ChatGPT to Generate Highly Rated Radiology Reports

A recent study evaluated the ability of ChatGPT to produce highly rated reports for distal radial fractures.

Unfortunately, without a substantial increase in clinical imaging capacity, the growing demand for imaging services will lead to patients enduring longer-than-recommended waiting times, which inevitably leads to worse patient outcomes.

Author Wolfram A. Bosbach, MD, PhD, of the University Hospital of Bern, said, "Text drafting tools might well support work of radiologists in the future. They would allow a radiologist to focus time on the observation of image details and patient pathology. ChatGPT can be considered a substantial step forward towards that aim".

The artificial intelligence software was tested for its ability to draft appropriate radiology reports for nine cases of distal radius fractures, for five iterations each. The model was fine-tuned using human conversations and a reward model for reinforcement learning by ranking model outputs.

Four expert radiology reviewers participated using a score card test to evaluate the responses in the following categories: correctness of exam information and fracture findings, suitability of impression, grammar and style format.

An overall high appraisal of ChatGPT radiology report quality was obtained. The reviewers scores reflected the high competence of ChatGPT to generate radiology report drafts.

Criticism of reviewers focused on the length of the impression section; they would have preferred a more concise version. Lastly, ChatGPT revealed limitations in its ability to cope with technical and medical terminology.

However, ChatGPT is considered a substantial step forward towards supporting the work of radiologists in the future.

Source: Current Problems in Diagnostic Radiology

Image Credit: iStock

Published on : Thu, 27 Apr 2023