

Report highlights 'extraordinary era' of AI in health care

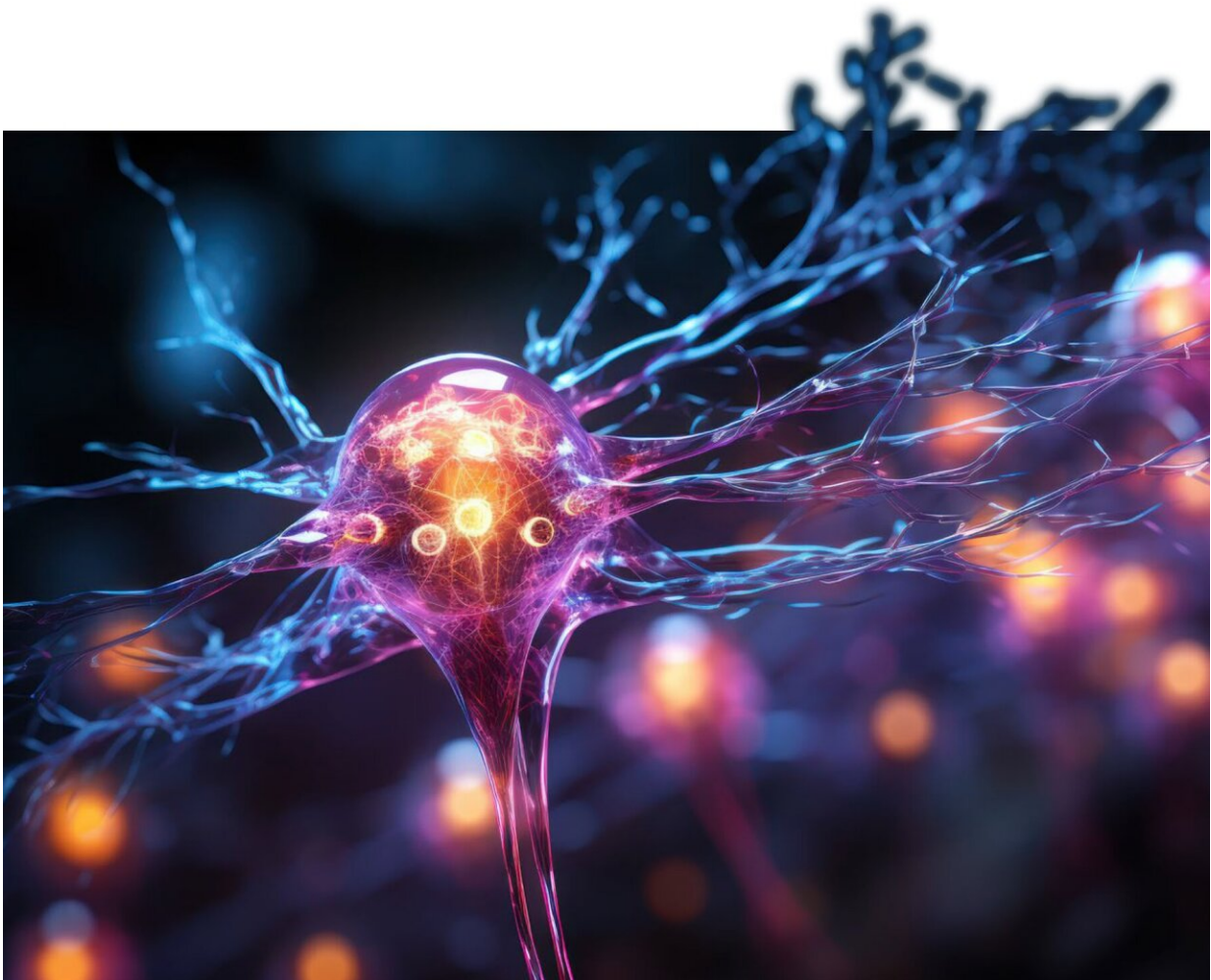
March 27 2024



Australia's National
Science Agency

AI trends for healthcare

March 2024



Credit: CSIRO

A surge in the amount of digital data in the health sector, together with increases in compute power and the availability of new artificial intelligence (AI) tools are leading to an explosion of AI being used in health care, according to a new report from CSIRO, Australia's national science agency.

The "AI Trends for Health care" [report](#) identifies the opportunities and challenges facing the continued and inevitable integration of AI in Australia's health care sector; from clinical decision support to administrative tasks.

Research Director of CSIRO's Australian e-Health Research Center (AEHRC), Dr. David Hansen said that the use of AI in health care is unique because the accuracy of models could mean the difference between life or death, or ongoing health or illness.

"A key difference between the use of AI in health care compared to other industries is the use of AI in decision making for prevention, diagnosis, monitoring and treatment," Dr. Hansen said.

"As we strive to create newer and better [digital tools](#) to harness the benefits of AI in health care, frameworks and ethical implementation along with established safety, quality and monitoring guidelines continue to be imperative."

The report also notes that the digitalization of Australia's hospital records system—or [electronic medical records](#) (EMRs)—is rapidly

expanding.

EMRs and other clinical systems are likely to provide the platform for implementing AI technologies—with uses in areas such as imaging, diagnosis, and treatment, as well as tasks such as reconciliation of reports or analysis of clinical data.

"There is more health and medical data out there than ever before, so data privacy and security are a growing challenge," Dr. Hansen said.

"AI can play an important role in allowing Australians to have full access to and control over their health data."

The report identifies that [medical research](#) will be a significant winner from the digitization of health care and the introduction of AI algorithms, as medical research institutions invest in infrastructure to harness the power of the data being generated.

"We're at the cusp of an extraordinary era in medicine. For the first time, machines can provide efficient administrative support for clinicians and education for patients, diagnose and predict disease and inform clinical decision making," Dr. Hansen said.

"If done with care, thought and safety, embedding AI in health care is an opportunity to drastically improve the work lives of medical professions and the health and well-being of consumers."

The [report](#) highlights other sectors—such as aged care or disability—as also being able to benefit substantially from the improved support and vigilance offered by AI.

"Our research shows the benefits of AI's capacity for the analysis of large data sets for [disease control](#) and for clinical support in high

demand such as medical imaging. All of this shows great promise for increasing digital health impact," Dr. Hansen said.

More information: AI Trends for Healthcare. aeihrc.csiro.au/new-report-says...when-it-comes-to-ai/

Provided by CSIRO

Citation: Report highlights 'extraordinary era' of AI in health care (2024, March 27) retrieved 28 April 2024 from <https://medicalxpress.com/news/2024-03-highlights-extraordinary-era-ai-health.html>

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