target identification to clinical trial design and pharmacovigilance. By leveraging Google Cloud's technology and expertise, Servier is unlocking the potential to transform the discovery and development of new drugs, ultimately leading to better patient outcomes.

Building a Thriving Health Ecosystem



Joëlle Barral,
Research & Engineering Senior Director, Google DeepMind



Around the world, millions of people still lack access to essential healthcare, and this gap often leads to preventable illness, lost lives, and missed opportunities for entire communities.

Bridging these gaps requires an approach that combines technology with deep, collaborative partnerships—working alongside governments, nonprofits, and local organizations to develop impactful, sustainable solutions. At Google, our goal is to foster a health ecosystem that brings this range of voices and expertise together, so that we can build a future where everyone has access to quality care.

Our partnerships are making a real difference. In India and Thailand, we are enabling millions of free eye screenings for diabetic retinopathy, helping to prevent blindness in communities where there are only a handful of eye doctors for every million people. In Zambia, we are working to improve tuberculosis detection using AI, aiming to reach more people in one of the countries hardest-hit by TB.

And through our ongoing commitment in Sub-Saharan Africa, we are developing multi-language tools for low-resource settings to support maternal and newborn health, helping local organizations bring critical health information to the communities that need it most. In the US, we are also teaming up with the Food is Medicine Institute at the Friedman School of Nutrition Science and Policy at Tufts University to develop data-driven, reliable nutrition guidance that empowers people to make healthier choices—recognizing that diet is foundational to long-term health.

But partnerships are not only about delivering immediate solutions—they are about building the foundation for future innovations. Our collaboration with startups through the Google for Startups Growth Academy and with research institutions on projects like the [SCIN dataset](#) and [Human Pangenome Reference Project](#) is helping ensure that our technology and research are representative of the global populations we serve. By making these datasets and tools available to the broader health ecosystem, we are creating resources that developers, researchers, and communities around the world can use to drive impactful change.

The future of healthcare is about empowering communities, supporting local solutions, and ensuring that the benefits of new technology reach everyone, everywhere. Together with our partners, we are building a healthcare ecosystem that's not only accessible but also resilient—ready to tackle the most pressing health challenges facing people around the world.

Supporting Startups and Empowering Developers

Google is proud to support **90% of generative AI unicorns** that are Google Cloud customers. In India, for example, our partnership with Eka Care enables **600 million people** to store and access digital health records through Google Wallet, supporting healthcare access. Through our Open Health Stack, developers around the world access essential tools to build next-generation healthcare apps. Health solutions developed using Open Health Stack have positively impacted over 5 million people, including across sub-Saharan Africa, India, and Southeast Asia. With Health Connect and Health Services APIs, we make it easier to connect data from multiple sources, apps, and devices, helping developers save time and deliver seamless health insights. For example, Peloton used Health Connect to give its users more options for sharing their data, boosting engagement by 10%.

Health Research For All

We are committed to advancing health research that represents everyone. Google provides open-source software libraries and datasets alongside published research in areas such as neuroscience, genomics, imaging, epidemiology. Our SCIN database, developed in collaboration with physicians at Stanford Medicine, provides over **10,000 images** of various skin tones and conditions to improve dermatology AI accuracy. Meanwhile, our work on the Human Pangenome Reference Project enhances genomic research, making health solutions more accurate for all populations. Likewise, our research on photoplethysmography signals —light signals which can be used from a smartphone to measure blood flow— includes an open-source library enabling researchers to collect this data to assess cardiovascular risk non-invasively, potentially reaching billions with accessible heart health insights. Fitbit has also become the most widely used consumer wearable in clinical research, powering 1,700 studies and supporting the majority of NIH-funded research that uses activity monitors, including NIH's "All of Us" program.

Addressing Global Health Challenges

Google's AI and product suite supports large-scale health initiatives, from early disease detection to climate resilience. In Washington State, our opioid trend analysis model uses AI to detect patterns in opioid use, improving intervention efforts. In 14 U.S. cities, Google's Heat Resilience feature helps policymakers understand how cool roofs and tree canopies can reduce extreme heat, making communities safer and more livable. Across India, Thailand, and Africa, our AI solutions assist in diagnosing tuberculosis, cancer, and retinopathy, impacting millions in low-resource settings.

