Peer-Review Report

Peer Review of "Finding Potential Adverse Events in the Unstructured Text of Electronic Health Care Records: Development of the Shakespeare Method"

Haiyan Yu, PhD

Center for Data and Decision Sciences, Chongqing University of Posts and Telecommunications, Chongqing, China

Related Articles:

Preprint (medRxiv): <u>https://www.medrxiv.org/content/10.1101/2021.01.05.21249239v1</u> Preprint (JMIR Preprints): <u>https://preprints.jmir.org/preprint/27017</u> Authors' Response to Peer-Review Reports: <u>https://med.jmirx.org/2021/3/e31568/</u> Published Article: <u>https://med.jmirx.org/2021/3/e27017/</u> (*JMIRx Med 2021;2(3):e31551*) doi: <u>10.2196/31551</u>

This is a peer-review report submitted for the paper "Finding Potential Adverse Events in the Unstructured Text of Electronic Health Care Records: Development of the Shakespeare Method"

Round 1 Review

General Comments

This paper [1] investigated the new and increasing rates of adverse events (AEs) in unstructured text in electronic health records (EHRs). The topic is interesting. The authors used the Shakespeare method to identify attributed and unattributed potential AEs with EHRs. This method would be a useful supplement to AE reporting and surveillance. Although I believe that the topic of the study is very relevant, I have some concerns related to the theoretical background of the study. Specific major and minor comments are listed below.

Specific Comments

Major Comments

1. What is the accuracy of the new method, the Shakespeare method, for identifying attributed and unattributed potential AEs? The previous study showed the process of this method in the literature [2]. This paper did not mention the accuracy of the new method.

Minor Comments

- 1. Too many keywords. I would suggest that the authors reduce some of the keywords.
- 2. In the "Conclusions" subsection, I would suggest the paragraphs be reorganized to improve them.

Conflicts of Interest

None declared.

References

- Bright RA, Dowdy K, Rankin SK, Blok SV, Palmer LAM, Bright SJ. Finding Potential Adverse Events in the Unstructured Text of Electronic Health Care Records: Development of the Shakespeare Method. JMIRx Med 2021 Aug 11;2(3):e27017 [FREE Full text] [doi: 10.2196/27017]
- Bright RA, Rankin SK, Dowdy K, Blok SV, Bright SJ, Palmer LAM. Potential Blood Transfusion Adverse Events Can be Found in Unstructured Text in Electronic Health Records using the Shakespeare Method. medRxiv Preprint published on January 6, 2021 [FREE Full text] [doi: 10.1101/2021.01.12.21249674]

Abbreviations

AE: adverse event **EHR:** electronic health record



JMIRx Med

Edited by E Meinert; this is a non-peer-reviewed article. Submitted 24.06.21; accepted 24.06.21; published 11.08.21. <u>Please cite as:</u> Yu H Peer Review of "Finding Potential Adverse Events in the Unstructured Text of Electronic Health Care Records: Development of the Shakespeare Method" JMIRx Med 2021;2(3):e31551 URL: https://med.jmirx.org/2021/3/e31551 doi: 10.2196/31551 PMID:

©Haiyan Yu. Originally published in JMIRx Med (https://med.jmirx.org), 11.08.2021. This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in JMIRx Med, is properly cited. The complete bibliographic information, a link to the original publication on https://med.jmirx.org/, as well as this copyright and license information must be included.

