PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	How can equitable video visit access be delivered in primary care? A qualitative study among rural primary care teams and patients
AUTHORS	Goldstein, Karen; Perry, Kathleen R.; Lewinski, Allison; Walsh, Conor; Shepherd-Banigan, Megan E.; Bosworth, HB; Weidenbacher, Hollis; Blalock, Dan; Zullig, Leah

VERSION 1 – REVIEW

REVIEWER	Monica Taylor University of Queensland, Centre for Online Health, Centre for Health Services Research
REVIEW RETURNED	30-Mar-2022

GENERAL COMMENTS	Thank you for the chance to review this manuscript. This qualitative study brings the much-needed voice of rural and underserved patients to the forefront of the discussion on appropriateness of video visits. Primary care provider views are also incorporated to develop a practical tool for case-by-case decision making on who would be appropriate for and benefit from a video appointment. I appreciated that the authors emphasized patient choice and avoiding implicit biased. Overall, the paper was well written and methods suitable. I provide a few suggestions below for improving the reporting of this research. Abstract Page 2, Line 18: I think this sentence is missing the word “how” (“on when and to employ”) Introduction I appreciated the use of many timely citations from the last 1-2 years for recent context. Page 4, Line 52: Perhaps use another word for access in one instance? Sounds a bit repetitive. Methods Setting: I am interested to know what kind of video platform VA uses for context. Is it bespoke? Off the shelf? Is it the same across all of VA or up to individual clinicians to choose type of video software they use? This could be relevant as later providing recommendations on how to incorporate video. How user-friendly a platform is will have direct implications on how successful the uptake by clinicians and patients is. Patients: Sampling is one part of the COREQ checklist I would like more details in your methods - Were all eligible patients sent an invitation? Or just a select sample size?

	Primary care teams: Why did you select these 4 VA primary care clinics? Results Page 8, Line 23: 4 clinics were approached, but only 3 participated – could you provide any information as to why the other did not take part? Similarly, do you have any details from patients who were approached and did not take part as to why they declined? Great to interview those with and without video visit experience. Algorithm diagram: "Has the patient's concern been identified as appropriate for video-based evaluation?": I worry that this would be answered "No" quite easily if the clinician can't think of any evidence off the top of their head. How are they meant to answer this question? Is there a way to make the question more specific? Is it from published literature? From colleagues? From a list of conditions they keep in their clinic with yes/no to TH? "Is patient interested in conducting visit by video?": Perhaps reword to "Is the patient open to conducting.." as if they are not familiar with video or have never had an experience, they may not have an "interest". However, they may still be open to trying. Is it worth having a part of the algorithm at the end for if you complete the video call and then decide in-person is still required to actually complete the assessment? Showing clinicians there is always still that option? Not necessarily saying there should be, just curious of your opinion. Discussion Good to acknowledge you did not identify a pattern about which patients would prefer video – I have also found you can't generalise. Have previous tools/algorithms for the same purpose been developed? What are the similarities or differences? What are they lacking that your focus on rural/underserved populations brings to the model? I am not sure of the entire background literature myself but a quick search brought up a few somewhat related documents: https://www.bettersafercare.vic.gov.au/clinical-guidance/telehealth/telehealth-decision-tool https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6543775/ Perhaps explain in more details what makes this algorithm more useful than a list of guidelines. Or if you're confident there hasn't been algorithms of this type developed maybe highlight that fact? Just wondering if readers will want to know what else similar exists or another reminder in the Discussion as to why others are inadequate. Limitations: Is the ratio of male:female participants and average age from your participants similar to breakdown of patients at the clinics? If not, could you provide any ideas why there might be a difference? If similar, maybe add a line in the first paragraph of the Results so readers are assured by this. Strengths: Did you reach "data saturation"? COREQ includes this as an item to be discussed as part of their checklist. If not, perhaps put in Limitations.

