# Google unveils AI advancements in healthcare at The Check Up event



At Google's annual event, The Check Up, the tech giant detailed six advancements in the healthcare sector leveraging artificial intelligence (AI). Google asserts that these innovations can enhance health outcomes globally, although the practical applications of such technology in medicine are often less apparent than in areas like email management or research.

One prominent initiative is the enhancement made to Google's AI Overviews in Search. This feature aims to provide users with credible and relevant health information efficiently. The company has introduced a "What people suggest" section, which curates insights from online discussions alongside expert sources. This feature is designed to help users find relatable experiences; however, Google included a disclaimer, advising that the provided information is "for informational purposes only" and users should consult medical professionals for advice.

In addition, Google has launched a Medical Records API via its Health Connect initiative. This API allows applications to read and write medical records, such as patients' allergies and medications, in a standardised format that can be shared with healthcare providers.

Furthermore, the recently announced Pixel Watch 3 will feature a Loss of Pulse Detection capability in the US from March end. This tool can automatically alert emergency services and notify nearby individuals if a user's heart stops beating.

On the research side, Google introduced an AI co-scientist designed to assist researchers with navigating vast scientific literature and generating innovative hypotheses. This tool is already in use at esteemed institutions like Imperial College London and Stanford University.

Google also unveiled TxGemma, a suite of models aimed at streamlining AI-driven drug discovery. This AI can analyse textual information and the structural properties of various therapeutic entities, assisting in assessing the safety and efficacy of new drugs.

Finally, Google demonstrated its support in developing an AI tool for the Princess Máxima Center in the Netherlands, which aims to expedite the identification of personalised cancer treatments by integrating de-identified patient data with extensive public medical data. The tool is said to offer summaries of treatment options and relevant literature, allowing physicians to concentrate more on direct patient care.

While the long-term impact of these initiatives remains to be seen, they signify a significant push towards the integration of AI in healthcare, as the technology continues to evolve and extend its reach into various facets of everyday life, including medical practice.

In a notable development concerning drug discovery, researchers at the Institute of Cancer Research, London, have introduced an innovative AI method that could significantly accelerate drug development timelines. This breakthrough could allow cancer patients to access new medicines in roughly half the time currently required, as well as speeding up treatments for other diseases.

This new "AI fingerprint" technology observes cellular responses to drugs by monitoring changes in cell shape. The researchers claim that this approach could streamline drug development processes, potentially reducing the time taken from roughly a decade to about four years. The pre-clinical phase may be shortened from three years down to three months, while entire trials could be completed up to six years sooner.

Chris Bakal, a professor at ICR, articulated the method's significance, stating: “3D cell shape is like a fingerprint of cellular state and function – it’s a previously untapped reservoir of information.” The AI was trained using approximately 100,000 3D images of melanoma cells, identifying the specific shape changes associated with different drug treatments with an impressive accuracy of 99.3%.

Dr Matt De Vries, chief technology officer of Sentinal4D, the spinout company established to advance this tool, added that it could assess the effectiveness of a drug and predict potential side effects across various diseases. The AI has also shown applicability to other cell types, indicating a broader range of opportunities for medical advancements.

Professor Kristian Helin, chief executive of ICR, highlighted the institute's commitment to presenting innovative drug options for cancer patients, particularly in light of challenges concerning cancer evolution and drug resistance. He expressed optimism that this cutting-edge technology will make a meaningful difference in developing new treatments for those affected by cancer.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://cloud.google.com/blog/topics/healthcare-life-sciences/google-cloud-gen-ai-healthcare-announcements> - This article discusses Google Cloud's advancements in healthcare AI, including tools like Vertex AI Search, which can enhance health outcomes by providing more efficient access to medical information. While it does not directly mention Google's AI Overviews in Search, it highlights the broader efforts in healthcare AI.
* <https://www.fiercehealthcare.com/ai-and-machine-learning/himss25-google-cloud-expands-ai-powered-search-capabilities-images-genetic> - This article details Google Cloud's expansion of AI-powered search capabilities in healthcare, including the integration of medical images and genetic information. It supports the broader context of AI advancements in healthcare.
* <https://cloud.google.com/blog/topics/healthcare-life-sciences/introducing-medlm-for-the-healthcare-industry> - This article introduces MedLM, a family of AI models fine-tuned for healthcare use cases, which can assist in tasks like summarizing medical conversations and searching medications. It highlights Google's focus on improving healthcare processes with AI.
* <https://www.google.com/search?q=Google+Health+Connect+API> - This search query can lead to information about Google's Health Connect initiative, which includes APIs for managing medical records. However, specific details about the Medical Records API might not be directly available from this link.
* <https://www.google.com/search?q=Pixel+Watch+3+Loss+of+Pulse+Detection> - This search query can provide information about the Pixel Watch 3's Loss of Pulse Detection feature, although specific details might require navigating through search results.
* <https://www.icr.ac.uk/news-media/news-archive/ai-fingerprint-technology-could-speed-up-drug-development> - This article from the Institute of Cancer Research discusses the AI fingerprint technology for drug development, which aligns with the breakthroughs mentioned in the article about accelerating drug discovery timelines.
* <https://www.techradar.com/computing/artificial-intelligence/google-reveals-6-ways-its-using-ai-to-improve-health-care-from-crowdsourced-advice-to-personalized-cancer-treatments> - Please view link - unable to able to access data