

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	A qualitative investigation into patient views on visual field testing for glaucoma monitoring
AUTHORS	Glen, Fiona; Baker, Helen; Crabb, David

VERSION 1 - REVIEW

REVIEWER	Selena Gray University of the West of England, Bristol, UK Mother has glaucoma; some personal experience of attending clinics with her
REVIEW RETURNED	07-Oct-2013

GENERAL COMMENTS	<p>I think the abstract is clear except for the sentence "Patients would be open to more frequent VF testing if the clinician felt it would enhance their care."- I think that this needs further clarification- do patients themselves not think field tests enhance their care? do they not think that their clinicians think it will improve their care?</p> <p>I also think the abstract should include the fact that patients get very little feedback from their test results as a key point</p> <p>I think that this is a useful contribution to the field, giving a patient's view of a very important and at times frustrating part of their care.</p>
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REVIEWER	Nitin Anand Calderdale and Huddersfield NHS Trust Huddersfield Royal Infirmary Lindley
REVIEW RETURNED	13-Oct-2013

GENERAL COMMENTS	<p>This is a well-written report on the most important aspect of glaucoma care-visual field testing. There is no qualitative research on patient's opinion on VF testing and this report fills the gap admirably.</p> <p>The authors have discussed the limitations well. They should add the fact that the study was limited to the South of UK and ethnic minorities were not included. The patients appeared to have self-selected as often happens in these studies. The more articulate and confident and perhaps those with more severe disease (hence more motivated) usually volunteer.</p> <p>Finally, the section on clinic constraints should be shortened (Pages 23-4) to one paragraphs as it detracts from the main theme i.e VF testing.</p>
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REVIEWER	Maria Prior
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	Research Fellow, Health Services Research Unit, University of Aberdeen, Scotland, UK
REVIEW RETURNED	16-Oct-2013

