

WHO weighs up AI risks and benefits for health care

January 18 2024, by Robin MILLARD



Health care assistant robot 'Grace' at the ITU's AI for Good Global Summit in July 2023.

Generative artificial intelligence could transform health care through things like drug development and quicker diagnoses, but the World

Health Organization warned Thursday of the potential pitfalls in rushing to embrace AI.

The WHO has been examining the likely dangers and benefits posed by AI large multi-modal models (LMMs), which are relatively new and are quickly being adopted in health.

In generative AI, algorithms trained on data sets can be used to produce new content.

LMMs are a type of generative AI which can use multiple types of data input, including text, images and video, and generate outputs that are not limited to the type of data fed into the algorithm.

"Some say this mimics human thinking and behavior, and the way it engages in interactive problem-solving," WHO digital health and innovation director Alain Labrique told a press conference.

The WHO said LMMs were predicted to have wide use and application in health care, scientific research, public health and drug development.

The UN health agency outlined five broad areas where the technology could be applied.

These are: diagnosis, such as responding to patients' written queries; scientific research and drug development; medical and nursing education; clerical tasks; and patient-guided use, such as investigating symptoms.

Misuse, harm 'inevitable'

While this holds potential, WHO warned there were documented risks that LMMs could produce false, inaccurate, biased or incomplete

outcomes.

They might also be trained on poor quality data, or data containing biases relating to race, ethnicity, ancestry, sex, gender identity or age.

"As LMMs gain broader use in health care and medicine, errors, misuse and ultimately harm to individuals are inevitable," the WHO cautioned.

They could lead to "automation bias", where users blindly rely on the algorithm—even if they have good grounds to disagree.

On Thursday the WHO issued recommendations on the ethics and governance of LMMs, to help governments, tech firms and health care providers take advantage of the technology safely.

The WHO said it did not want to wait for roll-out in health care settings to discover the flaws and then try to fix them afterwards.

"Generative AI technologies have the potential to improve health care but only if those who develop, regulate and use these technologies identify and fully account for the associated risks," said WHO chief scientist Jeremy Farrar.

"We need transparent information and policies to manage the design, development and use of LMMs."

The WHO said liability rules were needed to "ensure that users harmed by an LMM are adequately compensated or have other forms of redress".

Tech giants' role

AI has been used in public health and clinical medicine for more than a

decade, for example to help in radiology and medical imaging.

The WHO stressed, however, that LMM formats presented "risks that societies, health systems and end-users may not yet be prepared to address fully".

This included concerns as to whether LMMs complied with existing regulation, including on data protection—and the fact they were often developed by tech giants, due to the significant resources required, and so could entrench these companies' dominance.

The guidance recommended that LMMs should be developed not just by scientists and engineers alone but with medical professionals and patients included.

Governments will have to ensure privacy when patients' sensitive health information is fed in as data—and give people the chance to opt out of involvement, said Rohit Malpani, of the WHO's research for health department.

The WHO warned that LMMs were vulnerable to cyber-security risks that could endanger patient information, or even the trustworthiness of health care provision.

The WHO said governments should assign a regulator to approve LMM use in health care, and there should be auditing and impact assessments.

The guidance "paves the way for a future where AI contributes to the well-being of humanity, adhering to the highest ethical standards", said Labrique.

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Citation: WHO weighs up AI risks and benefits for health care (2024, January 18) retrieved 9 May 2024 from <https://medicalxpress.com/news/2024-01-ai-benefits-health.html>

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