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)	Guidance for virtual mental health services: a rapid review of guidelines and recommendations from high income countries
AUTHORS	Ekeleme, Ngozichukwuka; Yusuf, Abban; Kastner, Monika; Waite, Karen; Montesanti, SR; Atherton, Helen; Salvaggio, Ginetta; Langford, Lucie; Sediqzadah, Saadia; Ziegler, Carolyn; Do Amaral, Tamara; Melamed, Osnat; Selby, Peter; Kelly, Martina; Anderson, Elizabeth; O'Neill, Braden

VERSION 1 – REVIEW

REVIEWER	Ballard, Jaime University of Minnesota
REVIEW RETURNED	03-Oct-2023

| GENERAL COMMENTS | Thank you for the opportunity to review this rapid review of guidelines for virtual mental health sevicse in primary care.
The rapid response screening criteria and coding process are rigorous and thoroughly explained. The search process is described in clearly replicable detail, particularly via the appendices. The results are clearly displayed.
Overall, this article was informative and easy to read.

ABSTRACT & ARTICLE SUMMARY
The abstract is currently difficult to follow, and seems better suited to an intervention study than a rapid review. It could be improved by providing a more brief and targeted objective (without background or conclusions), and by listing data sources, inclusion criteria, and coding methodology rather than setting and interventions.

OBJECTIVE
The objective of the study is clearly to systematically identify recommendations for virtual mental health care. However, the discussion section suggests a further aim was to assess whether there were recommendations within each Quadruple Aim component. Is this correct? If so, please state it in the objectives.

METHODS
Please provide more detail about how you conducted member-checking, and how people with lived experience informed the research question and keywords. In the strengths section, you state, "Strengths include our engagement of individuals with lived experience of mental illness throughout the review process," however, only one person is identified in the methods (e.g.m "the abstracts were taken to the project advisory group including one person with |

lived experience") or in the author list.

DISCUSSION
Some comments in the discussion present results that are not included in the results section or methodology. For example, the authors state, "Overall, most of the articles reviewed were generally positive in tone while discussing the
510 future of virtual mental health care and services," but tone was not described as systematically coded. Similarly, the authors state that "almost all of our included manuscripts reporting standards for virtual mental health
493 care provided recommendations related to improving either population health or patient
494 experience, none of them reported patient inclusion or feedback within their work." At what point was this coded?

The discussion section currently does not present an overview of the recommendations or how they will inform Canadian policies.

EDITING
Additionally, some minor editing required (e.g., repeated word in "then conducted directed directed content analysis")

REVIEWER	Hayes, Karen Charles Sturt University, School of Allied Health & Exercise Science
REVIEW RETURNED	23-Nov-2023

GENERAL COMMENTS	This is a great body of work which will significantly support the continued roll out of virtual care with people who have mental health needs. There are opportunities to improve the manuscript to clarify outcomes and increase impact. Clearly stating the review question in your introduction will support the reader to understand the purpose of this review. The aim of any type of systematic review is to synthesise the results in a way that supports the understanding of the reader/clinician/policy maker. At present this article reads more like a list than a synthesis. The use of the Quadruple Aim framework to analyse and synthesise results is useful approach, and drawing a simple diagram such a matrix of how QA and the themes interlink would help to clarify synthesis for the reader. This is likely to increase readership of people with limited time. In terms of the themes themselves, the tenses of the terms tend to jump around and the meaning is not always immediately clear. Since these themes all relate to guidelines and are aiming to support future guideline development, consider writing the themes in an instructional voice by including verbs. For example, instead of 'Emergency contacts', a more instructional theme would be something like 'Obtain emergency contact details'; instead of 'Accessibility' consider 'Improve marginalised patient access to service'. Rewriting all your themes into guideline style instructions will likely support readers to use them when developing local guidelines and increase the impact of your paper. Your abstract is unlikely to attract the attention of potential readers. It is disjointed and does not outline the most exciting

	aspects of your study. The headings in the abstract outlined by BMJ Open do not all need to be included, just the most relevant ones. You need to re-write the abstract to better represent your paper and interest the reader in reading it. For example, 'Cost reduction aspect needs attention' is unclear and not all that interesting. However, your finding that the articles cite that virtual care will reduce costs, but don't explain how, is really interesting. The strengths and limitations of the study are unclear as to whether and how they are a strength or limitation - you need to explain them. Why is "Rapid review of virtual mental health service guidelines" a strength? Is it more that it this review will provide valuable information for policy and guideline development? Is it because you used a systematic process? Is it because the focus on QA is relevant to healthcare settings? Good luck with your review of the manuscript.