<p>GENERAL COMMENTS</p>	<p>The manuscript entitled: <i>patient views on visual field testing for glaucoma monitoring</i> presents qualitative findings from a study involving focus groups of glaucoma patients. However, the study design is not apparent from the title. Patients' views and experiences of glaucoma monitoring and in particular visual field testing is an interesting and important topic and the paper is well written in parts, however methodological aspects of this study require further explanation and clarification and the findings section needs some restructuring. In addition, whilst I appreciate that the abstract follows the BMJ Open recommended structure, it does not currently function well as the 'shop window' for this study.</p> <p>Specific points to address:</p> <ul style="list-style-type: none"> • Abstract - the text under the heading primary and secondary outcomes duplicates the study objective. Also, a lack of any study background information means that the abstract conclusion regarding patients highlighting issues that could compromise the effectiveness of research-supported guidelines for frequency of VF testing appears out of context. • Introduction section - the last sentence of the second paragraph (<i>This finding suggests that personal attitudes regarding the frequency of testing could play an important role in translating research into practice</i>) needs revising as the relevant finding [Reference 7] relates to organisational and resource barriers to increasing the frequency of VF testing. Such barriers would need to be addressed before the personal attitudes (e.g. positive beliefs and high motivation) amongst glaucoma specialists' to increase frequency of VF testing would be the main driver to changing practice. • Methods section - Further detail of sampling and recruitment methods are required - i.e. How and when did consultant ophthalmologists identify and make the initial approach to eligible patients (in person in eye clinics, by letter, by phone) how did patients communicate their permission to be contacted? • The authors state that eligibility criteria (age and established glaucoma) "<i>were chosen to ensure that participants had had sufficient experience of VFs as part of their glaucoma follow-up</i>". What is the relevance of patients being aged 60 years and over to this justification? • Can the authors clarify the reasons for participants being kept "<i>unaware of the emphasis on VF testing frequency</i>" • Clarification is also needed on the data analysis methods. In particular, the authors state "<i>data was analysed by two of the authors (HB and FCG) independently using the Framework technique</i>" and that "<i>one of the authors was blind to the purpose of the study at the point of analysis</i>". They then report NVIVO "<i>was used to organise the thematic framework by refining and</i>
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	<p><i>condensing predefined categories...</i>” The first sentence of the findings section then states “<i>data was initially indexed according to themes central to the main research questions</i>”.</p> <p>Whilst it is common in qualitative data analysis to develop predefined themes from the research questions, I do not understand how one of the authors could analyse the data using this method if they were blind to the purpose of the study.</p> <ul style="list-style-type: none"> • In the first paragraph of the analysis section, the authors report “<i>field notes were used to account for any information missed or incorrectly reported in the transcripts due to excessive background noise</i>”. Was missing data an issue? Were the focus groups transcribed verbatim? • Findings section - The authors present a coding tree of main and sub-themes emerging from the data in Figure 1. However, the use of headings and sub-headings in the results section lacks consistency and does not always tie in with the identified themes in the coding tree. For example, under the theme-heading of <i>visual fields</i>, findings are presented on the sub-themes (in the coding tree) of <i>opinions on the test</i>, <i>comparison with other tests</i> and <i>performance pressure</i>. In contrast, the theme-heading <i>frequency of visual field testing</i> has a sub-theme heading of <i>current experience</i>. Findings related to <i>learning effect</i> are included under this subheading (without a separate sub-heading). A paragraph on location of VF tests is also included under this sub-heading. The next sub-heading of <i>perceived issues and barriers for successful follow-up care</i> does not map on to the coding tree. I would also like to see more clarity over findings presented as <i>current experience</i> and those presented under <i>testing environment</i> as to my mind, the paragraph on the possibility of VF tests being carried out at optometrist practices, fits better under the sub-heading of <i>test environment</i> than under <i>current experience</i>. • The authors state that questions in the topic guide were “<i>broad, open and ‘non-leading’</i>”. However, the only question from the topic guide that is included in the paper (as the topic guide itself is not uploaded as an additional file) is IF THE DOCTOR ACTUALLY SPENT A BIT MORE TIME DISCUSSING IT WITH YOU, WOULD IT MAYBE EASE THE PRESSURE OF ACTUALLY DOING THE TEST? This question is ‘narrow’, ‘closed’ and leading! I suggest the authors make the topic guide available as part of their paper submission to provide evidence that the description in the methods section of the types of questions used is appropriate and accurate. • Conclusion section – the authors include the sentence: <i>Anxiety associated with increased testing in the absence of clinical explanation was another theme</i>. However, <i>anxiety</i> does not appear as a theme or sub-theme in Figure 1.
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REVIEWER	Susan Campbell,
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	Lecturer in HSR University of East Anglia, United Kingdom
REVIEW RETURNED	25-Oct-2013

