

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Certification for vision impairment – Researching perceptions, processes and practicalities in health and social care professionals and patients
<b>AUTHORS</b>	Boyce, Tammy; Leamon, Shaun; Slade, John; Simkiss, Phillippa; rughani, sonal; Ghanchi, Faruque

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Irene Stratton Gloucester Hospitals NHS FT UK
<b>REVIEW RETURNED</b>	12-Nov-2013

<b>GENERAL COMMENTS</b>	<p>"there is concern that the number of CVIs is as accurate as possible as the Public Health Outcomes Framework in England, introduced in 2013, includes an indicator for preventable sight loss for the first time."</p> <p>Should say "number of CVIs SHOULD BE as accurate as possible as the Public Health Outcomes Framework in England, introduced in 2013, includes an indicator for preventable sight loss for the first time." as we know that the data are of very poor quality.</p> <p>"The study was undertaken at three separate areas of England identified as having inconsistent CVI registration rates between 2006 and 2011."</p> <p>How was 'inconsistent' defined?</p> <p>Seems to be no consideration as to whether the lack of a random element in choosing the people who were interviewed would affect the outcomes. Only those certified were interviewed, not those who had visual impairment and who had not been certified. This would seem to introduce bias.</p> <p>The discussion seems to be discussing CHANGES in the rates between areas when a major concern is differences in the actual rates in the data - the first lot of PHOF data shows this . Rate is 5/100,000 in Stoke on Trent and 82 in East Sussex. I think you'd be hard pressed to find another indicator with a 16 fold</p>
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	<p>difference. I would suggest a re-read of reference 12.</p> <p>That no one has been interviewed who is in the process of having vision loss which could be certified but has not been certified is a problem. This should be rectified because those interviewed said that life would have been easier had they been certified earlier and it would be helpful to know what people who were waiting for certification thought about it as they might never get to that point. Maybe you could find some in Stoke on Trent!</p> <p>There's no mention of the Public health needs that this research covers, especially now that PH professionals may be located in Councils. There should be mention of the use of numbers that should be made in making decisions on everything within councils - for example transport provision - difficult for those with vision loss. The CVI has two purposes, for the patient and for provision of services at local and national level.</p>
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<b>REVIEWER</b>	Moyra McClure University of Ulster Northern Ireland, UK
<b>REVIEW RETURNED</b>	18-Nov-2013

<b>GENERAL COMMENTS</b>	<p>This study is worthy of publication and dissemination in the field of sight impairment, pending a few minor alterations and responses to reviewer's suggestions.</p> <p>It is refreshing to read a study incorporating qualitative data in the field of visual impairment that utilizes both patient and service provider. As a study, this is extremely beneficial to direct the improvements required in service provision of certification and registration.</p> <p>This study is presumably a research paper from the study / report commissioned and funded by the RNIB and published as an RNIB report, The Certification and Registration Processes: Stages, barriers and delays, July 2012. It does not appear to have a copyright and the authors clearly state the funding is from RNIB.</p> <p>Abstract: The objective should include that the perceptions of the patients are also examined.</p> <p>The abstract should better reflect the feelings of the patients that earlier CVI enables service access. For patients, CVI is a start to the process of coming to terms with sight loss while the ophthalmologists feel it is a final process to be offered when no further treatment is available. The pdf containing the full paper and abstract omits some words on line 2 of the abstract; these are present in the separate abstract file.</p> <p>Introduction: This provides a good historical background to CVI that may be enhanced with information on the levels of visual function for categories of sight impairment; for a novice reader interested in this area, a table or perhaps a reference to the Royal College of Ophthalmologists website for CVI, (<a href="http://www.rcophth.ac.uk/page.asp?section=165&amp;ionTitle=Certificate+of..">http://www.rcophth.ac.uk/page.asp?section=165&amp;ionTitle=Certificate+of..</a>) and especially the explanatory notes would be helpful.</p> <p>The second paragraph brings to attention that certification numbers are falling; as such numbers are interesting, could some figures be added and referenced?</p> <p>Furthermore, the introduction could be improved by the reader briefly understanding the benefits (practically in service access, financially and</p>
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emotionally) of certification and registration for both patients and services; the authors correctly explain the importance of the epidemiological data from CVIs in directing requirement of services.

Are there any previous research papers examining patient perceptions of service provision that are relevant?

