



**Certification for vision impairment – perceptions, process
and practicalities**

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Certification for vision impairment – perceptions, process and practicalities

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Abstract

Objectives

To evaluate the processes for Certification of Vision Impairment, examine the role of ophthalmologists and health and social care professionals in the

Design

Qualitative.

Setting

Telephone interviews with health and social care professionals and patients from three sites in England examining experiences of the certification and registration processes.

Participants

43 health and social care professionals involved in the certification or registration process and 46 patients certified as blind or partially sighted within previous 12 months.

Results

The process of being certified is separate from being registered for vision impairment. Deciding at what point a patient should be certified can be uncertain and ophthalmologists varied in their comprehension of the certification process. The length of time to complete the certification and registration process varies from a few weeks to many months. The avoidable delays in completion and forwarding of the CVIs to social services can be helped by Eye Clinic Liaison Officers (ECLO).

Conclusion

Visual function is the key aspect to consider when offering a patient CVI. Being certified with vision impairment is a significant process for patients that can

1
2 substantially change their lives. Eye Clinic Liaison Officers can improve the
3
4 process of being certified and registered.
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8 **Article summary**

9 **Strengths and limitations of this study**

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11
12
13 • This is the first study to study those involved in the certification and
14 registration processes, including health and social care professionals and
15 patients.
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- 19
20
21 • The number of participants was small, so findings should be considered
22 indicative, however repetition levels were reached in all three interview
23 groups suggesting confidence in the findings.
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- 27
28 • Further research is needed to understand the impact of new Disability
29 Living Allowance assessment policies and whether there is any pressure
30 on ophthalmologists not to certify patients and explore patients who are
31 eligible but not certified.
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Introduction

The Certificate of Vision Impairment (CVI) was introduced in England in September 2005 and in Wales in April 2007. Its purpose is to provide a reliable route for someone with sight loss to be brought to the attention of social care. Certification and registration are two separate processes: an ophthalmologist completes the CVI based on existing visual function criteria and support needs. Patients can be certified as sight impaired (SI – formerly ‘partial sighted’) or severe sight impairment (SSI- formerly ‘blind’). Local Social Service Department (SSDs) then initiate the registration process upon receipt of the completed CVI. Registration is a voluntary choice, as such, SSDs ask patients if they would like to be registered.

There has been an inconsistent decline in both the number of certifications and number of registrations in many areas of England, though the ageing population would suggest an increase in certifications.⁽¹⁾ There is also 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. The indicator aims to better target financial resources to improve early detection of the three major causes of sight loss (glaucoma, age related macular degeneration (AMD) and diabetic retinopathy).⁽²⁾ As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is therefore important that the number and information in CVIs and subsequent registrations reflect accurate levels of need.

1
2 This paper examines the certification processes in hospitals and identifies the
3
4 main barriers, delays and enablers with particular emphasis on the role of
5
6 ophthalmologists. It also explores the significance of certification for patients.
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10 **Materials and Methods**

11 **Sample**

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17 A qualitative study was designed based on semi-structured telephone interviews
18
19 of clinical and social care providers and service users.⁽³⁾⁽⁴⁾ The study was
20
21 undertaken at three separate areas of England identified as having inconsistent
22
23 CVI registration rates between 2006 and 2011. NHS research ethics approval
24
25 was secured for each hospital site. 43 health and social care professionals and
26
27 46 patients were interviewed by an experienced interviewer (See Table 1).
28
29 These interviewed included; ophthalmologists (12), ECLOs (4), Nurses (3),
30
31 Optometrists (4) and Administrators (8). All ophthalmologists interviewed were
32
33 consultants except one trainee registrar. Of the eleven consultants interviewed,
34
35 two were qualified for less than two years; the remaining nine consultants were
36
37 qualified for over ten years. Hospital interviewees were identified by their head
38
39 of department. Social care interviewees were identified by ECLOs and a
40
41 representative from the London Visual Impairment Forum.
42
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48 Patients with vision impairment (and two primary carers) were interviewed.
49
50 Patients were identified by ECLOs or social services. As patients' recollections
51
52 of medical consultations can be poor within relatively short periods after a
53
54 consultation,⁽⁵⁾ only patients certified within the last year were interviewed.
55
56 Interviewees included patients certified and registered and those only certified.
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58
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1
2 A sampling frame was created to direct patient recruitment. The sample frame
3
4 aimed to ensure age, ethnicity, gender and income variation.
5
6