GENERAL COMMENTS	<p>1. Introduction</p> <p>The introduction is clear in putting the importance of assessment of glaucoma and the importance of the visual field test. However, there are a few problems.</p> <p>a. You say that you are trying to establish the views of a UK population but you only put the statistics for glaucoma for England. (page 6, lines 15-19). It would be good to get a broad view of the UK as a whole and set the context for outpatient appointments throughout the NHS.</p> <p>b. Page 1, line 53-55 - I found the sentence about NICE confusing. Are you trying to say there is no evidence on how often a person with glaucoma should be monitored throughout the year as well as overtime if they worsen? It needs clarification.</p> <p>c. Page 7, line 16 to 23 - You cite the views of glaucoma specialists and the impracticalities of the current health setting and then go on to say it is important that personal attitudes are then explored. If this is about personal attitudes of patients this argument does not fit and if its attitudes of specialists I do not see its significance at this point.</p> <p>d. Page 7, lines 39 to 41. Are there no other studies at all that look at patients attitudes to tests? I think a stronger argument could be made for conducting your research on the patients perceptions if you had a broader literature.</p> <p>e. Page 7, line 50 to 56. there needs to be some referencing here.</p> <p>IN SUMMARY - I think a stronger argument could be made around the importance of seeking patient views as well as a wider literature.</p> <p>4. METHODS</p> <p>The methods are unclear in places and in particular the selection of focus groups.</p> <p>a. I think you say in the limitations that you allowed the physician to sample and this is not here. Therefore your purposive sampling strategy included those over 60, had glaucoma for over 2 years and those that the specialist thought were able to take part in the research.</p> <p>b. There is no indication of how many the specialists approached and who said no, no information on how many were telephoned and who said no, no information on any who did agree to take part and did not turn up on the day. This is a fundamental flaw as there is therefore difficulty in giving context to the research and to the groups.</p> <p>c. Please justify why there is only 3 in a group? Focus groups should be between six and 8 as group interaction and exploration of the issues between participants is difficult and minimal in smaller groups. (see Bowling and Ebrahim, Handbook of Health Research Methods, 2005). You purposively sampled on age, and time they have had glaucoma. Can you say the range of time with glaucoma for the groups please?</p> <p>d. From looking at the paper overall and how you have written your findings I get the impression that the focus group discussions were very structured and not as open</p>
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	<p>ended as reported. Can you clarify please?</p> <p>e. Page 10, line 54 to 57 - usually known as framework analysis in the research literature and the main work used for this is. Pope C et al. Analysing qualitative data BMJ. 2000 January 8; 320(7227): 114–116.</p> <p>8. References - there are places where there needs to be more than one reference particularly if you say "studies". Some of the references for the qualitative methodology need to be updated and more suitable references given.</p> <p>9 and 10. results addressing the research question and presentation of the results. Under many of the themes you only have results of focus groups from one hospital. In others two and rarely is London mentioned. The only views from London are in the convenience of the location and once on frequency. Although qualitative research is not about numbers its about integrating the opinions. Just as the framework suggests the data needs to be re-arranged according to the thematic content in a way which allows for a cross case and within case analysis. I think there needs to be more work done to achieve this. I assume sampling was done from three areas to get an idea of the whole but also differences between and this has not been achieved.</p> <p>12. Some of the study limitations in sampling need to be clear in the methods and a discussion of what the implications are for the interpretation of the data in more depth.</p> <p>13. Although you have correctly tried to follow the COREQ checklist I think you can see from the comments above that this has not be done adequately.</p> <p>Discussion and conclusions are adequate but there could be much more indepth around the literature on training health professionals to impart the right knowledge and far more around the development of good patient information using patients to develop this.</p> <p>If there can be a more comprehensive analysis done and the reporting improved then I would recommend major ammendments but I think the analysis has not be done in enough depth at the moment for this and therefore it has to be a reject.</p> <p>This is clearly and important piece of work but there needs to be far more work on the analysis, integration and interpretation before publication.</p>
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VERSION 1 – AUTHOR RESPONSE

- Reviewer 1: Selena Gray

- I think the abstract is clear except for the sentence "Patients would be open to more frequent VF testing if the clinician felt it would enhance their care."- I think that this needs further clarification- do patients themselves not think field tests enhance their care? Do they not think that their clinicians think it will improve their care?

Many of the patients disliked doing the test and therefore the idea of completing it more frequently was not all that appealing on a personal level. However, patients accepted it was an important part of their care and would be open to visiting the clinic more frequently for VF testing on the grounds that it must be necessary to save their sight. We have modified the wording of the abstract and hope this

finding is clearer now (see results section of abstract).

- I also think the abstract should include the fact that patients get very little feedback from their test results as a key point.

We now refer to this finding in the abstract results section.

- I think that this is a useful contribution to the field, giving a patient's view of a very important and at times frustrating part of their care.

We are pleased that the reviewer deems this study to be of importance.

- Reviewer 2: Nitin Anand

- The authors have discussed the limitations well. They should add the fact that the study was limited to the South of UK and ethnic minorities were not included.

It is true that the sites chosen were all in the South of England and therefore this limitation is now included in the Article Summary (page 5 line 109) and discussion (page 30 line 719). With regards to ethnicity, all participants in Norwich and Portsmouth were Caucasian. The London groups were of mixed ethnicity (this is typical of the clinic populations at the corresponding hospitals). However, we now acknowledge these limitations of our sample (page 30 line 721)

- The patients appeared to have self-selected as often happens in these studies. The more articulate and confident and perhaps those with more severe disease (hence more motivated) usually volunteer.