VERSION 1 – AUTHOR RESPONSE

Response to editor and reviewer comments for *Guidance for virtual mental health services: a rapid review of guidelines and recommendations from high income countries*

21 December 2023

Thank you for the opportunity to revise our manuscript. We believe it is now substantially improved as a result of these changes, guided by your helpful questions and suggestions.

Feedback	Response
- Reference 13 (for the overall project) is an incomplete reference. Also, please provide a brief summary of the overall project and how this first phase ties in with any subsequent steps.	We have updated and fixed the reference section, and we have added in the following description of the overall project at the start of 'Methods': "We chose this over a traditional systematic or scoping review because we wanted to quickly generate evidence that could be used in a policymaking process to develop national standards for virtual delivery of mental health services in Canadian primary care; this manuscript reports results of the first phase of that rapid-cycle project (13), which subsequently went on to conduct focus groups and interviews and extensive policy review to generate a list of standards."
- In the abstract's section on objectives, please refrain from including results.	Thanks, we have changed this.
- A rapid review would be expected to have a short time frame between running the searches and	Thank you for this comment. The timeline for the entire project was one year. We

presenting the findings. The rapid nature of your review could be questioned as your search is over a year old.	had hoped to conduct the rapid review and submit it for publication immediately after completion. Because of our limited timeline and resources we ended up needing to prioritize resources to the completion of the entire original project, instead of to publication of one phase of the project. We have described this in more detail in the limitation section as follows: "In addition, despite our best efforts, the timeline of this review took longer than expected in order to prioritize resources to the completion of the entire grant project instead of to one individual article.".
- Please justify your limitations of scope to high-income countries only.	We have now addressed this in the methods section, stating: "In addition, the search was limited to high income countries to maximize the generalizability to the Canadian healthcare setting."
Thank you for the opportunity to review this rapid review of guidelines for virtual mental health services in primary care. The rapid response screening criteria and coding process are rigorous and thoroughly explained. The search process is described in clearly replicable detail, particularly via the appendices. The results are clearly displayed.	Thank you very much for your feedback.
Overall, this article was informative and easy to read.	Thank you.
ABSTRACT & ARTICLE SUMMARY	
The abstract is currently difficult to follow, and seems better suited to an intervention study than a rapid review. It could be improved by providing a more brief and targeted objective (without background or conclusions), and by listing data sources, inclusion criteria, and coding methodology rather than setting and interventions.	Thank you. We have substantively rewritten the abstract.
OBJECTIVE	
The objective of the study is clearly to systematically identify recommendations for virtual mental health care. However, the discussion section suggests a further aim was to assess whether there were recommendations within each Quadruple Aim component. Is this correct? If so, please state it in the objectives.	This project was funded to generate evidence on how to align virtual care or mental health issues more closely in Canadian primary care settings with the Quadruple Aim. For that reason, we used the Quadruple Aim as a lens for data collection to link our findings to this existing quality framework.

We have made this more explicit in the abstract by stating, "This study rapidly reviewed existing recommendations for |

	virtual mental healthcare services through the Quadruple Aim framework to create a set of recommendations on virtual healthcare delivery to guide the development of Canadian policies on virtual mental healthcare. "
METHODS	
Please provide more detail about how you conducted member-checking, and how people with lived experience informed the research question and keywords. In the strengths section, you state, "Strengths include our engagement of individuals with lived experience of mental illness throughout the review process," however, only one person is identified in the methods (e.g.m "the abstracts were taken to the project advisory group including one person with lived experience") or in the author list.	Thank you. We revised the methods section to more clearly state the roles of people with lived experience in this study as follows: "Two people with lived experience of mental health concerns (EA and another team member who chose not to be identified) were members of the study team and involved in a series of team meeting where we developed and approved the research question and search keywords. As themes were being developed, findings were regularly reviewed with the study team, which at that point included one person with lived experience of mental health concerns (EA) who provided substantive input on the final themes."
DISCUSSION	
Some comments in the discussion present results that are not included in the results section or methodology. For example, the authors state, "Overall, most of the articles reviewed were generally positive in tone while discussing the future of virtual mental health care and services," but tone was not described as systematically coded. Similarly, the authors state that "almost all of our included manuscripts reporting standards for virtual mental health care provided recommendations related to improving either population health or patient experience, none of them reported patient inclusion or feedback within their work." At what point was this coded?	Thank you for this comment. We deleted the first point you noted, since it described our subjective impression of the literature and was not an extracted variable. For the second point, upon reviewing the manuscript and associated documents, we realised we did not include one column in the table that kept record of whether patients were involved in each study. We have now added that column in and corrected this statement to: "Surprisingly, although almost all of our included manuscripts reporting standards for virtual mental health care provided recommendations related to improving either population health or patient experience, only one article reported patient inclusion or feedback within their work (46)."

