Reviewer’s report

Title: Development of an intervention to facilitate implementation and uptake of diabetic retinopathy screening,

Version: 0 Date: 17 Nov 2019

Reviewer: Stacey Guy

Reviewer's report:

Dear Authors,

My decision is to Accept with Minor Revisions. Thank you for providing a detailed account of the development of your implementation intervention, IDEAS. The supplemental material provides more context with which to understand the main body of text. The process figure and logic model aid further understanding of the study. I appreciate the focus given to including stakeholders or end-users throughout the development process, and hope you consider telling us "how" you did this in another manuscript (for example: dealing with power relations, ensuring representativeness, building relationships of trust). I look forward to reading about the evaluation trial.

My suggested revisions are related to clarity and implications for practitioners of implementation.

Please consider the following suggestions where you see fit:

1) I appreciate the distinction between the clinical intervention and the implementation intervention. Please consider making this distinction explicit in the abstract.

2) Please clarify the timeline of development. The interviews with stakeholders / end-users took place July 2014, January 2015, April 2016, February 2017 (lines 165 - 166). You state the intervention was developed 2018/ 2019. Please clarify if you see the interviews as part of the intervention development, and if so would the timeframe for development be 2014 - 2019?

2) There is both mention of stages of development and steps of development. Please consider choosing either steps (in the abstract, line 154, and then in subheadings) or stages (line 154), or explaining how the steps are rolled up into the stages.

3) Given general practitioners are a key influential stakeholder, line 440 "largely relies on GP endorsement", could you clarify the number of GP's included in stakeholder interviews?

4) Please clarify the sentence in line 155-156 which refers to using TiDieR and Proctor et al. Are these informing the development? Or does it refer to reporting the implementation intervention in this manuscript? Or both?
5) In reference to the qualitative interviews (lines 165 - 172), where were they conducted? By whom were they conducted? I see in the Acknowledgements Dr. Tracey conducted the patient interviews. It might be worth clarifying this for the reader in this section. Supplemental File 1 shows the interview guides were part of a published realist evaluation protocol. If this is the same study, could you make reference to this here? This might help the reader understand which paradigm, theorist, and type of data analysis framed the methodology in this section. Or, could you clarify whether the main analysis was TDF and a systematic review used for coding?

6) Please clarify if the group discussions were with the research team and general practitioner, or others (line 239).

7) The first time the title of the intervention is introduced is line 256. Please consider introducing the reader to the name closer to the beginning of the manuscript for flow.

8) Consider moving the system-level factors that need to be addressed to the Limitations section rather than the Implications section (lines 492 - 501).

Editorial:

1) Duplicate "along with" in line 144.

2) Consider removing square brackets in line 287 and using "such as getting time off work."

3) Already introduced the IDEAS acronym, so no need for line 351 in brackets.


Other points:

1) Rationale for targeting primary care provided (109 - 115).

2) Aim of paper stated (lines 135 - 136).

3) Identified the spectrum of co-creation by stating collaborating with some stakeholders/ end-users, and consulting with others (line 142-151).

4) Focused on individual level of behaviour change.

4) Linkages of BCTs to TDF to inform strategies.

5) Acknowledgement of what is out of scope. Considerations of those system level factors that are out of scope of this study and their implications for the evaluation pilot.

6) Representativeness of sample. Was gender and sex taken into account?
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