We agree that this is an important point. We previously touched upon this matter in our limitations section but have now expanded on this topic (page 30) and also refer to this limitation in the 'strengths and limitations' section of the 'article summary' (page 5).

- Finally, the section on clinic constraints should be shortened (Pages 23-4) to one paragraph as it detracts from the main theme i.e VF testing.

Although this section does diverge from the theme of VF testing, the topic consistently emerged in all focus groups. Therefore we felt it was important to include this section to give a fair account of all views expressed. However, the sections about the waiting room and Saturday appointments in these sections have now been removed as these deviate from the overall message of the manuscript.

- Reviewer 3: Maria Prior

- The manuscript entitled: patient views on visual field testing for glaucoma monitoring presents qualitative findings from a study involving focus groups of glaucoma patients. However, the study design is not apparent from the title.

The title has been modified slightly so it now reads "A qualitative investigation into patient views of visual field testing for glaucoma monitoring".

- Specific points to address:

- • Abstract

- The text under the heading primary and secondary outcomes duplicates the study objective.

The primary and secondary outcomes have been rewritten so that they now read:

- 1) Attitudes and experiences of patients with glaucoma regarding VF testing
- 2) Patients' opinions about successful follow-up in glaucoma.

- Also, a lack of any study background information means that the abstract conclusion regarding patients highlighting issues that could compromise the effectiveness of research-supported guidelines for frequency of VF testing appears out of context.

Whilst more background would be useful, the abstract wording constraints and predefined structure make it difficult to provide more detailed information. We have therefore removed the following underlined section from the abstract as we agree that it is out of place in the overall context of the abstract.

“...that could compromise the effectiveness of research-supported guidelines for frequency of VF testing”

Note that further information regarding the study background can still be found in the “Article Focus” section in the “Article Summary” (page 4).

- • Introduction section

- The last sentence of the second paragraph (This finding suggests that personal attitudes regarding the frequency of testing could play an important role in translating research into practice) needs revising as the relevant finding [Reference 7] relates to organisational and resource barriers to increasing the frequency of VF testing. Such barriers would need to be addressed before the personal attitudes (e.g. positive beliefs and high motivation) amongst glaucoma specialists' to increase frequency of VF testing would be the main driver to changing practice.

The introduction has been restructured and rewritten in parts in order to better portray the context of this work (see page 6 lines 139 to page 7 line 168)

- • Methods section

- Further detail of sampling and recruitment methods are required - i.e. How and when did consultant ophthalmologists identify and make the initial approach to eligible patients (in person in eye clinics, by letter, by phone) how did patients communicate their permission to be contacted?

The consultant ophthalmologists identified potential participants in person during routine eye clinics. The ophthalmologist gave suitable participants an outline of the study and provided them with a brief information sheet. Interested people were asked to sign a form indicating they were happy to be contacted by a researcher with more information and their preferred contact telephone number. It was stressed that the person was not obliged to take part in the study. The researcher (HB) then contacted the participants with further information about the study and the option of participating on one of two dates. Those who agreed to participate received confirmation in the post, together with more information and a consent form. All participants were talked through the consent form at the

beginning of each session and questions were taken to ensure everyone was happy to participate.

We have added some more information about this procedure on page 9 (lines 205-221).

- • The authors state that eligibility criteria (age and established glaucoma) “were chosen to ensure that participants had had sufficient experience of VFs as part of their glaucoma follow-up”. What is the relevance of patients being aged 60 years and over to this justification?

Glaucoma is an age related condition and it is generally accepted that the majority of established patients will be in this age-range. Of course some long term service users will be younger- however this is rarer and their lifestyle and experiences may not reflect those of the more typical, elderly patient. Although interesting, the views of younger service users probably warrant further (separate) investigation. We refer to this point on page 9 line 209 and page 30 (line 726).

- • Can the authors clarify the reasons for participants being kept “unaware of the emphasis on VF testing frequency”

Participants were informed that they would be involved in a discussion about their experiences of the glaucoma clinic, and knew they would be asked about their views on vision tests. However, we did not explicitly inform participants of our interest in the visual field test (and particularly their opinions about more frequent visual field testing) as participants with strong views on this topic may have been more inclined to volunteer for the study, therefore increasing selection bias. We have added some information about this to the methods section (page 10 lines 241-245)

- • Clarification is also needed on the data analysis methods. In particular, the authors state “data was analysed by two of the authors (HB and FCG) independently using the Framework technique” and that “one of the authors was blind to the purpose of the study at the point of analysis”. They then report NVIVO “was used to organise the thematic framework by refining and condensing predefined categories...” The first sentence of the findings section then states “data was initially indexed according to themes central to the main research questions”. Whilst it is common in qualitative data analysis to develop predefined themes from the research questions, I do not understand how one of the authors could analyse the data using this method if they were blind to the purpose of the study.

On reflection the wording of this section is confusing. When initially reading the transcripts to manually identify the main themes, one of the authors had very limited knowledge regarding the purpose of the study. However, once both experimenters had identified the main categories manually from the transcripts, some discussion took place before progressing to the more detailed NVIVO based analysis. We have modified the wording of this section on page 12 line 271-273.

- • In the first paragraph of the analysis section, the authors report “field notes were used to account for any information missed or incorrectly reported in the transcripts due to excessive background noise”. Was missing data an issue? Were the focus groups transcribed verbatim?

A quiet location was chosen and booked prior to each discussion but, on one occasion, a noisy event was running in another room nearby. All focus groups were transcribed verbatim from the recordings and some words were not audible on the recording due to background noise caused during breaks at the aforementioned event. Although participants are asked to speak up it is inevitable that some people speak more softly than others, talk over each other or mumble. For the purpose of fluidity the researcher decided to continue the discussion rather than repeatedly interrupting the group. When re-reading the transcripts as a whole, and by referring to field notes, the missing words could be inferred with relative confidence. We have added some more discussion on page 11 lines 264-266.

- • Findings section - The authors present a coding tree of main and sub-themes emerging from the data in Figure 1. However, the use of headings and sub-headings in the results section lacks consistency and does not always tie in with the identified themes in the coding tree. For example, under the theme-heading of visual fields, findings are presented on the sub-themes (in the coding tree) of opinions on the test, comparison with other tests and performance pressure. In contrast, the theme-heading frequency of visual field testing has a sub-theme heading of current experience. Findings related to learning effect are included under this subheading (without a separate sub-heading). A paragraph on location of VF tests is also included under this sub-heading. The next sub-heading of perceived issues and barriers for successful follow-up care does not map on to the coding tree. I would also like to see more clarity over findings presented as current experience and those presented under testing environment as to my mind, the paragraph on the possibility of VF tests being carried out at optometrist practices, fits better under the sub-heading of test environment than under current experience.

Although the coding tree reflects the findings previously reported, we accept that there were some inconsistencies between the structure and wording of the headings within the article compared to the figure. We have reworded some of the headings and restructured the article slightly and have also updated the figure so that it adequately reflects what is reported in the main body of the report.

- • The authors state that questions in the topic guide were “broad, open and ‘non-leading’”. However, the only question from the topic guide that is included in the paper (as the topic guide itself is not uploaded as an additional file) is IF THE DOCTOR ACTUALLY SPENT A BIT MORE TIME DISCUSSING IT WITH YOU, WOULD IT MAYBE EASE THE PRESSURE OF ACTUALLY DOING THE TEST? This question is ‘narrow’, ‘closed’ and leading! I suggest the authors make the topic guide available as part of their paper submission to provide evidence that the description in the methods section of the types of questions used is appropriate and accurate.

