LETTER TO THE EDITOR



Response to comment regarding "Translating musculoskeletal radiology reports into patient-friendly summaries using ChatGPT-4"

Ian J. Kuckelman¹ · Karla Wetley¹ · Paul Hyunsoo Yi² · Andrew Bailey Ross¹

Received: 23 February 2024 / Accepted: 23 February 2024 © The Author(s), under exclusive licence to International Skeletal Society (ISS) 2024

Thank you for engaging with our work and providing a detailed commentary [1]. Your insight is valued as we collectively seek to improve our understanding of how to best apply this novel technology.

Firstly, we acknowledge the variability in report summaries when using identical prompts. This may manifest in unpredictable ways across different sessions. While our exploratory study did not aim to standardize the format, style, and content of report summaries, we agree that detailed instructions could minimize these variations. Updates to ChatGPT, implemented since our study and discussed below, may make this more easily achieved.

Secondly, we recognize that large language models (LLMs) like ChatGPT are rapidly evolving, which may render our study's findings specific to the time of research. Since our study's completion, ChatGPT has introduced features such as tailored instructions and the ability to create custom models, which could potentially refine the application of LLMs in translating radiology reports with enhanced consistency in format and content. Additionally, industry is moving rapidly towards single purpose implementations of LLMs for specific tasks. This may very well include facilitating patient

This reply refers to the comment available online at https://doi.org/10.1007/s00256-024-04633-3.

☐ Ian J. Kuckelman kuckelman@wisc.edu

> Karla Wetley kwetley@uwhealth.org

Paul Hyunsoo Yi pyi@som.umaryland.edu

Published online: 02 March 2024

Andrew Bailey Ross aross@uwhealth.org

- University of Wisconsin, School of Medicine & Public Health, 750 Highland Ave, Madison, WI 53705, USA
- University of Maryland School of Medicine, 655 W, Baltimore St S, Baltimore, MD 21201, USA

communication; although, it should not be assumed that these purpose-made models are superior or correct.

Lastly, you rightly highlight the challenge of achieving consensus on what defines complete, accurate, and effective patient communication in radiology reporting. It is imperative to involve all relevant stakeholders in establishing standardized best practices for conveying radiology findings to patients. Hartung et al.'s methodical approach to standardizing radiology reports exemplifies the kind of thoughtful strategies we should consider [2]. As LLMs become increasingly integrated into clinical practice, we support the creation of comprehensive guidelines and recommendations for their judicious implementation.

References

- Molligoda P, Arachchige AS. Translating musculoskeletal radiology reports into patient-friendly summaries using ChatGPT-4: additional considerations. Skeletal Radiol. 2024; https://doi.org/10.1007/s00256-024-04633-3
- Hartung M, Bickle I, Gaillard F, Kanne J. How to create a great radiology report. 2020;40:6, 1658-1670. https://doi.org/10.1148/ rg.2020200020

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