7
8 One fifth (n=11) of patients identified as Asian/Black and 41% stated they had
9
10 an income below £15,000/annum. 63% were over 60 years of age and 26 out of
11
12 46 interviews were with women.
13

14 15 **Interviews and Data Analysis**

16
17 Telephone interviews were arranged with individual participant's agreement at a
18
19 time that suited the interviewees. Interviews lasted on average for 15 minutes,
20
21 although some were substantially longer (Patients range 8-40 minutes,
22
23 health/social care professionals range 6-50 minutes). The interviews were
24
25 based on semi-structured questions that were predefined by the consensus of
26
27 the research team. Interview questions included descriptions of their role in the
28
29 certification process (See Box 1-3).
30
31
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34

35 CVI process / when you recommend certification
36 Purpose of CVI
37 What you tell patients about CVI
38 Barriers to approaching patients
39 Length to complete CVI
40 Knowledge of benefits of being certified
41 Reasons for decline
42 Improvements
43

44 Box 1: Themes in ophthalmology/optometrist/nurse questions
45

46 CVI process
47 Length from receiving CVI to sending to social services
48 Purpose of CVI
49 Improvements
50

51 Box 2: Themes in administrators/ ECLO questions
52

53 Experiences of being certified and registered, length to complete
54 Access to support before certification
55

56 Box 3: Themes in patient questions
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1
2 Interview questions acted as a guide and additional information was also
3
4 gleaned.
5
6
7

8
9 All interviews were recorded, transcribed and analysed using thematic analysis.
10
11 A list of deductive codes was initially created; inductive codes emerged during
12
13 the second level of the thematic analysis.^(6,7,8)
14
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16
17
18 The interviewees are described using a number and labels – patient (Pat),
19
20 ophthalmologist (Oph), secretaries and administrators (Adm) and social services
21
22 staff- managers, rehabilitation officers, administrators (SS).
23
24

25
26
27 It was observed that the terms ‘certification’ and ‘registration’ were used
28
29 incorrectly and inconsistently by most interviewees hence these terms were
30
31 amended in the text to provide clarity. In addition, the term ‘patient’ is used
32
33 throughout the report instead of ‘client’ or ‘service user’. This is for continuity
34
35 and clarity.
36
37

38 **Results**

39
40
41 There were subtle differences in process for certification in the three areas and
42
43 the clinicians differed in the timing of offer of certification to the patients. The
44
45 difference was not so much a geographic trend but related to individual
46
47 clinician’s approach. It was not possible to conclude in this research if
48
49 differences in certification processes are due to systematic issues or individual
50
51 practices.
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1
2 A significant difference between hospitals was the length of time for CVIs to be
3 sent to SSDs. Within each of the three geographic areas studied social services
4 responded that it took from one week to many months for CVIs to be sent to
5
6
7
8
9 them:

10
11
12
13 'Between 10 days and three or four months.' (SS2)

14
15 'Some received few days later, others take 3 months.' (SS4)

16
17
18
19
20 Delays also occur as incomplete CVIs are sent to SSDs. One SS interviewee
21 estimated half of the CVIs they receive have the wrong or no telephone number
22 and this delayed the C&R process;
23
24

25
26 'The standard of completion of CVIs is extraordinarily poor... You
27 have to tick whether SSI or SI, quite regularly they'll have ticked
28 the wrong box.' (SS11)
29
30
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35 An additional practice that unnecessarily delays sending certifications to SS is
36 waiting to send CVIs in batches. All SS staff (n=12) stated they received CVIs
37 in batches.
38
39
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41

42
43 In each of the three areas, patients confirmed the length of time for them to go
44 through both C&R varied from a few weeks to close to one year. There was
45 also variation within each department, with some patients stating C&R took a
46 few weeks whilst others stated it took many months.
47
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53
54 The eye clinics differed in their approach to use of the ECLO service for
55 certification and registration process. ECLOs helped complete the CVI in two
56 areas, however one factor that contributed to the inconsistent certification
57
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60

1
2 process in hospitals was ophthalmologists' attitudes towards ECLOs. All four
3
4 ECLOs said ophthalmologists used them inconsistently. One consultant
5
6 agreed;
7