The topic guide simply listed general topic areas and included a small number of prompts or question ideas under each heading. The order of the topics was not fixed and the wording of the actual questions varied from group to group. Although care was taken to ensure the questions asked were open and non-leading, sometimes the researcher would ask a more direct question to clarify what a participant had just said. The question above was not asked to everyone and instead directly followed on from a previous line of discussion in one of the six focus groups. The style of this question was certainly not typical of the study as a whole, and was included in the manuscript only to give context to the responses. Nevertheless, we accept that the question in this instance could be interpreted as ‘closed’ and ‘leading’ and in the interest of fairness we have therefore removed this example from the manuscript. We feel that doing so does not detract from the overall message of the manuscript.

- • Conclusion section – the authors include the sentence: Anxiety associated with increased testing in the absence of clinical explanation was another theme. However, anxiety does not appear as a theme or sub-theme in Figure 1.

This was an oversight and we now refer to anxiety in the new version of the figure.

- Reviewer 4: Susan Campbell

- 1. Introduction

- a. You say that you are trying to establish the views of a UK population but you only put the statistics for glaucoma for England. (page 6, lines 15-19). It would be good to get a broad view of the UK as a whole and set the context for outpatient appointments throughout the NHS.

We have modified this sentence to include wider statistics for the UK (page 6 lines 123-125).

- b. Page 1, line 53-55 - I found the sentence about NIC E confusing. Are you trying to say there is no evidence on how often a person with glaucoma should be monitored throughout the year as well as overtime if they worsen? It needs clarification.

Optimal frequency of VF testing is certainly important for detecting signs of worsening of vision in those people already diagnosed with glaucoma, and research evidence about this is only just emerging. It is particularly important in the follow-up period just after diagnosis to examine the effect of treatment; sufficient measurements need to be made to have adequate power for detecting vision loss. At the same time lack of resources may not mean this is possible. Research studies have provided recommendations regarding optimum frequency of VF testing based on results from statistical analysis/computer simulations using retrospective data. However, there are no randomised clinical trials looking at the benefits of more frequent compared to less frequent monitoring. In 2009 NICE provided general guidelines for glaucoma follow-up but also called for more research into examining the effectiveness of using different monitoring intervals to detect disease progression in people with glaucoma more research. We have extensively modified this section of the introduction (page 6 lines 139 to page 7 line 155) to provide more information.

- c. Page 7, line 16 to 23 - You cite the views of glaucoma specialists and the impracticalities of the current health setting and then go on to say it is important that personal attitudes are then explored. If this is about personal attitudes of patients this argument does not fit and if its attitudes of specialists I do not see its significance at this point.

We have (as explained in the previous response) modified this section of the introduction to avoid this confusion. Since it is the decision making of the clinicians that determine the intervals between tests in each individual's treatment plan, naturally their personal views on the appropriateness and effectiveness of monitoring strategies will be important. However, the effectiveness of VF testing (i.e. the quality of data it yields to inform the clinician's decisions) will also require the full confidence and cooperation of the patient. It is known that views and perceptions of patients and clinicians are not always aligned yet often the views of the patient are not taken into consideration. We therefore refer to the personal attitudes of both the clinicians and the patients in this section. A further short section has been added to the introduction to clarify the context of the work (page 7 line 157 to 163).

- d. Page 7, lines 39 to 41. Are there no other studies at all that look at patients' attitudes to tests? I think a stronger argument could be made for conducting your research on the patients perceptions if you had a broader literature.

As stated in the previous version of the manuscript, bar one quantitative study that asked patients to rate vision tests in order of preference, there have been no studies examining the attitudes of patients towards vision tests in glaucoma. However, some further discussion regarding patient based studies investigating other parts of eye care has now been added to the introduction (page 8 lines 168 to 183; added refs 10, 17-19)

- e. Page 7, line 50 to 56. there needs to be some referencing here.

This section has now been shortened (as there was some overlap with the discussion) but some referencing regarding the use of questionnaire in patient based research has been added (refs 13 to 15 page 9 line 169)

METHODS

- a. I think you say in the limitations that you allowed the physician to sample and this is not here. Therefore your purposive sampling strategy included those over 60, had glaucoma for over 2 years and those that the specialist thought were able to take part in the research.

