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)	Efficacy and Safety of a Digital Check-in and Triage Kiosk in
	Emergency Departments: A Systematic Review Protocol
AUTHORS	Sehgal, Himani; Greenfield, Geva; Neves, Ana Luisa; Harmon,
	Mark; Majeed, Azeem; Hayhoe, Benedict

VERSION 1 – REVIEW

REVIEWER	Fekonja, Zvonka University of Maribor, Nursing
REVIEW RETURNED	07-Feb-2024

GENERAL COMMENTS	Dear Authors, Thank you for this interesting protocol and the opportunity to review it. Please see my suggestions below to strengthen the paper and add clarity for the reader.
	Provide an explicit statement of the question(s) the review will address regarding participants, interventions, comparators, and outcomes (PICO). Describe which method for narrative synthesis will be used.

Sabbe, Marc
KU Leuven, Emergency Medicine
14-Mar-2024

GENERAL COMMENTS Dear Authors, I have no comments or suggestions

REVIEWER	Tsou, Christina
	Curtin University, School of Public Health
REVIEW RETURNED	25-May-2024

GENERAL COMMENTS	Thank you for the opportunity to review the digital check-in and triage kiosk systematic review protocol. It is an area of telehealth research commonly termed 'tele-triage'. A Google search will find you the recent systematic reviews in this body of research. I suggest that you review these as background literature for your paper to identify the gap in research and tele-triage should probably be a search term for you.
	A further issue I have with the framing of the research question for the systematic review is 'efficacy'. I acknowledge this is not a clinical trial so please let me know if you have come across a different definition of efficacy to the one widely known to the scientific community. Below quote from a paper discussing effectiveness and efficacy trials:

'Efficacy can be defined as the performance of an intervention under ideal and controlled circumstances, whereas effectiveness refers to its performance under 'real-world' conditions.' (Singal et al 2014)
ED is certainly not a controlled condition as such emergency telehealth studies commonly look at effectiveness instead of efficacy. This may be why you have not been able to find the word efficacy attached to emergency medicine or teletriage in general.
Suppose there is a specific aspect of the digital check-in and triage kiosk you are looking at testing and want to perform a systematic review on this. In that case, you will need to specifically define this on the background of the already performed review.
The methodology of the review is fine. We just need to redefine and clarify why we need this review and what you are actually reviewing.
All the best.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1	
Provide an explicit statement of the question(s) the review will address regarding participants, interventions, comparators, and outcomes (PICO).	An explicit statement of the research question the review will address, structured according to the PICO framework, has been added to the "Introduction" subsection of the manuscript. The research question is as follows: <i>'In adult patients and healthcare staff within an emergency department setting, how does the implementation of digital triage and check-in self-service kiosks compare to traditional triage methods in terms of efficacy, safety, and equity?'</i>
Describe which method for narrative synthesis will be used.	Due to the heterogeneity of interventions and studies, conducting a meta-analysis will not be practical or possible. Consequently, a thematic analysis will be applied to the narrative synthesis of findings across studies.
Reviewer 2	
I have no comments or suggestions.	Thank you for your review and feedback.
Reviewer 3	
Thank you for the opportunity to review the digital check-in and triage kiosk systematic	Thank you for your insightful feedback. We have conducted a thorough review of recent

review protocol. It is an area of telehealth research commonly termed 'tele-triage'. A Google search will find you the recent systematic reviews in this body of research. I suggest that you review these as background literature for your paper to identify the gap in research and tele-triage should probably be a search term for you.	systematic reviews around tele-triage and have included 'tele-triage' in our search strategy to better identify gaps and ensure comprehensive coverage of existing literature. However, we have noted that most systematic reviews around tele-triage focus on the use of telephones for consultations and triage rather than kiosks. Since our study specifically examines digital check-in and triage kiosks, we have tailored our search strategy to reflect this. This distinction has been made clearer within the "Introduction" subsection of the manuscript.
A further issue I have with the framing of the research question for the systematic review is 'efficacy'. I acknowledge this is not a clinical trial so please let me know if you have come across a different definition of efficacy to the one widely known to the scientific community. Below quote from a paper discussing effectiveness and efficacy trials: 'Efficacy can be defined as the performance of an intervention under ideal and controlled circumstances, whereas effectiveness refers to its performance under 'real-world' conditions.' (Singal et al 2014)	We appreciate the clarification between 'efficacy' and 'effectiveness'. In the context of this systematic review, efficacy refers to the ability of digital kiosks to perform their designated functions, including patient check-in, triage, and patient categorisation, without compromising patient safety.
ED is certainly not a controlled condition as such emergency telehealth studies commonly look at effectiveness instead of efficacy. This may be why you have not been able to find the word efficacy attached to emergency medicine or tele-triage in general.	
Suppose there is a specific aspect of the digital check-in and triage kiosk you are looking at testing and want to perform a systematic review on this. In that case, you will need to specifically define this on the background of the already performed review. The methodology of the review is fine. We just need to redefine and clarify why we need this review and what you are actually reviewing.	

We believe that the revisions have significantly improved the manuscript, and we hope that these revisions are sufficient to make our manuscript suitable for publication in BMJ Open. Please let us know if anything further is required and thank you for considering our revised manuscript.

VERSION 2 – REVIEW

REVIEWER	Tsou, Christina
	Curtin University, School of Public Health

REVIEW RETURNED	29-Jun-2024
GENERAL COMMENTS	Thank you for addressing our comments which has significantly
	improve the readability of the manuscript.