Google's AI boosts maternal health program retention by 30% for an India-based non-profit

India: High maternal mortality

Google is enabling its partners Forus Health, AuroLab, and Percepta to provide 6M free screenings for diabetic retinopathy using our AI models in India & Thailand over the next 10 years to improve early detection and prevent blindness

India and Thailand: Severe shortage of eye doctors - with only eleven eye doctors for every one million people in India

Google is investing \$1.7B in LATAM to improve healthcare access and outcomes

LATAM: 30% of the population lacks access to health services

In Nigeria, we are using Google Maps to improve access to emergency obstetric care - access to which can reduce maternal deaths by 50%

Nigeria: Accounts for about 1/3rd of global maternal deaths

Google is partnering with Zambia's Center for Infectious Disease Research to improve tuberculosis detection with AI

Zambia: Among the top 30 countries globally with the highest tuberculosis rates

Google and Taiwan's health agency are using AI to revolutionizing detection of non-communicable diseases early

Taiwan: Non-communicable diseases account for almost 77% of deaths, and are rising

Google.org and Jacaranda Health have launched a Fellowship, supported by a \$1.4 million grant, to develop customizable multi-language LLMs for low-resourced communities in Sub-Saharan Africa, to improve maternal and newborn health

Sub-Saharan Africa: Almost all maternal deaths (99%) occur in developing countries. More than half of these deaths occur in sub-Saharan Africa

Committing to Safe, Responsible Technology

Google’s approach to health is rooted in a commitment to safety and responsible innovation for everyone. As we advance AI, Google’s [AI principles](#) ensure that all tools are safe and responsible, protecting user trust and prioritizing societal benefit.

Data Security and User Privacy

We are committed to your privacy. Privacy is built into every product, and our [privacy page](#) provides clear, accessible options for users to manage their data, including auto-delete controls and encrypted storage. Google [never sells](#) your personal information, and gives you controls over who has access. For enterprises, Google offers unmatched security, with protections like our [Shared Fate model](#) and Mandiant’s top-tier cybersecurity expertise, all designed to meet high standards like HIPAA and GDPR compliance. We go further with technologies like our differential privacy anonymization technology in Chrome and Google Maps, which ensures that personally identifiable information is protected, and the Google Cloud Healthcare De-Identification API, which removes personal details from medical images and FHIR data, making it safer for AI-driven diagnostics and research. One example of our broader efforts includes a [partnership](#) with the U.S. White House to strengthen cybersecurity for rural hospitals, enhancing protection where it’s needed most. For individuals, we provide some of the world’s [most advanced security](#), including encryption, proactive alerts to protect personal information, and safer sign-in options. Together, these practices make sure that sensitive data is protected at every step.

Building for Everyone, Everywhere

Building products for everyone, everywhere is central to Google’s approach to health technology. We work across research, product development, and partnerships to help address the social, economic, and environmental drivers of health. Resources like [AfrimedQA](#)—the first Pan-African medical multi-specialty, question-answering [dataset](#)—support responsible AI development for African healthcare. By working with partners ([AfrimedQA consortium](#), [PATH](#) and [the Gates foundation](#)), and openly sharing our work, we support responsible healthcare innovations that are reflective of all communities.

Leading in Responsible AI Practices

Google’s approach to AI is guided by our [AI principles](#), which ensure that all our models are safe, fair, and transparent. In healthcare, we have [published](#) our robust risk management and safety principles for medical generative AI in Nature Medicine, with a dedicated focus on clinical safety and optimization of health for everyone. Our Responsible AI Impact Lab and bias-detection [toolbox](#) support developers in evaluating models and addressing biases in large language models. Through novel evaluation methods, like the OSCE (Objective Structured Clinical Examination) model, we ensure our AI tools are rigorously tested, safe, and trustworthy for healthcare. Our partnerships further these goals, including our participation in the work of the US National Academy of Medicine on its Health Care AI Code of Conduct, and participation in the work of Standing Together, a consortium focused on improving data quality for AI.

Shaping the Future of Health Globally Through Innovation

Google is driving a new era of health and life sciences innovation, where technology empowers individuals, supports care teams and researchers, and transforms organizations.

Our work with wearables and AI is pioneering preventive and personalized care approaches, while our partnerships with organizations worldwide are helping to bring high-quality care to those who need it across the globe.

We are excited about the future of health and our role in shaping it. Looking ahead, we see emerging opportunities in health technology that hold tremendous potential to address some of today's most pressing challenges. Through our platforms, products, and partnerships, Google aims to make health information, tools, and services accessible to everyone, everywhere. By pushing the boundaries of technology responsibly, we are working toward a more connected, healthier world.