This information was already included in our methods section ("The study used purposeful sampling whereby a consultant ophthalmologist at each participating eye hospital selected participants that were suitable for the study. To take part, the participant was required to be aged 60 years and over and to be an established glaucoma patient who had been under review for at least two years. These criteria were chosen to ensure that participants had had sufficient experience of VFs as part of their glaucoma follow-up.). However, we have now provided some more information about the recruitment process (see page 9).

- b. There is no indication of how many the specialists approached and who said no, no information on how many were telephoned and who said no, no information on any who did agree to take part and did not turn up on the day. This is a fundamental flaw as there is therefore difficulty in giving context to the research and to the groups.

We recognise that we should have made this process clearer and we thank the reviewer for highlighting this. Our additional information removes this flaw. Three consultant ophthalmologists each recruited 20 patients who had expressed interest in the study and agreed to be contacted. If a suitable participant did not seem interested in the research, the ophthalmologist simply did not pursue the matter anymore. Unfortunately the specialists did not record how many people had declined to take part. The 20 participants recruited by each consultant ophthalmologist were then contacted by one of the study investigators (HB) with further information and were invited to take part on one of two specific dates at the corresponding hospital. Those who declined did so because they were not available on the specific dates (no other reason was cited). Between 5-6 people were booked for each group on each day but some people (n=4) did not attend, or cancelled at the last minute. This is the nature of group discussions and obviously it was only possible to progress with the people who actually attended on the day! We have added this detail in the methods section (page 9-10) and address the associated limitations in the article summary (page 5) and in the discussion (page 30 line 722).

- c. Please justify why there is only 3 in a group? Focus groups should be between six and 8 as group interaction and exploration of the issues between participants is difficult and minimal in smaller groups. (see Bowling and Ebrahim, Handbook of Health Research Methods, 2005).

There is no definitive prescription for the minimum number of people for a focus group. Our main aim was to be transparent about the number of people in the focus groups. I am sure the reviewer will agree with us that information is often not reported. The reviewer might be familiar with this excellent article: [1] Although 5-6 people initially confirmed their attendance at each of our six focus group sessions, some of these people did not turn up or cancelled with short notice (so ultimately this particularly small number was out of our control). Nevertheless, whilst focus groups of 6 -8 people are recommended in the reference provided by the reviewer, the number of participants used in focus group research generally varies quite widely across the literature. Sizes of focus groups are (at least in part) likely to also reflect the personal preferences of the researcher. For example, another book

about focus group methodology, which was compiled based on the views and experiences of 21 key researchers in the field, states that "Several of the contributors to this volume prefer to work with groups of 5-6 participants, or even as few as 3"[2]. In our opinion, smaller focus groups can provide more in depth discussion about the study topic as participants are generally more relaxed- this may be because they feel more comfortable contributing their view without the need to compete with several other (perhaps more outspoken) individuals. While we do not see the small size as a huge flaw given the number of focus groups that took place, we appreciate that the views expressed in our focus groups may not reflect those of a wider patient population, and have addressed this in our discussion section (page 31 lines 731)

References:

1. Carlsen, B. and C. Glenton, What about N? A methodological study of sample-size reporting in focus group studies. BMC medical research methodology, 2011. 11(1): p. 26.
2. Kitzinger, J., Qualitative Research: Introducing focus groups. Bmj, 1995. 311(7000): p. 299-302.

- You purposively sampled on age, and time they have had glaucoma. Can you say the range of time with glaucoma for the groups please?

All participants had been attending glaucoma clinics for at least 2 years to ensure they had experience of multiple visual field tests. We did not explicitly record the years since diagnosis for each patient/group in order to remain impartial about the participants and to reassure the participants that the research would have no influence on the care they received. Nevertheless, the majority of the participants commented on the length of time they had been attending glaucoma clinics when introducing themselves to the other participants at the beginning of each focus group. For the reviewer's interest, the range of self-reported years with glaucoma for each group was as follows:

Norwich 1: Range 3-15 years.
Norwich 2: Range 5-15 years
London 1: 12-30 years
London 2: 5-10 years
Portsmouth 1: 5-10 years
Portsmouth 2: 5-25 years.