8
9
10
11 'At the moment I keep forgetting (laughs). I'm meant to send to
12
13 ECLO...He's not here for all of my clinics.' (Oph1)
14

15
16
17 Three quarters of the ophthalmologists (N=9) agreed it would be cost-effective
18
19 and would be better use of their time if ECLOs helped to complete the CVI (Part
20
21 3) and participate in the certification process;
22
23

24
25
26 'I'm fairly senseless when it comes to a list of benefits they are
27
28 entitled to, I think the ECLO is brilliant at explaining the other benefits
29
30 like tax, entitled to this and that, parking.' (Oph9)
31

32
33 '(Completing CVI) does eat into clinic time, someone else can do it.'
34
35 (Oph2)
36

37
38
39 The interviewed ophthalmologists identified difficulties in subjective
40
41 interpretation of visual field defect and fluctuating visual function as potential
42
43 reasons why the offer of certification may be delayed.
44
45
46

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48
49 'The whole issue itself is subjective... It depends on the clinician,
50
51 assessing the visual field and interpreting that.' (Oph10)
52
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1
2 One ophthalmologist described the difficulty of certifying people with AMD, as
3
4 with recent antiVEGF treatments visual improvement may be possible, and
5
6 fluctuating visual acuity levels can influence certification process.
7
8

9
10
11 'People with AMD with injections go up and down like a yo-yo.

12
13 Once they have reached certifiable level, a lot of time we couldn't
14
15 do anything and historically we would have offered certification.
16

17
18 Now they will have a few more injections, they get a little better.'

19
20 (Oph11)
21
22
23

24 Similarly, some of the Consultants responded highlighting that similar issues in
25
26 certifying patients with other eye conditions for example for patients with diabetic
27
28 retinopathy⁽⁹⁾.
29

30
31 'We know with diabetics when you've got some degree of visual
32
33 impairment you've also got peripheral field changes because of
34
35 the diabetic retinopathy and the lasering - there's a whole mass
36
37 of grey area in there.' (Oph6)
38
39
40
41

42 Most ophthalmologists stated they based their decisions on when to offer
43
44 certification on visual acuity: many did not consider a patient's functionality or
45
46 the level of support a patient might need. Half of the ophthalmologists (n=6)
47
48 admitted they relied only on quantitative visual function (acuity or field) when
49
50 deciding whether or not to offer certification, they did not consider a patients'
51
52 support needs.
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1
2 'making the decision, use visual acuity, based on visual fields, and then
3
4 work out if eligible (Interviewer: Do you think about support at home?)
5
6 You decide whether or not they are eligible and whether or not it will be of
7
8 benefit for them is a separate issue.' (Oph8)
9

10
11
12 Some of the ophthalmologists (n=4) took account of a patient's practical visual
13
14 needs when considering to offer certification.
15
16

17
18
19 '(If patients) highlight particular problems they are
20
21 having...problems with seeing dials for thermostats, looking for
22
23 instructions for things, could do with help regarding lighting even,
24
25 if they ever talk about safety issues like gas fires or cookers or
26
27 have burnt themselves I tend to worry more about safety...I think
28
29 of offering low vision support as a package.' (Oph1)
30
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35 Similar to the majority of the ophthalmologists, all three nurses interviewed
36
37 stated that visual function was a primary factor in their decision whether to
38
39 recommend certification.
40
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42

43
44 Consultants appeared more likely to offer certification at the end of their
45
46 treatment, they (n=5) often described how they regard certification as the 'final
47
48 stage' in the management of the eye condition;
49

50
51 'I think in practice (certification) does tend to coincide with an
52
53 acknowledgement that there's little more that we can offer them
54
55 medically...Certification can often form part of a process towards
56
57 the end of a period of medical care and so it often coincides with
58
59
60

1
2 their discharge from hospital or their discharge from a period of
3
4 follow-up.' (Oph5)
5
6

7
8 In contrast, patients very much regarded certification as a significant point in
9
10 their treatment, stating it was the beginning of a stage of acceptance of their
11
12 sight loss. The offer of certification was emotionally overwhelming for almost
13
14 every patient interviewed (n=41); the help they received at this time vastly
15
16 improved the quality of their lives.
17

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20
21 Interviewer: 'Has registration helped you?'