The objective is clearly written at the end of the Introduction.

Methodology: The methodology of the study is completely appropriate although explanation of the repetition levels between the groups in the “strengths and weaknesses of the study” could be further explained.

Sample:

The second sentence reading “The study was undertaken...” should also be referenced as Reference 3. Would the reader be interested in the three areas selected?

Table 1 is missing. Having accessed this from the report, it is complete and needs to be added to this paper.

It is not clear what area the nurses and optometrists work in: are they in a Low Vision service or other service where CVI is routinely addressed? It is worth including the number of social care interviewees (n = 12) in the text. The terminology is explained and reasons given for the use of “patient”. As this is consistent throughout and highlighted, the term “subject” may not be used. The last sentence in the Methods should however be moved to the “Sample” section.

The last line on page 5 could be improved by having the number included: Interviewees included patients certified and registered (n = 32) and those only certified (5) and also those unsure if registered although certified (n = 9). (Even though this is in the table)

Page 6: 1st paragraph: does the sample frame ensure that there is a wide spread of the variables age, ethnicity, gender and income: this sentence could be clearer.

2nd paragraph: Suggest keep consistent presentation of figures: “Twenty percent” reads better than “one fifth”.

41% (n =19).

Sixty-three percent (n = 29) rather than 63%;

26 out of 46: Fifty-seven percent (n =26) of interviewees were women. Interviews and Data Analysis.

An example of one question in each section might be helpful.

The use of thematic analysis could also be elaborated on, describing in the results the codes and themes typical of the study.

Include all labels (Opt, Nur etc.).

Results

The outcomes for this study are the themes that are associated with barriers and causes for delays in certification and registration and the themes associated with enablers. In this respect, the author/s have discussed a range of significant themes such delay in processing, record keeping and discussion of certification.

The results do not fully reflect the significant workload of this study and its relevance to current practice. There are quotes from 3 SS, 9 oph and 3pat; the results should fully reflect comments from all interviewees including opt and nur. The weighting towards oph is also biased and further in particular more patient comments warrant examination and display in the results. The title uses “perceptions” so the reader wants to know what these are especially from a patient viewpoint both examples of grateful and frustrated patients, as mentioned in the discussion.

The results fully address the objective of the study. However, more clarification on each theme, perhaps with subheadings highlighting each theme, as suggested below:

- “Delays in CVIs processing” (forms incomplete, time delays)
- “Enablers in CVI processing”: (discussion of ECLO use- are there any patient comments to support this? Improvement to patient understanding

of benefits)

- “Certification practicalities”: (clinician interpretation, treatment ongoing, practical needs assessment)
- “Differences in perceptions of certification”- (pat versus oph- this is a good point.)

While the results read fairly clearly, there are a few details that could be enhanced:

Line 1 of results, insert “the” before “process”

Line 2, page 8 comma after studied.

Line 8, “wrong or no telephone” could be changed to “an incorrect or missing..”

Last paragraph: insert “the” before “use”

Page 9, the quotation may be omitted and in the next paragraph a line added: In such cases, a team of ECLOs would be required in order that all clinics are supplied with this service.

2nd paragraph, page 9 Use “Seventy –five percent” rather than “three quarters”, similarly on page 10 use “Fifty percent” in the 4th last line. Use “and” instead of a comma on the penultimate line.

Page 12 insert “being” before “certified” in 2nd paragraph

Discussion.

This area of the paper gathers the perceptions and discusses the issues of the practicalities and processes of certification. It also considers the possible enablers for certification. The content here is realistically balanced except for the omission of opt and nurses input.

A few minor adjustments are recommended:

Omit “number of” before registrations. Comma after 2011/12.

Comma after “areas” line 8, page 13. Insert “that” before “they”, 3rd paragraph.

Page 13: Figure 1 has been referenced: Take out “see”; a “%” should be on the y axis. Take out (13) and change to (12) after the title take out measurements. Is there copyright for reproduction of this data? It certainly is relevant and clearly shows how much the numbers are falling.

Page 14: CUT “In addition”

Add “to the patient” after offer it , line 2 page 14.

Move the sentence “Of the 46 patients..” to Results and use appropriate numerical presentation (%) .Consider inserting a comment to reflect this finding, like “This current study highlighted that patients would like earlier certification in order to access holistic low vision and sensory support.”

