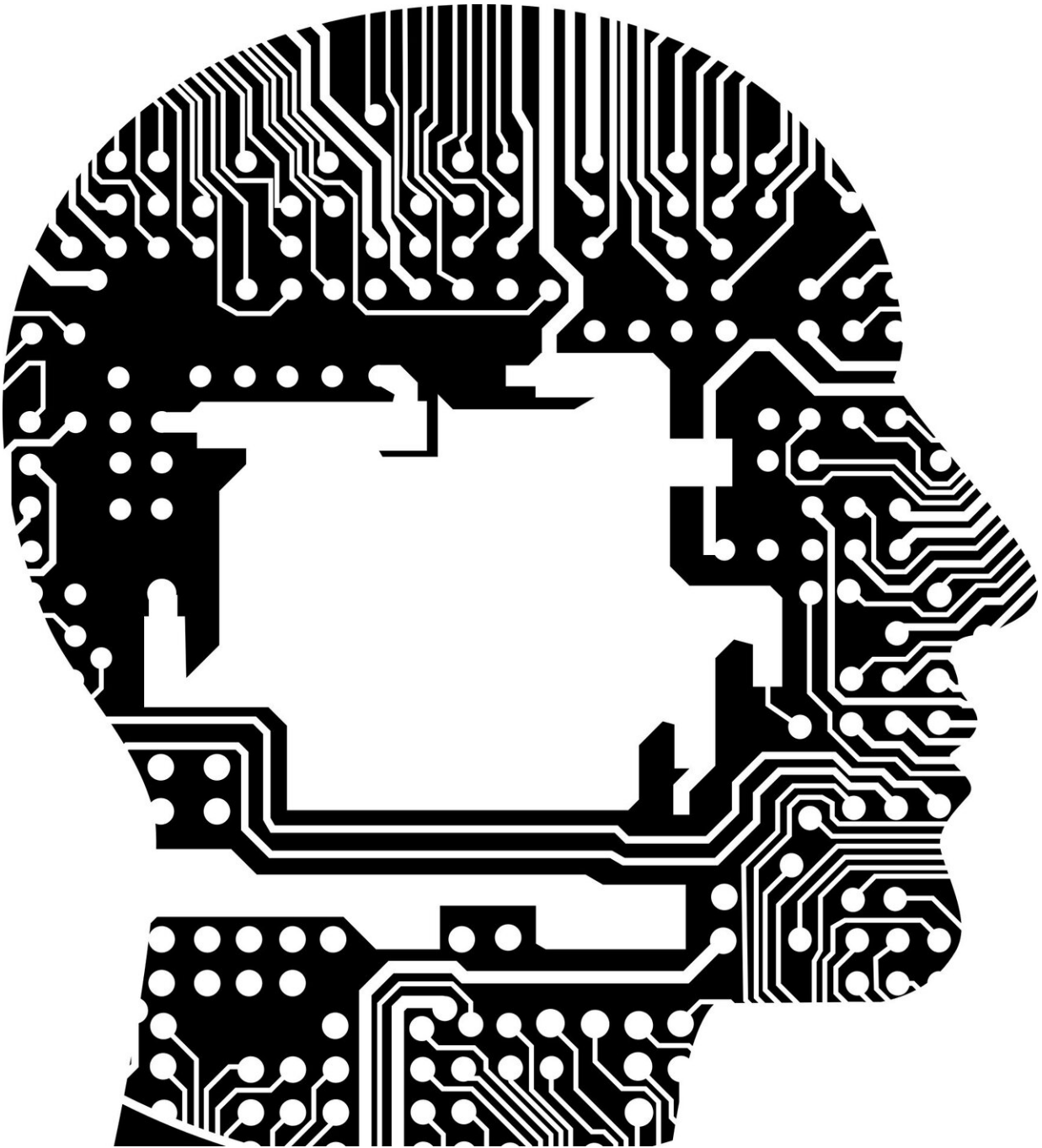# Better reporting of studies on artificial intelligence

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Credit: CC0 Public Domain

An increasing number of studies on artificial intelligence (AI) are

published in the dental and oral sciences but aspects of these studies suffer from a range of limitations. Standards towards reporting, like the recently published CONSORT-AI extension, can help to improve studies in this emerging field. Watch authors Falk Schwendicke and Joachim Krois of the Charité - Universitätsmedizin Berlin, Germany, discuss the *Journal of Dental Research* (JDR) article "Better Reporting of Studies on Artificial Intelligence: CONSORT-AI and Beyond," moderated by JDR Editor-in-Chief Nicholas Jakubovics, Newcastle University, England.

For AI studies in healthcare, only a limited number of randomized controlled trials are available, many studies are low quality and reporting is often insufficient to fully comprehend and possibly replicate these studies. Reporting standards such as the CONSORT (Consolidated Standards of Reporting Trials) statement, which provides evidence-based recommendations for reporting of randomized controlled trials, have been widely adopted by journals and have been shown to increase reporting quality. The new CONSORT-AI extension specifically addresses issues relating to the use of AI in clinical trials.

Randomized controlled trials are often used to inform decision-makers in health policy, regulatory, and clinical care, comprehensive and systematic reporting, allowing to gauge a trial's methodology, validity and bias as well as facilitating replication, is crucial. With the rapid expansion of AI as a tool to enhance clinical trials and other research studies, it is critical that steps are made to standardize reporting in this area.

"Given the emergence of studies on AI in dentistry, action is needed," said Jakubovics. "Standards like the recently published CONSORT-AI extension will improve reporting of AI studies in dentistry. The *Journal of Dental Research* encourages authors, reviewers and readers to adhere to these standards. A range of further aspects along the AI lifecycle should be considered when conceiving, conducting, reporting or

evaluating studies on AI in dentistry."

**More information:** F. Schwendicke et al, Better Reporting of Studies on Artificial Intelligence: CONSORT-AI and Beyond, *Journal of Dental Research* (2021). DOI: 10.1177/0022034521998337

Provided by International & American Associations for Dental Research

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