22
23 Pat26: 'Absolutely, 100%.'
24
25

26
27
28 The practical assistance that resulted from certified and registered was
29
30 valued most by patients;
31

32
33
34 'I faced my fear thinking I'd never walk in the dark anymore and
35
36 thanks to (SS), they've trained me to walk in the dark.' (Pat14)
37
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40
41 '(SS) issued me with bus pass, made me more mobile, fold up
42
43 white stick, recognition stick, helps an immense amount.' (Pat31)
44
45

46 Discussion

47
48 The aim of this research was to examine the inconsistent decline in the number
49
50 of certifications issued since the CVI was introduced in England in September
51
52 2005. Despite the ageing population and predicted increases in those with sight
53
54 loss⁽¹⁰⁾, there has been an inconsistent decline in both the number of
55
56 certifications and number of registrations. Between 2010/11 and 2011/12 there
57
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60

1
2 was a 4% *increase* in the number of certifications in England⁽¹⁰⁾ In contrast,
3
4 between 2008/09 and 2009/10 there was a 5% *decrease* in the number of
5
6 certifications.⁽¹¹⁾
7

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9
10 In addition the decline in new blind registrations at regional level reveals wide
11
12 variations in the numbers registered.⁽¹²⁾ The largest decline in new
13
14 registrations was observed in the East Midlands, where new blind registrations
15
16 decreased by 52%, while the smallest decline was in the North East - only 10%
17
18 (See Figure 1).⁽¹²⁾ Even in small geographical areas the number of CVIs and
19
20 associated registrations varied widely, e.g. in inner London new registrations fell
21
22 by 41% whereas in outer London the decrease was 24%.⁽¹²⁾ Reasons for the
23
24 inconsistent declines in certifications and registrations are poorly understood.⁽¹³⁾
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30
31 Interviews with ophthalmologists revealed they are often uncertain as to when to
32
33 offer certification. For some patients it is clearly evident when their eye sight
34
35 has reached the point to be certified but for others deciding when to certify is
36
37 more ambiguous. Research finds higher under-registration in patients with
38
39 treatable disease compared to those with untreatable disease.⁽¹⁴⁾ The
40
41 uncertainty of when to certify was also an issue for other eye conditions⁽⁹⁾ For
42
43 example, certifying patients with atrophic AMD also presents significant timing
44
45 difficulties.⁽¹⁵⁾ These patients often experience severe sight loss after discharge
46
47 but need to be referred back into the hospital eye service for certification when
48
49 their vision declines. Introducing these patients to the ECLO/social services
50
51 team before they are discharged will improve their access to relevant support
52
53 services.
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1
2 In addition, some ophthalmologists are unclear of the purpose of certification
3
4 which may affect when they offer it. Consultants may delay certifying patients as
5
6 they regard certification as the *end of a clinical process* and wait to certify
7
8 patients until they think they cannot offer any further medical treatments.
9

10
11 Related to the issue of *when* to offer certification is the reason for offering it: the
12
13 purpose of certification is to provide access to support for patients.⁽¹⁶⁾
14

15
16 Certification and registration are not simply medical processes but a significant
17
18 step in patients' adjusting and accepting of their sight-loss. Interviews with
19
20 patients revealed the issuing of certification is often viewed as the beginning of
21
22 a new phase and a gateway to much needed support. In contrast, many
23
24 ophthalmologists regard certification as the end of the process but this attitude
25
26 can lead to patients needing support left without it. Of the 46 patients
27
28 interviewed, 20 stated they would have liked to have been offered certification
29
30 earlier, to access support.
31
32

33
34
35 There was variation in the certification process in each of the three areas and
36
37 the process used by each consultant differed within hospitals. The DH
38
39 recommends the CVI be sent to the local social services department "within five
40
41 working days".⁽¹⁷⁾ Across the three areas, interviews with hospital and social
42
43 services staff and patients revealed that only very rarely were CVIs sent to
44
45 SSDs within five days. It was much more common for CVIs to take weeks or
46
47 months to be sent. Previous research also found that delays often occur when
48
49 CVIs are sent to SSDs.⁽¹⁸⁾ Each administrator (n=8) confirmed consultants can
50
51 'take a while' to return the CVI to their office. Another significant delay is sending
52
53 incomplete CVIs to SSDs; an unnecessary delay for patients waiting for support.
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1
2 These practices lengthen the C&R process, making it more complicated and
3
4 fraught for patients. In each of the three areas studied, there were examples of
5
6 good and bad practice and stories of both grateful and frustrated patients, thus a
7
8 good certification process is achievable in each department.
9

