




Peer Review: Validation of Chain-of-Thought prompt structuring to improve a language model's capability to extract new clinical concepts from clinical text messages

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Collaborators: 2 reviewers

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Accepted by 2 of 2 reviewers

Conflicts of Interest

The authors declare no conflicts of interest.

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Reviewer Summaries

Henk Harkema

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

no

What did the authors do a good job with?

Clear and concise descriptions of research problem and experimental approach.

How do you think this research will contribute to the field?

Limited contribution: Problem addressed in paper is very narrow in scope and outcomes are unsurprising.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

Provide error analysis for the medication concept.

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

Discuss in more detail how the findings in this paper influence the approach to the overall goal of building an ontology for the 4M framework.

Is there anything else you think the authors need to fix in their article to be fit for publication?

A lot of minor, moderate, and major things. See line by line comments/edits for reference.

Do you have any concerns about the ethics of this research?

None.

Based on your review, what should happen next?

This paper requires minor revisions but does not need further peer review

Would you like to be listed as a Collaborator on the final publication?

Yes, please list me as a Collaborator

Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

no.

How well did the authors respond to your comments?

4/5

What - if any - feedback do you feel the authors did not adequately respond to?

Based on your review, what should happen next?

This paper requires minor revisions but does not need further peer review

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator

2nd Revised Submission



Do you have any conflicts of interest that could bias your ability to provide an independent review?

no

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

Based on your review, what should happen next?

This paper is ready for publication

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator

Stephen Wu

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

What did the authors do a good job with?

The authors clearly described the setting and motivation of their work.

How do you think this research will contribute to the field?

This work is a minor data point confirming a known phenomenon, in which Chain-of-thought prompting tends to improve generative AI-based concept extraction. The work shows this to be applicable to text messages in geriatric clinical care.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

Innovation is lacking, in that CoT is a known phenomenon. The substance is also somewhat lacking. It is hard to say what can be improved, since a larger scope would essentially change the study.

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

A deeper dive into statistics of the data set is warranted. Besides gold standard data, it should include large-scale differences between CoT and non-CoT prompting, and error analysis.

For example, exploring the anomalous performance of medications would be beneficial.

Is there anything else you think the authors need to fix in their article to be fit for publication?

No.

Do you have any concerns about the ethics of this research?

No, they seem to have it addressed as part of their larger research project.

Based on your review, what should happen next?

This paper needs major revisions and another round of peer review

Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

no



How well did the authors respond to your comments?

4/5

What - if any - feedback do you feel the authors did not adequately respond to?

The significance test was added but not described, so it is not replicable.

Based on your review, what should happen next?

This paper requires minor revisions but does not need further peer review

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator

2nd Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

no

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

None

Based on your review, what should happen next?

This paper is ready for publication

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator