

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)	Evaluating the implementation of interdisciplinary patient-centred care intervention for people with multimorbidity in primary care: a qualitative study
AUTHORS	Ngangue, Patrice; Brown, Judith; Forgues, Catherine; Ag Ahmed, Mohamed Ali; Nguyen, Tu; Sasseville, Maxime; Loignon, Christine; Gallagher, Frances; Stewart, Moira; Fortin, Martin

VERSION 1 – REVIEW

REVIEWER	Gagliardi, Anna University Health Network, Toronto General Research Institute
REVIEW RETURNED	06-Feb-2021

GENERAL COMMENTS	<p>Many thanks for the opportunity to review this study. The authors are to be applauded for conducting a lot of work and analyzing a lot of interviews. They could better highlight the value of this work, and following are some suggestions for details to clarify so that readers better understand what they did and what the results mean.</p> <p>BACKGROUND Reads largely as one long continuous paragraph – break this up into distinct paragraphs that each address a unique concept germane to the overall topic</p> <p>Given the title, as part of the Background, I had anticipated reading about patient-/person-centred care in this context and what makes the intervention patient-centred; for example, is it somehow tailored to patient needs/preferences. If the intended targets of an intervention are patients, that does not make it patient-centred. Please elaborate or consider framing the intervention in a different manner.</p> <p>Not clear what is meant by “black box”. Ensuring an intervention has been implemented as intended pertains to implementation fidelity. Is that the main goal of this work? Or was the main goal to assess if participants thought the intervention and/or its impact was patient-centred. Please clarify. Based on the intervention questions and use of the CFIR framework, my impression is that the study was assessing implementation fidelity.</p> <p>Explicitly state the overall aim and objectives to achieve that aim.</p> <p>Suggest moving discussion of the CFIR to the Methods.</p> <p>METHODS</p>
-------------------------	--

	<p>Study design – elaborate on why a qualitative design was chosen, cite and justify the qualitative approach (i.e. descriptive), and specify compliance with qualitative research reporting criteria (COREQ). Put details about participants under Participants & Sampling</p> <p>Participants/Sampling What was the initial estimated target for number of participants and how was sample size ultimately established?</p> <p>Data Collection Specify the question or refer readers to an online-only supplemental file or Table</p> <p>Somewhere in Methods, justify use of the CFIR</p> <p>Not clear who the two groups are (and hence why two interview guides)</p> <p>Data Analysis Unclear what this means: “All nodes of transcribed audio-recorded interviews used in previous studies [8] were re-examined through secondary data analysis”</p> <p>Were themes compared across participants by role/profession?</p> <p>Table 1 is generally part of the Results</p> <p>RESULTS Participants According to COREQ, it is customary to mention the number invited to participant, the number that declined or did not respond, and then the ultimate number of participants</p> <p>The Results consist of a very long and dense list of themes and exemplar quotes. I suggest the authors summarize this data in one or more tables, and instead use the Results section for a deeper analysis of predominant determinants/CFIR components, relationship between determinants, differences between participants or participant groups, and more providing the reader with a sense of what it all means.</p> <p>DISCUSSION Can the authors more clearly specify who should use these findings and how? Is this relevant to only the participating sites? What might others learn from this work and how might they apply it?</p> <p>Specify how this study is unique from other research or interventions that aim to improve self-management? In relation to that, specify how or what this work contributes to the literature on interventions that support self-management.</p> <p>Limitation – I’m not sure that authors explained why only healthcare professionals and no patients/family were included in the study. Perhaps more explicitly state this in Research Design as well as Limitations</p>
--	--

REVIEWER	Rijken, Mieke
-----------------	---------------

	Netherlands Institute for Health Services Research, Utrecht, The Netherlands
REVIEW RETURNED	08-Feb-2021

GENERAL COMMENTS	<p>This paper reports on the evaluation of the implementation of a person-centred care intervention for people with multimorbidity in primary care, which is in itself highly relevant, and sharing the findings of such an evaluation is very important as it allows others to learn from these experiences. Unfortunately, in its current form the paper is not sufficiently informative for that purpose. I have a number of major concerns with this manuscript:</p> <ol style="list-style-type: none"> 1. Background: the literature here should be updated. For instance, lines 37-38 read: 'a recent systematic review [3]'. But this review was published in 2016; several more have been published on this topic after 2016. Also reference 2 is rather old; more (recent) refs can be added here (though they may not all underline that 'most people accessing primary care services have more than one CD'). 2. The intervention has not been described sufficiently; only the key components are mentioned. I can imagine that the authors feel they cannot describe it in much detail in the main text, but more information is absolutely needed to understand the information provided by care professionals and managers in the interviews. Perhaps the authors could add a box with a description of the intervention as a supplementary file. 3. To better understand the facilitators and barriers that impacted the implementation, readers will need more information about the context in which the intervention was implemented. For an international audience the health reform mentioned by the authors needs clarification. Also this information could be an additional box. 4. In the Methods section under Data analysis, the authors start with: All nodes of transcribed audio-recorded interviews used in previous studies [8] were re-examined through secondary data analysis.[9] The reference no. 8 is another article by the authors of the current manuscript, in which they describe the results of a qualitative study on the experiences with the same intervention of patients and carers, but also of health care professionals. My questions are: <ol style="list-style-type: none"> a. To what extent is there overlap between this manuscript and the previously published paper regarding the data and results of the 19 healthcare professionals interviewed? b. Assuming that the authors used the same transcripts of the interviews with the healthcare professionals as in the previous study, which parts of the stepwise analysis procedure described (lines 31-48) were conducted exclusively for the purpose of this paper and which were taken from the previous paper? (Thus, what is exactly the 'secondary data analysis' and what is repetition of a previously conducted data analysis?) 5. The authors use the CFIR constructs to structure their Results section. I am not very happy with this approach, as it now shows as if they tried to find at least some information from their interviews to fit each of the CFIR constructs. This results in very 'thin' descriptions under each of the headings, which sometimes even seem artificial and not really addressing the particular
-------------------------	--

	<p>construct of the CFIR (see for instance the information provided under Evidence strength and quality; to my opinion, this does not show that the interviewees were convinced of the evidence underpinning the intervention, but rather that they were already working according to several of the intervention principles, as such this information may be better placed under Compatibility (innovation fits existing workflows) or Complexity (disruptiveness). This is just an example, as I noticed similar weaknesses under Patients' needs and resources and a few other constructs. I suggest the authors to rewrite the Results section, abandoning the rigid structuring based on the CFIR model and connecting the parts that together inform about more comprehensive themes. NB: This is not to say that the CFIR cannot be used as a basis for developing the coding scheme, but to encourage the authors to identify higher-level themes that go beyond the separate CFIR constructs.</p> <p>6. Likewise the Discussion section could be improved by more reflection on the study results and less repetition of general information underpinning the validity of the CFIR.</p> <p>Some minor comments:</p> <ul style="list-style-type: none"> • In the report according to the COREQ criteria, under 16. Description of sample, family physicians are mentioned to be included in the sample. This is also mentioned in the Abstract and Methods section. However, table 1 shows that among the 19 interviewed HCPs there were no family physicians. I can imagine that family physicians participated in the intervention, but this should inform about participation in the qualitative study, i.e. the interviews. • Related to this: is it correct that all persons invited for an interview actually participated in an interview? This would then also mean that family physicians were not invited for an interview. See CREQ-criterion Non-participation. • Where you quote the interviewees: please do not write for example 'Nutritionist 10' (as this would suggest that there are at least ten nutritionists participating), but 'Participant 10, nutritionist'. Similar for all quotes. • Some basic editing of the English-language may be needed.
--	--

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Miss Anna Gagliardi, University Health Network

Comments to the Author:

Many thanks for the opportunity to review this study. The authors are to be applauded for conducting a lot of work and analyzing a lot of interviews. They could better highlight the value of this work and following are some suggestions for details to clarify so that readers better understand what they did and what the results mean.

Comments	Response
----------	----------

<p>BACKGROUND</p> <p>Reads largely as one long continuous paragraph – break this up into distinct paragraphs that each address a unique concept germane to the overall topic</p>	<p>We thank the reviewer for this comment. We have made the required changes (see the revised manuscript pages 2 and 3)</p>
<p>Given the title, as part of the Background, I had anticipated reading about patient-/person-centred care in this context and what makes the intervention patient-centred; for example, is it somehow tailored to patient needs/preferences. If the intended targets of intervention are patients, that does not make it patient-centred. Please elaborate or consider framing the intervention in a different manner.</p>	<p>We have added Information on patients needs, values and preferences in the background (please see highlight in the revised manuscript, page 3).</p>
<p>Not clear what is meant by "black box". Ensuring an intervention has been implemented as intended pertains to implementation fidelity. Is that the main goal of this work? Or was the main goal to assess if participants thought the intervention and/or its impact was patient-centred. Please clarify. Based on the intervention questions and use of the CFIR framework, my impression is that the study was assessing implementation fidelity. Explicitly state the overall aim and objectives to achieve that aim.</p>	<p>We thank the reviewer for this comment. The study is a process evaluation that aimed to identify barriers and facilitators in implementing the intervention. We have specified it and elaborate the aim and objectives (please see the highlight in the revised manuscript, page 3).</p>
<p>Suggest moving discussion of the CFIR to the Methods.</p>	<p>We thank the reviewer for this suggestion. We have moved the discussion of the CFIR to the Methods section (please see the highlight in the revised manuscript, pages 3 and 4).</p>
<p>METHODS</p> <p>Study design – elaborate on why a qualitative design was chosen, cite and justify the qualitative approach (i.e. descriptive), and specify compliance with qualitative research reporting criteria (COREQ). Put details about participants under Participants & Sampling</p>	<p>We have elaborated on why a qualitative design was chosen, justified the qualitative approach and added a reference. We have also elaborated about participants under Participants & Sampling (please see the highlight in the revised manuscript, page 4).</p>
<p>Participants/Sampling</p> <p>What was the initial estimated target for number of participants and how was sample size ultimately established?</p>	<p>We have added this Information (please see the highlight in the revised manuscript, page 4).</p>
<p>Data Collection</p> <p>Specify the question or refer readers to an online-only supplemental file or Table</p>	<p>We have added a table with questions (see Appendix S3 in supplementary file).</p>

