PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Multi-stakeholder perspectives of locally commissioned enhanced optometric services.
AUTHORS	Baker, Helen; Harper, Robert; Edgar, David; Lawrenson, John

VERSION 1 - REVIEW

REVIEWER	Dr Samuel Bert Boadi-Kusi Department of Optometry School of Allied Health Sciences University of Cape Coast Ghana
REVIEW RETURNED	14-Apr-2016

GENERAL COMMENTS	This is a very useful paper and I commend the authors for the good work. There are few comments which I have attached in the main document. Please address them and I believe we will be good to go. 1. Please comment on how the issue of one hospital being better equipped than the other will could be addressed in future studies. 2. Please comment on how sustainable the program and training of participants are in the discussion and any lessons. 3. Standards could fall should the scheme be expanded. What do you suggest could remedy this? 4. None of the optometrists had specialist prescribing qualifications... Will you recommend a training in therapeutics ? The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.

REVIEWER	Andrew White Westmead Hospital, Westmead Australia
REVIEW RETURNED	12-May-2016

GENERAL COMMENTS	The paper addresses an increasing issue of optometry led care for what has traditionally been the domain of ophthalmologists. It is the way of the world that this is changing so some focus group/qualatative data is timely. The paper is structured and well written with the typical output one might expect of focus groups. The issue I have with the paper is that while two schemes are mentioned, the reader has no idea of how they work in practice. Are they hospital or community based for example. spending some time, a paragraph or two and perhaps a flow diagram of the patient pathway would greatly enhance and clarify the paper.

REVIEWER	Dr Jyoti Khadka Flinders University, South Australia, Australia
REVIEW RETURNED	02-Jun-2016

GENERAL COMMENTS	This is a well-designed and executed qualitative study which utilized a mixed method and included multi-stakeholder perspectives of community-based enhanced optometric services in two major cities in the UK. The in-depth extent of the results which had been unravelled simply could not be obtained from a quantitative study, kudos to the authors. I have got a few issues for the authors to address 1) Methods: Why were structured interviews used over non-structured and semi-structured interviews? Structured interviews and probes may introduce investigators induced bias. How was this bias examined and addressed? 2) Methods: How was analysis carried out? There is a few lines in the first paragraph of the results but it is not enough. Looking at the enormity of the data collected, it is important to detail the analysis procedure which is important to demonstrate validity of a qualitative study and its results. 3) Data/thematic saturation: Obtaining data saturation is critical in a qualitative study. How was this ensured? Basically among practitioners' and commissioners where sample sizes do not seem adequate. Similarly, only 2 focus groups were conducted with optometrists. Was thematic saturation obtained? Very important for the validity of the results presented. 4) A clinical-demographic table of all the participants will be useful to put their viewpoints in perspectives.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Reviewer Name: Dr Samuel Bert Boadi-Kusi

Institution and Country: Department of Optometry, School of Allied Health Sciences, University of Cape Coast, Ghana

Comment 1.1. This is a very useful paper and I commend the authors for the good work.

Response: Thank you.

Comment 1.2.. Please comment on how the issue of one hospital being better equipped than the other will could be addressed in future studies.

Response: The following section has been added into the discussion:

'This study highlights the importance of the HES being fully committed to enhanced optometric services and demonstrates the value of good inter-professional communication. In MECS one hospital provided a more streamlined referral pathway, which led to optometrists opting to refer more urgent cases to this hospital. It is likely that referral pathways could be improved through an electronic referral system but this would ideally require community optometrists to be connected to the N3

network, which provides secure broadband connectivity across the NHS.'

Comment 1.3. Please comment on how sustainable the program and training of participants are in the discussion and any lessons.

Response: We hope we are interpreting this comment correctly in the responses that follow:

1. Sustainability. We have commented on the sustainability of the program in the section titled "Future prospects" on page 15. However, we have changed the title of this section to "Sustainability and future expansion" to better reflect the focus of this section, which reads:

'Both schemes have received continued funding and commissioners recognized scope for expansion within both schemes, although the nature of expansion was to be discussed and no commitments were made. Further evaluation of MECS was seen as vital before committing to any form of expansion.'
"We have two years funding which is as good as it gets. If it continues to deliver then I can see it getting mainstream funding" MECS
"We are pleased with the service. While other schemes are being disbanded this one is expanding." GRRS.

