PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	DETECT – DEveloping and testing a model to identify preventive vision loss among older paTients in gEneral praCTice: Protocol for a complex intervention in Denmark
AUTHORS	Sandholdt, Catharina; Jønsson, Alexandra; Reventlow, Susanne; Bach-Holm, Daniella; Line, Kessel; Kolko, Miriam; Jacobsen, Marie; Mathiesen, Olivia; Waldorff, Frans

VERSION 1 – REVIEW

REVIEWER	Wu, Wenbin Beijing Hospital
REVIEW RETURNED	06-Feb-2023

GENERAL COMMENTS	Vision is one of the six most important intrinsic capacities for older adults which greatly affect the quality of their life. Timely detection of visual impairment is necessary, although the participatory approach and the method of graphic facilitation seem to be complex in practice. We believe the authors' project is meaningful at improving health care services and patient support in primary care. However, we have several concerns on the protocol. 1. Page 7, line 32-34. "The aim of Phase I is to explore the problem we are addressing. Visual impairment in the middle aged and elderly population consists of a variety of diagnoses with cataract, glaucoma ….". The author mentioned several common vision problems- cataract, glaucoma, AMD-. 1.1 Will all the common eye diseases be screened? Or only the several main ones be focused on this project? 1.2 Which guideline should they use to diagnose or to screen these problems? It is important to select methods suitable for GPs and for ophthalmologists, respectively. Please give more details on the issues.

	2. Page 9, line 12, please write more details on “Graphic facilitation” or I suggest that the authors show how it works in this protocol by a flowchart or graphics. 3. Page 11, line 11. “We will produce a variety of qualitative and quantitative data…..”. I suggest list the potential variables (qualitative and quantitative data) in a table, so readers will know more clearly about the project. 4. The primary outcome/aim of this project is to unfold the potentials and limitations of the GP’s role concerning visual impairment and vision loss. How to test the quality of authors’ results? Can the selected potentials or limitations of GP’s role be generalized to elderly with different kind of vision problems, since the author will include only 7-10 patients. Should the number of patients they included be discussed or detailed in this project? The author will develop an intervention-model for improved detection and support of visual impairment in general practice. They will test the feasibility in general practice. Isn’t it necessary to test the effects of the interventions on improving the living quality of the elderly with vision impairment?

REVIEWER	Beh, Anthony University of Nottingham Malaysia, Department of Applied Psychology
REVIEW RETURNED	14-Feb-2023

GENERAL COMMENTS	This article provides a detailed outline for a multi-phase protocol for developing an intervention model for patients with low vision. The objective and methodology for each phase are clearly described. Improving primary care services will go a long way in terms of treatment, rehabilitation, and support for those affected by visual impairment. It would be interesting to see how the intervention develops once this study is completed. No revisions are recommended.

VERSION 1 – AUTHOR RESPONSE

Manuscript ID: bmjopen-2022-069974 DETECT protocol	
Review comments	Author Response
1. Page 7, line 32-34. "*The aim of Phase I is to explore the problem we are addressing. Visual impairment in the middle aged and elderly population consists of a variety of diagnoses with cataract, glaucoma ….*". The author mentioned several common vision problems- cataract, glaucoma, AMD-. 1.1 Will all the common eye diseases be screened? Or only the several main ones be focused on this project? 1.2 Which guideline should they use to diagnose or to screen these problems? It is important to select methods suitable for GPs and for ophthalmologists, respectively. Please give more details on the issues.	We acknowledge that the guidelines to screen or diagnose are missing from this protocol. This is due to the aim of co-designing the intervention and therefore making these choices as part of the study. We have made changes in this specific paragraph and elaborated on the text relating to the three content-developing workshops in phase II to meet these comments. We hope it reads clearer now.
2. Page 9, line 12, please write more details on "Graphic facilitation" or I suggest that the authors show how it works in this protocol by a flowchart or graphics.	We have made some changes in this paragraph to better illustrate the method of graphic facilitation
3. Page 11, line 11. "*We will produce a variety of qualitative and quantitative data*…..". I suggest list the potential variables (qualitative and quantitative data) in a table, so readers will know more clearly about the project.	We have made significant changes in the paragraph: We have reduced length and produced a figure illustrating the analytical steps in the project to make it clearer
4. The primary outcome/aim of this project is to unfold the potentials and limitations of the GP's role concerning visual impairment and vision loss. How to test the quality of authors' results?	The project is designed through three iterative phases where Phase I+II is focused with developing the intervention and Phase III on testing. We have elaborated on phase III in the text to make it clearer how we aim to test the quality and effects of the intervention. However, the specific effect measurements and tests will be developed in Phase II in collaboration with relevant health professionals and are thus difficult to specify further in this protocol. We have made a change in workshop 3 in Phase II to put a greater focus on the specific element of formulating primary outcome and effect

	measurement. We have now written this explicit in the text.
Can the selected potentials or limitations of GP's role be generalized to elderly with different kind of vision problems, since the author will include only 7-10 patients. Should the number of patients they included be discussed or detailed in this project?	The 7-10 patients are included in the development phase. We will test the effects of the intervention in a cohort study and here we will better be able to investigate whether the selected potentials or limitations of GP's role can be generalized to elderly with different kind of vision problems. We have tried to make this distinction clearer in the text by reducing the scope of phase I and elaborating on the activities in phase III. Furthermore, we have removed the specific numbers from the main text and instead made them clear in Figure 1 to have all numbers in one place.
The author will develop an intervention-model for improved detection and support of visual impairment in general practice. They will test the feasibility in general practice. Isn't it necessary to test the effects of the interventions on improving the living quality of the elderly with vision impairment?	We thank the reviewer for this question. It is indeed relevant to address if+how the intervention can improve the living quality of the elderly with vision impairment. We hope to investigate this in a later project with this specific research question. We estimate it out-of-scope for this specific protocol
- Please clarify whether ethics approval has been obtained from an ethics committee in the Ethics and Dissemination section of your Abstract.	This has been added in the abstract. Details on ethics approval has further been elaborated in the Ethics and Dissemination section

Further revisions:

- We have reduced word count where relevant
- Information on specific numbers of patients and health professionals included in Phase I+II have been merged in Figure 1 and thus removed from the main text. This to make the text more uniform and readable
- The aim of workshop 3 have been altered from the first submission to provide a bigger focus in the clinical relevance of the intervention.

VERSION 2 – REVIEW

REVIEWER	Wu, Wenbin Beijing Hospital
REVIEW RETURNED	05-May-2023

GENERAL COMMENTS	I have no additional comments to the author. I wish they will finish project successfully.