Somewhere in Methods, justify use of the CFIR	We have justified the use of the CFIR (see highlight in the revised manuscript, page 4)
Not clear who the two groups are (and hence why two interview guides)	The two groups are different. Healthcare professionals (nurses, nutritionists, kinesiologists, and a respiratory therapist) take care of patients and managers (including two family physicians) are in charge of administrative affairs.
<p>Data Analysis</p> <p>Unclear what this means: "All nodes of transcribed audio-recorded interviews used in previous studies [8] were re-examined through secondary data analysis"</p>	We have revised this section by removing this phrase which was not clear (see the revised manuscript, page 5).
Were themes compared across participants by role/profession?	For each theme, we compared the perceptions across participants according to their role/profession (health care professionals/managers) when possible.
Table 1 is generally part of the Results	We agree with the reviewer and put the Information about Table 1 in the results (see the revised manuscript, page 6).
<p>RESULTS</p> <p>Participants</p> <p>According to COREQ, it is customary to mention the number invited to participant, the number that declined or did not respond, and then the ultimate number of participants</p>	We have added the following in the revised manuscript: "). Information about participants invited and the number that declined or did not respond are presented in the COREQ checklist (see Appendix S2, supplementary file)".
The Results consist of a very long and dense list of themes and exemplar quotes. I suggest the authors summarize this data in one or more tables, and instead use the Results section for a deeper analysis of predominant determinants/CFIR components, relationship between determinants, differences between participants or participant groups, and more providing the reader with a sense of what it all means.	We thank the reviewer for this suggestion. We have reorganized the results section and added a table (see Appendix S4, supplementary file).

<p>DISCUSSION</p> <p>Can the authors more clearly specify who should use these findings and how? Is this relevant to only the participating sites? What might others learn from this work and how might they apply it?</p>	<p>We thank the reviewer for this suggestion. We have added this Information (see highlight in the revised manuscript, page 13).</p>
<p>Specify how this study is unique from other research or interventions that aim to improve self-management? In relation to that, specify how or what this work contributes to the literature on interventions that support self-management.</p>	<p>We thank the reviewer for this suggestion. We have added this Information (see highlight in the revised manuscript, page 12).</p>
<p>Limitation – I'm not sure that authors explained why only healthcare professionals and no patients/family were included in the study. Perhaps more explicitly state this in Research Design as well as Limitations</p>	<p>We thank the reviewer for this suggestion. We have added this Information (see highlight in the revised manuscript, page 13).</p>

Reviewer: 2

**Dr. Mieke Rijken, Netherlands Institute for Health Services Research, Utrecht, The Netherlands,
University of Eastern Finland - Kuopio Campus**

Comments to the Author:

This paper reports on the evaluation of the implementation of a person-centred care intervention for people with multimorbidity in primary care, which is in itself highly relevant, and sharing the findings of such an evaluation is very important as it allows others to learn from these experiences. Unfortunately, in its current form the paper is not sufficiently informative for that purpose. I have a number of major concerns with this manuscript:

Comments	Response
<p>1. Background: the literature here should be updated. For instance, lines 37-38 read: 'a</p>	

<p>recent systematic review [3]'. But this review was published in 2016; several more have been published on this topic after 2016. Also reference 2 is rather old; more (recent) refs can be added here (though they may not all underline that 'most people accessing primary care services have more than one CD').</p>	<p>We agree with the reviewer. We have added more recent references (see highlight in the revised manuscript, pages 2 and 3).</p>
<p>2. The intervention has not been described sufficiently; only the key components are mentioned. I can imagine that the authors feel they cannot describe it in much detail in the main text, but more Information is absolutely needed to understand the Information provided by care professionals and managers in the interviews. Perhaps the authors could add a box with a description of the intervention as a supplementary file.</p>	<p>We have added the Template for Intervention Description and Replication (TIDieR) checklist in Appendix S1, supplementary file.</p>
<p>3. To better understand the facilitators and barriers that impacted the implementation, readers will need more Information about the context in which the intervention was implemented. For an international audience the health reform mentioned by the authors needs clarification. Also this Information could be an additional box.</p>	<p>We thank the reviewer for this suggestion. We have added this Information and two references for more details (see highlight in the revised manuscript, page 3).</p>
<p>4. In the Methods section under Data analysis, the authors start with: All nodes of transcribed audio-recorded interviews used in previous studies [8] were re-examined through secondary data analysis.[9] The reference no. 8 is another article by the authors of the current manuscript, in which they describe the results of a qualitative study on the experiences with the same intervention of patients and carers, but also of health care professionals. My questions are:</p> <p>a. To what extent is there overlap between this manuscript and the previously published paper regarding the data and results of the 19 healthcare professionals interviewed?</p>	<p>Our previous paper focused on participants' experience during the clinical intervention while this one is focused on implementation strategy</p>

<p>b. Assuming that the authors used the same transcripts of the interviews with the healthcare professionals as in the previous study, which parts of the stepwise analysis procedure described (lines 31-48) were conducted exclusively for the purpose of this paper and which were taken from the previous paper? (Thus, what is exactly the 'secondary data analysis' and what is repetition of a,previously conducted data analysis?</p>	<p>Our previous paper focused on participants' experience during the clinical intervention while this one is focused on implementation strategy. We have removed the 'secondary data analysis' and explained more about data source (see highlight in the revised manuscript, page 5) .</p>
<p>5. The authors use the CFIR constructs to structure their Results section. I am not very happy with this approach, as it now shows as if they tried to find at least some information from their interviews to fit each of the CFIR constructs. This results in very 'thin' descriptions under each of the headings, which sometimes even seem artificial and not really addressing the particular construct of the CFIR (see for instance the Information provided under Evidence strength and quality; to my opinion, this does not show that the interviewees were convinced of the evidence underpinning the intervention, but rather that they were already working according to several of the intervention principles, as such this Information may be better placed under Compatibility (innovation fits existing workflows) or Complexity (disruptiveness). This is just an example, as I noticed similar weaknesses under Patients' needs and resources and a few other constructs. I suggest the authors to rewrite the Results section, abandoning the rigid structuring based on the CFIR model and connecting the parts that together inform about more comprehensive themes. NB: This is not to say that the CFIR cannot be used as a basis for developing the coding scheme, but to encourage the authors to identify higher-level themes that go beyond the separate CFIR constructs.</p>	<p>We thank the reviewer for this comment. We have revised this section according to the reviewer's suggestions (see the revised manuscript, pages 6 to 11).</p>
<p>6. Likewise the Discussion section could be improved by more reflection on the study results and less repetition of general Information underpinning the validity of the CFIR.</p>	<p>We thank the reviewer for this comment. We have revised the discussion to focus on results (see the revised manuscript, pages 11 to 13).</p>

<p>Some minor comments:</p> <ul style="list-style-type: none"> • In the report according to the COREQ criteria, under 16. Description of sample, family physicians are mentioned to be included in the sample. This is also mentioned in the Abstract and Methods section. However, table 1 shows that among the 19 interviewed HCPs there were no family physicians. I can imagine that family physicians participated in the intervention, but this should inform about participation in the qualitative study, i.e. the interviews. 	<p>We thank the reviewer for this comment. Two family physicians are included in our participants. Both are Family medicine group managers. We have added this precision in the COREQ checklist (page 3, row 12) and in the manuscript (see highlight in the revised manuscript, page 5)</p>
<p>Related to this: is it correct that all persons invited for an interview actually participated in an interview? This would then also mean that family physicians were not invited for an interview. See COREQ-criterion Non-participation.</p>	<p>Recruitment was based on the data saturation. We invited two family physicians. They were FMG managers</p>
<ul style="list-style-type: none"> • Where you quote the interviewees: please do not write for example 'Nutritionist 10' (as this would suggest that there are at least ten nutritionists participating), but 'Participant 10, nutritionist'. Similar for all quotes. 	<p>We thank the reviewer for this comment. We have made the changes (see the revised manuscript).</p>
<ul style="list-style-type: none"> • Some basic editing of e may be needed 	<p>We thank the reviewer for this comment. The English-language editing was conducted.</p>