	References #17 – I think some key details have been formatted out of this reference. Please re-format so readers have the information. (E.g. update “O.o.E management, Editor”)

REVIEWER	Ji Eun Chang New York University, Public Health
REVIEW RETURNED	05-May-2022

GENERAL COMMENTS	Thank you for this opportunity to review your paper, “Pursuing Equitable Video Visit Access: A Clinical Algorithm Informed by Qualitative Data Collection from Clinical Teams and Patients.” I thought this was a well written, timely, and informative piece that could be of interest to practices looking to integrate a telemedicine workflow tool. I have two main suggestions for improvement. First, I would clarify how the qualitative results informed the development of the tool more clearly. The workflow makes sense, but it’s not clear how much of that is actually informed by the insights gleaned from the interviews and focus groups. You describe this is greater detail in table 2, but not in text. Second, I would also consider discussing the workflow for telephone (this may be beyond the scope of this paper). Given that the paper is framed in terms of access, having a remote option to receive care during Covid-19 is a critical part of maintain access to care. The workflow currently seems to present just a bifurcated option of in person vs. video modality, even as the authors acknowledge many low SES patients struggle with digital access. If the patient does not have video-capable equipment and/or high-speed internet, but would still prefer a remote visit, a phone option may be a good stop-gap in place of an in-person visit. I have a few minor points. Some of the results should be moved into methods. For example, I would clarify the number of interview and focus group participants in methods rather than describing them in the results. The abstract should also identify the number of staff/team members involved in the interview. Additionally, the sub-labels for the findings in the focus groups does not seem accurate. For example, in page 16, the findings presented under the section on access really seems to be about preferences (related to interpersonal communication) while the findings under “satisfaction” really seem more about the appropriateness of video. Finally, it would be helpful to know who is making the decisions in the workflow in figure 1 – for example, who is deciding whether the patient’s concern has been identified as appropriate?

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

1.1 Thank you for the chance to review this manuscript. This qualitative study brings the much-needed voice of rural and underserved patients to the forefront of the discussion on appropriateness of video visits. Primary care provider views are also incorporated to develop a practical tool for case-by-case decision making on who would be appropriate for and benefit from a video appointment. I appreciated that the authors emphasized patient choice and avoiding implicit biased. Overall, the paper was well written and methods suitable. I provide a few suggestions below for improving the reporting of this research.
Thank you.

1.2 Abstract
Page 2, Line 18: I think this sentence is missing the word “how” (“on when and to employ”)

This error has been corrected.

1.3 Introduction
I appreciated the use of many timely citations from the last 1-2 years for recent context.
Thank you.

1.4 Page 4, Line 52: Perhaps use another word for access in one instance? Sounds a bit repetitive.
We agree and have reworked this sentence.

1.5 Methods
Setting: I am interested to know what kind of video platform VA uses for context. Is it bespoke? Off the shelf? Is it the same across all of VA or up to individual clinicians to choose type of video software they use? This could be relevant as later providing recommendations on how to incorporate video. How user-friendly a platform is will have direct implications on how successful the uptake by clinicians and patients is.
We agree that this is an important point. We have added the following information to the setting section: "While there was some flexibility on use of approved commercially available video-conference platforms during the early pandemic, the VA primarily uses an internal program called VA Video Connect for delivery of video-based care."

1.6 Patients: Sampling is one part of the COREQ checklist I would like more details in your methods - Were all eligible patients sent an invitation? Or just a select sample size?
We have added more detail about our recruitment. This section now reads: "The research team contacted a subset of potential participants via mailed letter in batches of 25 with purposive sampling of Black veterans living in rural areas and then followed up by phone until the target recruitment number was obtained and thematic saturation was reached."

1.7 Primary care teams: Why did you select these 4 VA primary care clinics?
As noted below, we had an error in the original submission. We invited all 3 clinics from a single VA facility, not 4. The 3 primary care clinics engaged were all the primary care clinics affiliated with a nearby VA facility serving a large population of Black rural Veterans which would give us a sufficiently large potential recruitment pool. This detail has been added to the subsection titled "Primary Care Teams" and reads now as follows: "We invited all primary care team members from 3 VA primary care clinics serving a single facility in the Piedmont area of North Carolina which cares for a large population of Black, rural-dwelling population to participate in clinic specific focus groups."

1.8 Results
Page 8, Line 23: 4 clinics were approached, but only 3 participated – could you provide any information as to why the other did not take part? Similarly, do you have any details from patients who were approached and did not take part as to why they declined?
We appreciate the attention drawn to this issue. We realized that we made an error. There were only 3 clinics that were approached and all agreed to participate. However, due to scheduling, we conducted 4 focus groups (2 for a single clinic) to make sure all team members could participate if desired. We have corrected the language in the text.