The discussion section currently does not present an overview of the recommendations or how they will inform Canadian policies.	Thank you for this feedback. We have added the following section to the discussion section: "Our work expands on other resources developed by provincial, territorial and federal healthcare associations on how to incorporate virtual care into mental healthcare-based settings and could be used to further guide policy development on virtual mental healthcare. For example, in parallel to this project, Ontario Health – a provincial healthcare association- developed ad released a guidance reference document on using virtual care for treating depression and anxiety (69). This document summarized literature reviews on virtual care and cognitive behavioural therapy as well as the needs of First Nations, Métis, Inuit and other Indigenous peoples. While there were numerous similarities to the themes we found, particularly those emphasizing the need for patient screening and privacy policies, there was little guidance regarding training healthcare providers to deliver virtual care, setting professional boundaries with patients or assessing the cost-effectiveness of virtual health services (69). In general, the guidance from provincial medical associations tended to also be somewhat vague (we reviewed these documents as part of our project, available at: https://pcmhstandards.ca/policy-overview/). Several guidance documents focused more on describing the potential usefulness of virtual healthcare for improving health equity (70,71). Others did not provide an outline of what is needed for effective delivery of virtual mental healthcare services (72,73)."
EDITING	
Additionally, some minor editing required (e.g., repeated word in "then conducted directed directed content analysis")	Thank you. This has been fixed.
Reviewer: 2	
This is a great body of work which will significantly support the continued roll out of virtual care with	Thank you very much for your feedback.

people who have mental health needs. There are opportunities to improve the manuscript to clarify outcomes and increase impact.	
Clearly stating the review question in your introduction will support the reader to understand the purpose of this review.	Thank you. We have inputted our research question into the last paragraph of the introduction.
The aim of any type of systematic review is to synthesise the results in a way that supports the understanding of the reader/clinician/policy maker. At present this article reads more like a list than a synthesis. The use of the Quadruple Aim framework to analyse and synthesise results is useful approach, and drawing a simple diagram such as a matrix of how QA and the themes interlink would help to clarify synthesis for the reader. This is likely to increase readership of people with limited time.	Thank you for your feedback. We have made a diagram to illustrate the links between the QA and the themes and labelled it Figure 2.
In terms of the themes themselves, the tenses of the terms tend to jump around and the meaning is not always immediately clear. Since these themes all relate to guidelines and are aiming to support future guideline development, consider writing the themes in an instructional voice by including verbs. For example, instead of 'Emergency contacts', a more instructional theme would be something like 'Obtain emergency contact details'; instead of 'Accessibility' consider 'Improve marginalised patient access to service'. Rewriting all your themes into guideline style instructions will likely support readers to use them when developing local guidelines and increase the impact of your paper.	Thank you for this advice. We have changed all of the themes so that they are written like guideline style instructions and agree that it is much improved with this modification.
Your abstract is unlikely to attract the attention of potential readers. It is disjointed and does not outline the most exciting aspects of your study. The headings in the abstract outlined by BMJ Open do not all need to be included, just the most relevant ones. You need to re-write the abstract to better represent your paper and interest the reader in reading it. For example, 'Cost reduction aspect needs attention' is unclear and not all that interesting. However, your finding that the articles cite that virtual care will reduce costs, but don't explain how, is really interesting.	Thank you for pointing this out. We have rewritten our abstract.
The strengths and limitations of the study are unclear as to whether and how they are a strength or limitation - you need to explain them. Why is "Rapid review of virtual mental health service guidelines" a strength? Is it more that it this review will provide valuable information for policy and guideline development? Is it because you used a systematic process? Is it	Thank you for bringing attention to these points. We have changed them to better reflect our manuscript. The new strengths and limitations are as follows: • "Extraction of data on virtual healthcare from wide range of

because the focus on QA is relevant to healthcare settings?	sources that were analyzed using the Quadruple Aim framework • Engagement of people with lived experience with mental illness in study design • Recommendations for patient/provider experience and population health • Omission of non-English resources and research discussing asynchronous care • 'Rapid' nature of review may have left some pertinent resources unexplored "
Good luck with your review of the manuscript.	Thank you.

VERSION 2 – REVIEW

REVIEWER	Hayes, Karen Charles Sturt University, School of Allied Health & Exercise Science
REVIEW RETURNED	11-Jan-2024

GENERAL COMMENTS	Thank you for the work that you have put into this resubmission. Your abstract, aim and results are much clearer and will be very useful to others who are developing guidelines for telehealth provision of mental health services.