DH in full: Department of Health

Page 15: 2nd paragraph: the sentence reading “Any additional time..”

could be rewritten,.. for example: “due to the pressures of patient throughput related to the need to meet Referral to Treatment and other performance targets. Therefore, departments should explore if other service providers, such as optometrists, rehabilitation workers or ECLOs are...”

Also consider adding or commenting on the use of rehabilitation workers with expertise in this area. A further enabler may be the design of a “Certification Pathway” in the form of a simple flow-chart, for the benefit of the service provider offering and discussing certification. This could be a double sided sheet with the benefits of certification on the second side. By undertaking this qualitative research, what impact can the findings have on current clinical practice? Are there any models of care in other countries that can be used here in the UK, such as the well-respected low vision care seen in Sweden, USA and Australia??

Amend Conclusion (not Discussion)

No action required.

References

All references are cited in the text, up-to-date and relevant. The reference numbered 18 requires further citation, if possible.

	Grammar, spelling and expression: All addressed as above and 1 further comment: The use of C & R is not ideal; consider writing this in full each time: certification and registration.
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### VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

“That no one has been interviewed who is in the process of having vision loss which could be certified but has not been certified is a problem. This should be rectified because those interviewed said that life would have been easier had they been certified earlier and it would be helpful to know what people who were waiting for certification thought about it as they might never get to that point. Maybe you could find some in Stoke on Trent!”

Our response:

We have acknowledged the limitations of choosing to include only those who were certified and explain this was a deliberate decision in the methods section. The limitations include a statement this group should be researched. All authors are aware this is an issue however we were limited by time and research funding but nonetheless regard this issue as an important, but separate, piece of research.

Reviewer 1:

“There's no mention of the Public health needs that this research covers, especially now that PH professionals may be located in Councils. There should be mention of the use of numbers that should be made in making decisions on everything within councils - for example transport provision - difficult for those with vision loss. The CVI has two purposes, for the patient and for provision of services at local and national level.”

Our response:

Again, we agree this is an important factor, however we were constrained by the word limits and concentrated on issues relevant to the work of ophthalmologists and ophthalmology departments. Boyce and Leamon have co-authored a short editorial for a Public Health journal on issues related to CVI and the new PH indicator.

Reviewer 2:

“Are there any previous research papers examining patient perceptions of service provision that are relevant?”

Our response:

Any that exist are already referenced.

Reviewer 2:

“Methodology: The methodology of the study is completely appropriate although explanation of the repetition levels between the groups in the “strengths and weaknesses of the study” could be further explained.”

Our response:

Not amended – due to word limits –we felt addressing other points raised by the reviewers was more pertinent.

Reviewer 2:

“The second sentence reading “The study was undertaken...” should also be referenced as Reference 3. Would the reader be interested in the three areas selected?”

Our response:

We did not include the areas for confidentiality reasons.

Reviewer 2:

“Table 1 is missing. Having accessed this from the report, it is complete and needs to be added to this paper.”

Our response:

The Table in the article is different from the report published by the RNIB.

Reviewer 2:

“Interviews and Data Analysis. An example of one question in each section might be helpful. The use of thematic analysis could also be elaborated on, describing in the results the codes and themes typical of the study.”

Our response:

We have not amended this due to the word limit.

Reviewer 2:

“The results do not fully reflect the significant workload of this study and its relevance to current practice. There are quotes from 3 SS, 9 oph and 3pat; the results should fully reflect comments from all interviewees including opt and nur. The weighting towards oph is also biased and further in particular more patient comments warrant examination and display in the results.”

Our response:

The article is substantially shorter than the report, as such we made decisions on which points to emphasise. We have amended the quotes to include a wider range.

Reviewer 2:

“The title uses “perceptions” so the reader wants to know what these are especially from a patient viewpoint both examples of grateful and frustrated patients, as mentioned in the discussion.

The results fully address the objective of the study. However, more clarification on each theme, perhaps with subheadings highlighting each theme, as suggested below:

- “Delays in CVIs processing” (forms incomplete, time delays)
- “Enablers in CVI processing”: (discussion of ECLO use- are there any patient comments to support this? Improvement to patient understanding of benefits)
- “Certification practicalities”: (clinician interpretation, treatment ongoing, practical needs assessment)
- “Differences in perceptions of certification”- (pat versus oph- this is a good point.)”