- d. From looking at the paper overall and how you have written your findings I get the impression that the focus group discussions were very structured and not as open ended as reported. Can you clarify please?

The reviewer should be reassured that the topic guide consisted of only broad topic areas with a small number of prompts. The wording of the questions was not predetermined and the structure of the discussion was dictated by the patients themselves. We appreciate that the only question included in the report was a leading one and therefore in hindsight we can understand how the reviewers may have got the impression that the study was more structured and closed than it actually was! However, as discussed in the response to Reviewer 3, this particular question was a direct response to a comment made by one participant during one particular conversation thread, and was not an intended line of questioning prior to the study. For the interest of fairness we have now removed this question from the manuscript.

- e. Page 10, line 54 to 57 - usually known as framework analysis in the research literature and the main work used for this is. Pope C et al. Analysing qualitative data BMJ. 2000

Thank you, we have updated this information and added the suggested reference to the manuscript

(page 12 line 269).

- References

There are places where there needs to be more than one reference particularly if you say "studies". Some of the references for the qualitative methodology need to be updated and more suitable references given.

This is a fair point, although sometimes the reference was for a review article containing information about several relevant studies (i.e. page 8 line 171). We have tried to improve our referencing throughout the manuscript.

- Results addressing the research question and presentation of the results.

- Under many of the themes you only have results of focus groups from one hospital. In others two and rarely is London mentioned. The only views from London are in the convenience of the location and once on frequency. Although qualitative research is not about numbers its about integrating the opinions. Just as the framework suggests the data needs to be rearranged according to the thematic content in a way which allows for a cross case and within case analysis. I think there needs to be more work done to achieve this. I assume sampling was done from three areas to get an idea of the whole but also differences between and this has not been achieved.

As the reviewer acknowledges, qualitative research, by definition, is not all about numbers. Whilst it may enhance the paper to include examples from every location for every point made, a large number of topics are covered and we hope the reviewer appreciates that journal constraints make it difficult to do this. We chose to include quotes that we felt were most interesting or best illuminated each of the reported findings. Whilst several patients may express views on a similar topic, some will inevitably do so in a more articulate or concise manner and thus better demonstrate the point being made. If a location was not mentioned, this did not mean that similar results were not found in that location, and it was certainly not intentional to report findings from one location more than another. Whilst London may be slightly underrepresented in the direct quotes compared to the other locations, we would have to disagree slightly with the remark that "London is rarely mentioned" as there are still a number of examples included from the London focus groups. We have added or substituted in a few more examples from London (page 14, 16, 19, 21) but respectfully argue that our findings are balanced on the whole. Ultimately, we included information about location for transparency and see this as a strength to the study (it is fair to say that many studies do not even include this information) and by doing so we allow the reader to form their own conclusions about the work.

- Some of the study limitations in sampling need to be clear in the methods and a discussion of what the implications are for the interpretation of the data in more depth.

We have added some information about sampling on page 9 and have added discussion regarding the implications of patients dropping out of the research (and the resulting smaller sample sizes) (page 31). However, as mentioned in our response to a previous comment, we do not feel that this has had a huge bearing on our overall findings, and two focus groups were conducted at each site and similar themes emerged each time. The limitation that the views expressed may not represent those of all patients in the wider population is emphasised repeatedly (i.e. in the abstract summary, page 30-1).

- Discussion and conclusions are adequate but there could be much more in depth around the literature on training health professionals to impart the right knowledge and far more around the development of good patient information using patients to develop this.

We have added some more discussion regarding the involvement of patients in health education and training on page 28 lines 673 and page 30 lines 710 to 716.

VERSION 2 – REVIEW

REVIEWER	Maria Prior University of Aberdeen, UK
REVIEW RETURNED	29-Nov-2013

- The reviewer completed the checklist but made no further comments.

REVIEWER	Susan Campbell University of East Anglia United Kingdom
REVIEW RETURNED	10-Dec-2013

- The reviewer completed the checklist but made no further comments.