1.9 Great to interview those with and without video visit experience.
Acknowledged

1.10 Algorithm diagram:
"Has the patient's concern been identified as appropriate for video-based evaluation?": I worry that this would be answered "No" quite easily if the clinician can't think of any evidence off the top of their head. How are they meant to answer this question? Is there a way to make the question more specific? Is it from published literature? From colleagues? From a list of conditions they keep in their clinic with yes/no to TH?
The reviewer raises a valid concern. Based on input from our qualitative data collection, we have created a list of conditions that are likely to be appropriate for video-based visits – though acknowledge that it is not exhaustive and would require some clinical judgment in a given patient situation. We have added this list as a side reference table. In addition, we have added to the future research areas section that expanding and refining this list based on prospectively collected data would be valuable.

1.11 "Is patient interested in conducting visit by video?": Perhaps reword to "Is the patient open to conducting.." as if they are not familiar with video or have never had an experience, they may not have an "interest". However, they may still be open to trying.
We like this wording suggestion and have changed the algorithm accordingly.

1.12 Is it worth having a part of the algorithm at the end for if you complete the video call and then decide in-person is still required to actually complete the assessment? Showing clinicians there is always still that option? Not necessarily saying there should be, just curious of your opinion.
We agree that an in-person visit is always an option after a virtual visit, though ideally infrequent such that virtual care becomes a triage visit or additional point of care. While we think this is out of the scope of this algorithm which is focused on the initial determination of visit modality, we agree that this is an important outcome for consideration in future studies/implementation (*ie*, the number of subsequent in-person visits). We have mentioned this in the discussion and noted in the results.

1.13 Discussion
Good to acknowledge you did not identify a pattern about which patients would prefer video – I have also found you can't generalise.
That is helpful feedback, thank you.

1.14 Have previous tools/algorithms for the same purpose been developed? What are the similarities or differences? What are they lacking that your focus on rural/underserved populations brings to the model? I am not sure of the entire background literature myself but a quick search brought up a few somewhat related documents:
https://urldefense.com/v3/__https://www.bettersafercare.vic.gov.au/clinical-guidance/telehealth/telehealth-decision-tool__;!!OToaGQ!5isF7moV-PNrpmipBF-f_Ki1IADle7SB3vmVj1nM30L2PliekdQT_qgEM_Xw_jxZCznS7A$
https://urldefense.com/v3/__https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6543775/__;!!OToaGQ!5isF7moV-PNrpmipBF-f_Ki1IADle7SB3vmVj1nM30L2PliekdQT_qgEM_Xw_jzj7K-NNQ$
Perhaps explain in more details what makes this algorithm more useful than a list of guidelines. Or if you're confident there hasn't been algorithms of this type developed maybe highlight that fact? Just wondering if readers will want to know what else similar exists or another reminder in the Discussion as to why others are inadequate.
We appreciate this point as there is definitely existing guidance such as that identified by the reviewer. In general, these examples tend to take a data-centric approach, relying on predictive analytics and based on data that are commonly found in EHR records. That is an important approach and has its place. Our approach is different in that it is more centered on the patient or the patient-provider dyad and takes into account their preferences and experiences with telehealth, which are not typically captured in EHR data. We have acknowledged this in the discussion.

1.15 Limitations: Is the ratio of male:female participants and average age from your participants similar to breakdown of patients at the clinics? If not, could you provide any ideas why there might be a difference? If similar, maybe add a line in the first paragraph of the Results so readers are assured by this.
Yes, these demographic characteristics are consistent with those of rural VA clinics in North Carolina. We have added the following sentence to the results: "Patient demographics are consistent with this patient population."

1.16 Strengths: Did you reach "data saturation"? COREQ includes this as an item to be discussed as part of their checklist. If not, perhaps put in Limitations.
We have added a reference to reaching thematic saturation in the sentence listed above in response to comment 1.6.

1.17 References
#17 – I think some key details have been formatted out of this reference. Please re-format so readers have the information. (E.g. update "O.o.E management, Editor")
We have corrected the references.

Reviewer 2

2.1 Thank you for this opportunity to review your paper, "Pursuing Equitable Video Visit Access: A Clinical Algorithm Informed by Qualitative Data Collection from Clinical Teams and Patients." I thought this was a well written, timely, and informative piece that could be of interest to practices looking to integrate a telemedicine workflow tool.
Thank you.