Our response:

We have clarified the findings section and added section labels. The reviewer’s suggestions would make this a substantially longer article, as such, we believe our clarifications have improved this section.

Reviewer 2:

“Also consider adding or commenting on the use of rehabilitation workers with expertise in this area. A further enabler may be the design of a “Certification Pathway” in the form of a simple flow-chart, for the benefit of the service provider offering and discussing certification. This could be a double sided sheet with the benefits of certification on the second side. By undertaking this qualitative research, what impact can the findings have on current clinical practice? Are there any models of care in other countries that can be used here in the UK, such as the well-respected low vision care seen in Sweden, USA and Australia??”

Our response:

These are all interesting points, however, we are constrained by the word limit. The RNIB publication includes much of this information and some of the authors have worked with the RNIB and RCOph to create a flowchart, but we feel there is simply not space to include this information – relevant as it may be.

#### VERSION 2 – REVIEW

<b>REVIEWER</b>	Irene Stratton Gloucester Diabetic Retinopathy Research Group Gloucester Hospitals NHS FT
<b>REVIEW RETURNED</b>	19-Feb-2014

<b>GENERAL COMMENTS</b>	In the introduction needs to be clearer that the CVI is then sent to Social Services.
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<b>REVIEWER</b>	Moyra McClure University of Ulster, UK
<b>REVIEW RETURNED</b>	11-Mar-2014

<b>GENERAL COMMENTS</b>	<p><b>General Overview:</b></p> <p>This paper is exciting as it gives real patient statements and is a novel source of evidence to direct clinical change to improve the certification and registration process. The revisions meet the reviewer's suggestions and as an interested party the reviewer feels this is an excellent piece of research.</p> <p>The following very minor points ensure the paper is perfect and then ready for publication.</p> <p><b>Abstract:</b></p> <p>The use of "Blind" and "Partial Sight" should be changed to "severely sight impaired" and "sight impaired", as is used throughout the paper. This is used twice in the abstract so suggested that both sentences are changed.</p> <p><b>Article Summary</b></p> <p>Point 2: change "show" to "showing"</p> <p><b>Introduction:</b></p> <p>Change "the" to they" in the line "When patients are certified.." in the first paragraph. In the same line, take out "blind and partial sighted" terms as have already been explained.</p> <p>Change "decreased" to "decrease" in the line "Similarly the triennial survey of people..." and in the same line, change "blind and partially sighted" to "sight impaired or severely sight impaired"</p> <p>In the next paragraph, substitute the word "blindness" for severely sight impairment"</p> <p><b>Methods</b></p> <p>1 typo "the" under "sample" before "gender characteristics.."</p> <p><b>Results</b></p> <p>Any OPT or ECLO positive comment on certification and registration?</p> <p>A significant number of excellent quotes, otherwise with lovely themes.</p> <p>Ophthalmologist were shortened to OPHTH- please change that term to oph10 (two quotes), oph11, oph5 and oph1.</p> <p><b>Discussion:</b> Substitute the word "blindness" as before.</p>
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	<p><b>References</b> are appropriate and complete although different formatting seems apparent with an alteration of letter size that should be standardised.</p>
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## VERSION 2 – AUTHOR RESPONSE

Again we are grateful for the opportunity to revise our article. In response to the second round of reviewers' comments we made all recommended amendments/revisions, please note:

- 1) Title – amended to include research in title
  - 2) Abstract – added severely sight impaired and sight impaired and removed blind and partially sighted.
  - 3) Article Summary - Point 2: changed to “showing”
  - 4) Introduction:
    - a. Changed “the” to they”. Removed “blind and partial sighted”
    - b. Changed “decreased” to “decrease”. Changed “blind and partially sighted” to “SI and SSI”.
    - c. Changed “blindness” to “severely sight impairment”
  - 5) Methods
    - a. Changed ‘tthe’ to ‘the’
  - 6) Results
    - a. Oph10, Oph11, Oph5, Oph1 changed to Ophth10, Ophth11, Ophth 5, Ophth1
    - b. In light of reviewer 2’s comments about adding comment from OPT or ECLO – Under the section: ‘The role of clinic support staff and the ECLO ‘ we reduced the first quote and added a quote from an optometrist.
  - 7) Discussion
    - a. Changed ‘blindness’ to ‘severe sight impairment’.
  - 8) References – formatted so all same
- All changes are highlighted in green.