2. Training. We have addressed the training issue and lessons regarding training that can be learned from the schemes in the following paragraphs of our Discussion:
'It was acknowledged by community optometrists and HES that training was vital in producing and maintaining a high standard of care. It was widely agreed that some form of ongoing training in both schemes was required. In the current systems both hospital ophthalmologists and optometrists maintained an open-to-contact policy; however, in reality community optometrists, although they knew this to be the case, felt awkward approaching and accessing the help on offer. A more structured and planned method of training could benefit all involved. How training is planned and funded would need discussion. There was an undercurrent that commissioners should recognize this requirement and provide funding for it.'

'Training of GPs and their staff was seen as lacking by optometrists in MECS, with knowledge of referral procedures and the correct patient pathways the main areas to address. GPs in MECS recognized this lack of knowledge and were open to further training and guidance, an area often overlooked when implementing ESS, possibly because GPs are notoriously difficult to engage due to heavy clinic loads and over-stretched resources.'

Comment 1.4. Standards could fall should the scheme be expanded. What do you suggest could remedy this?

Response: The following section has been added to the Discussion.

'If either scheme were to be expanded, careful consideration would need to be taken to ensure quality of care is maintained. Structured training, and clear patient pathways would need to be put in place.'

Comment 1.5. None of the optometrists had specialist prescribing qualifications... Will you recommend a training in therapeutics?

Response: It is true that none of the participating optometrists had specialist prescribing qualifications. However, we would not recommend training in independent prescribing as we do not feel that it would add significant value to the scheme. Management of minor eye conditions requires relatively few therapeutic agents and the majority of these were available to MECS optometrists by virtue of

Medicines Act exemption legislation. We have added a sentence to our Discussion regarding a future development which could reduce the number of patients that are referred back to the GP for prescribing:

In future, this problem could potentially be addressed via the use of Patient Group Directions (PGDs), which provide a legal framework that allows particular registered healthcare professionals (including optometrists) to supply and/or administer a specified medicine(s) to a pre-defined group of patients, without them having to see a doctor.

Reviewer: 2

Reviewer Name: Andrew White

Institution and Country: Westmead Hospital, Westmead Australia.

Comment 2.1.The paper addresses an increasing issue of optometry led care for what has traditionally been the domain of ophthalmologists. It is the way of the world that this is changing so some focus group/qualatative data is timely. The paper is structured and well written with the typical output one might expect of focus groups.

Response: Thank you.

Comment 2.2. The issue I have with the paper is that while two schemes are mentioned, the reader has no idea of how they work in practice. Are they hospital or community based for example. spending some time, a paragraph or two and perhaps a flow diagram of the patient pathway would greatly enhance and clarify the paper.

Response: We have added a paragraph and flow diagram for each scheme to explain the patient pathways.

For MECS the paragraph reads:
'Under the MECS, patients presenting to their general practitioner (GP) with an eye problem and satisfying certain inclusion criteria are referred to specially trained community optometrists. The scheme also allows patients to access MECS optometrists directly. Patients were examined by optometrists within 48 hours and could be either managed within community optometric practice or referred directly to the HES. Patients could also be referred to their GP for systemic investigations. See figure 1.

For GRRS the paragraph reads:
'In the GRRS, patients with suspected glaucoma or ocular hypertension following a standard GOS sight test are referred to accredited community optometrists. These accredited optometrists work to an agreed set of referral criteria and, depending on whether or not patients meet these criteria, either refer the patients to the HES or discharge them. See figure 2.'

Reviewer: 3

Reviewer Name: Dr Jyoti Khadka

Institution and Country: Flinders University, South Australia, Australia

Comment 3.1. This is a well-designed and executed qualitative study which utilized a mixed method

and included multi-stakeholder perspectives of community-based enhanced optometric services in two major cities in the UK. The in-depth extent of the results which had been unravelled simply could not be obtained from a quantitative study, kudos to the authors. I have got a few issues for the authors to address

Response: Thank you.

