PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Large language model-based information extraction from free-text radiology reports: a scoping review protocol
AUTHORS	Reichenpfader, Daniel; Müller, Henning; Denecke, Kerstin

VERSION 1 – REVIEW

REVIEWER	Cook, Tessa Sundaram Penn Medicine I do research in NLP and large language models and am working on a similar review.
REVIEW RETURNED	06-Aug-2023

GENERAL COMMENTS	I think this is very interesting work and I look forward to reading the outcome. The field is moving quickly - I encourage the authors to think carefully about how to maintain relevance of their results after they're published.

REVIEWER	zhang, Tianlin The University of Manchester, computer science
REVIEW RETURNED	11-Nov-2023

GENERAL COMMENTS	This study protocol introduces the methodology of a scoping literature review about IE from free-text radiology reports based on LLMs, which is very important for new researchers to know the development of LLMs on radiology reports information extraction. The overall structure is well organized, and the writing can be easily followed. The scoping review will close the knowledge gap present in the field of information extraction from radiology reports caused by the recent rapid technical process. There are some minor comments: 1. It is better to add some search keywords or queries. 2. For the RQ, if possible, the authors could analyze the main trend of LLMs on radiology reports IE. 3. It is better to add some references about deep learning-based models for this task.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Dr. Tessa Sundaram Cook, Penn Medicine
Comments to the Author:

I think this is very interesting work and I look forward to reading the outcome. The field is moving quickly - I encourage the authors to think carefully about how to maintain relevance of their results after they're published.

The scoping review to be conducted based on this protocol will inform the detailed planning of a PhD thesis. Within this thesis, future developments will be compared with the results of this scoping review.

Reviewer: 2
Dr. Tianlin zhang, The University of Manchester
Comments to the Author:
This study protocol introduces the methodology of a scoping literature review about IE from free-text radiology reports based on LLMs, which is very important for new researchers to know the development of LLMs on radiology reports information extraction. The overall structure is well organized, and the writing can be easily followed. The scoping review will close the knowledge gap present in the field of information extraction from radiology reports caused by the recent rapid technical process.

There are some minor comments:
1. It is better to add some search keywords or queries.

The primary search terms were added in Table 3. A detailed search query draft for one database was uploaded as a supplementary file.

2. For the RQ, if possible, the authors could analyze the main trend of LLMs on radiology reports IE.

Identification of the main trends of applying LLMs for information extraction of radiology reports was added as a scoping review objective on page four.

3. It is better to add some references about deep learning-based models for this task.

Three references were added on page four.

References

1. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews (2020 version). Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis. JBI; 2020. https://doi.org/10.46658/JBIMES-20-12

VERSION 2 – REVIEW

REVIEWER	zhang, Tianlin The University of Manchester, computer science
REVIEW RETURNED	16-Nov-2023

GENERAL COMMENTS	The authors have addressed my comments. Thank you very much.