I have two main suggestions for improvement. First, I would clarify how the qualitative results informed the development of the tool more clearly. The workflow makes sense, but it's not clear how much of that is actually informed by the insights gleaned from the interviews and focus groups. You describe this is greater detail in table 2, but not in text.
We appreciate this reviewer's suggestion. We have added some additional detail in the text, though are somewhat limited by word count restrictions. If it is the preference of the editor, we could add additional language.

Second, I would also consider discussing the workflow for telephone (this may be beyond the scope of this paper). Given that the paper is framed in terms of access, having a remote option to receive care during Covid-19 is a critical part of maintain access to care. The workflow currently seems to present just a bifurcated option of in person vs. video modality, even as the authors acknowledge many low SES patients struggle with digital access. If the patient does not have video-capable equipment and/or high-speed internet, but would still prefer a remote visit, a phone option may be a good stop-gap in place of an in-person visit.
We agree with the reviewer that telephone visits offer an important option to improve access for patients without reliable broad-band resources. At the time we conducted this study, it was understood that phone visits were only to be a temporary reimbursable option due to COVID, so we focused on the decision point between video and face-to-face. We have highlighted this consideration in the discussion for future research. Specifically, we added the following to the limitations section: "We recognize that telephone-based care has been recognized as an important modality for maintaining access to care, especially for patients with limited access to broadband services. However, as our work focused on video versus face-to-face care based on what services were anticipated to remain reimbursable post-pandemic, we did not collect data about how and when phone should fit into visit modality decisions."

I have a few minor points. Some of the results should be moved into methods. For example, I would clarify the number of interviews and focus group participants in methods rather than describing them in the results.
We have moved this information to the methods.

The abstract should also identify the number of staff/team members involved in the interview.
This information was added to the abstract.

Additionally, the sub-labels for the findings in the focus groups does not seem accurate. For example, in page 16, the findings presented under the section on access really seems to be about preferences (related to interpersonal communication) while the findings under "satisfaction" really seem more about the appropriateness of video.
We agree that there is some subjectively in the placement of the findings and the sub-labels for the focus group findings. We have used these sub-labels as they correspond to the Fortney model for access to care which we used to guide this study including the focus group guide development and analysis.

Finally, it would be helpful to know who is making the decisions in the workflow in figure 1 – for example, who is deciding whether the patient's concern has been identified as appropriate?
We agree that identifying the clinical role responsible for managing the algorithm flow is critical for any given clinic to implement this process. As envisioned, we expect that multiple clinical roles could potentially complete this process or perhaps share in the process depending on the availability and capacity of a given clinical team. Thus, we have not prespecified who is making this determination. We have added this caveat to the results section as follows: " Note that the algorithm does not specify who is responsible for making this determination as we anticipate it could be managed by different clinical roles (*e.g.*, physician, advanced practice provider, nurse care manager) depending on a given clinic's resources and capacity."

VERSION 2 – REVIEW

REVIEWER	Monica Taylor University of Queensland, Centre for Online Health, Centre for Health Services Research
REVIEW RETURNED	29-Jun-2022

GENERAL COMMENTS	Thank you for addressing my comments. I am happy with all the responses but just wanted to check - you listed changes made to the "appendix_Process_Map", however, the same diagram from the original submission has been uploaded. Is there a new version with changes made/side reference table added? Just want to make sure you are submitting the latest document to the journal for publication. With this new document if necessary I will be happy to recommend the manuscript be accepted.

REVIEWER	Ji Eun Chang New York University, Public Health
REVIEW RETURNED	07-Jul-2022

GENERAL COMMENTS	Thank you for the opportunity to review this paper again. The authors have satisfactorily addressed all of the concerns raised in the initial review, and I believe this paper should be accepted for publication.

VERSION 2 – AUTHOR RESPONSE

Response to Reviewer 1's comments:

Thank you for addressing my comments. I am happy with all the responses but just wanted to check - you listed changes made to the "appendix_Process_Map", however, the same diagram from the original submission has been uploaded. Is there a new version with changes made/side reference table added? Just want to make sure you are submitting the latest document to the journal for publication. With this new document if necessary I will be happy to recommend the manuscript be accepted.

We apologize for any confusion. We did not change the "appendix_process_map". We revised "Figure 2_clinical support algorithm" to include the side table as previously requested. If there are additional revisions requested for the process map appendix, we are happy to consider those as well.

Response to Reviewer 2's comments:

Thank you for the opportunity to review this paper again. The authors have satisfactorily addressed all of the concerns raised in the initial review, and I believe this paper should be accepted for publication.

Thank you.