Comment 3.2. Methods: Why were structured interviews used over non-structured and semi-structured interviews? Structured interviews and probes may introduce investigators induced bias. How was this bias examined and addressed?

Response: Semi-structured interviews were used for both health professionals and commissioners. This was a typing error in the text that has now been rectified. The questionnaires followed the same format for each interview, using mainly open-ended questions. Probes were used where appropriate to maximise the input of each interviewee.

Comment 3.3. Methods: How was analysis carried out? There is a few lines in the first paragraph of the results but it is not enough. Looking at the enormity of the data collected, it is important to detail the analysis procedure which is important to demonstrate validity of a qualitative study and its results.

Response: We have now added the following paragraph and a table at the end of the Methods section to detail the analysis procedure.

Analysis
Focus groups were audio recorded (with permission from the participants). The dialogue from the recordings was later transcribed and reviewed by the investigators. Data from interviews and Focus Groups were analysed using framework analysis7 as displayed in table 2. The qualitative software package NVIVO V.10.2 (QSR International, Cambridge, Massachusetts, USA) was used to organise the thematic framework by refining and condensing the categories that had been manually identified and to identify additional themes for further analysis.

Framework Technique
1. Familiarisation Reading and re-reading the transcriptions
2. Identifying a Thematic Framework Condense data into categories
3. Indexing Codes systematically applied to the data
4. Charting Re-arranging the data according to the thematic content in a way which allows for a cross case and within case analysis
5. Mapping and Interpretation Interpretations and recommendations
Table 2: Framework technique used for data analysis7

Comment 3.4. Data/thematic saturation: Obtaining data saturation is critical in a qualitative study. How was this ensured? Basically among practitioners' and commissioners where sample sizes do not seem adequate. Similarly, only 2 focus groups were conducted with optometrists. Was thematic saturation obtained? Very important for the validity of the results presented.

Response: It is a fair to say some groups contained small sample sizes. We aimed to recruit as many people involved in both studies as possible. With regard to Ophthalmologists and Commissioners we were able to achieve 100% participation. We were less successful with the GP's, a weakness which is discussed in the limitations section of the study. Because numbers in some groups were small it is not possible to confirm that data saturation was achieved. We can only say that everyone was included in the sample frame, a comment that has now been added in the methods section. With regard to the

focus groups, these groups were held at a time convenient to the optometrists before a local optical committee meeting. This was done to attempt to gain maximum attendance to allow as many optometrists as possible to give a view point. Recurring themes came through in both groups, but it is not possible to say saturation was achieved. We have added the following to the limitations section.

Data saturation is often used as a quality indicator in qualitative research. Resource limitations and participant availability meant that were only able to conduct two optometrist focus groups. To ensure that the views and experiences of the majority of scheme participants were captured, these groups were larger than is optimal and it is possible that further themes may have emerged by using multiple smaller groups. However, the optometrist focus groups were characterized by a high level of participant engagement and consensus was reached. We are therefore confident that we have reliably identified the views of participating community optometrists regarding both schemes.
Comment 3.5. A clinical-demographic table of all the participants will be useful to put their viewpoints in perspectives.

Response: We are already conscious of the length of this paper, particularly after having added quite a bit of new text, two new figures and a new table to the paper in response to very helpful Reviewers' comments. Furthermore, we are doubtful if this table would greatly assist the reader. We would prefer not to expand the paper further by presenting what would be a fairly extensive table, though we are happy to be guided by the Editor on this point. We are also conscious of our ethical obligations to our participants and that the majority of patient data was anonymous.

VERSION 2 – REVIEW

REVIEWER	Dr Samuel Bert Boadi-Kusi University of Cape Coast Ghana
REVIEW RETURNED	03-Aug-2016

GENERAL COMMENTS	The revised version reads very well. The manuscript is clearly written and sends out a very positive message to readers. Just a minor comment: I am not comfortable when sentences starts with figures instead of words. Similarly comments apply to sentences starting with abbreviations. Authors can check these. eg. Liine 30 of Abstract

REVIEWER	Andrew White Westmead Hospital, Australia
REVIEW RETURNED	31-Aug-2016

GENERAL COMMENTS	Previous concerns addressed in the revision