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12
13 A more holistic approach to eye health is needed; health professionals,
14
15 including registrars, ophthalmologists, optometrists and medical secretaries
16
17 should improve their awareness of when certification should be offered and how
18
19 certification benefits patients.⁽⁹⁾ Any additional time needed for CVI discussion in
20
21 clinic may not be readily available due to pressures on quantity (meeting
22
23 Referral to Treatment and other performance targets), therefore departments
24
25 should explore if others, such as optometrists or ECLOs, are better placed to
26
27 complete parts of the CVI. It should also be considered who is best placed to
28
29 send completed CVIs quickly - ECLOs or secretaries or a designated
30
31 administrator/team.
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40 Discussion

41
42 The certification of vision impairment is inconsistently offered by
43
44 ophthalmologists. The uncertainty of when to certify may be contributing to the
45
46 decline in certifications. Many ophthalmologists regard certification as the end
47
48 of a process instead of regarding it as a formal route to support.
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54 Patients have both positive and negative experiences of certification. When the
55
56 C&R processes 'work', patients access support within weeks, however often
57
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60

1
2 patients with vision impairment need and wish to access support before they are
3
4 offered certification.
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6

7
8
9 ECLOs play an important role in improving the C&R process, by making it more
10
11 efficient and improving the process for consultants. Ophthalmologists may wish
12
13 to consider their role beyond clinical care and utilise their skills better to offer the
14
15 appropriate support to their patients. Certification changes patients' lives;
16
17 ophthalmologists should acknowledge the significant role they play in helping
18
19 patients access support and improve their quality of life.
20
21

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27 TB wrote the initial draft. All authors revised the initial draft, FG revised the
28
29 subsequent drafts. TB wrote the final draft. TB is the guarantor. All authors
30
31 have full control of the content of the article.
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Contributorship Statement

B wrote the initial draft. All authors revised the initial draft, FG revised the subsequent drafts. TB wrote the final draft. TB is the guarantor. All authors have full control of the content of the article.

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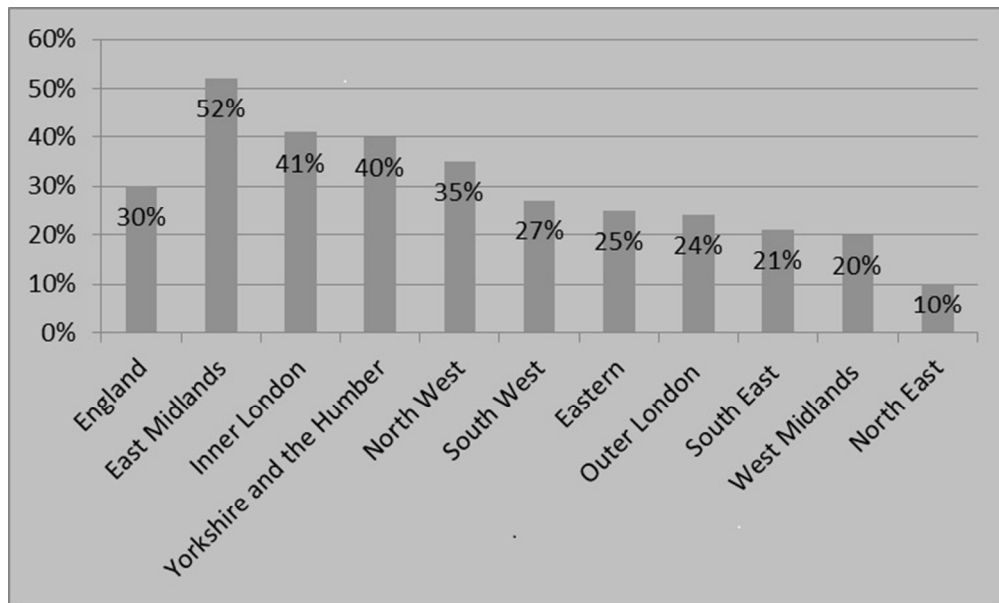


Figure 1: Decrease in new registrations by region 2003-2011(13)
197x118mm (96 x 96 DPI)

Review only



**Certification for vision impairment – perceptions, process
and practicalities**

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9

10 **Abstract**

11 **Objectives**

12 To explore the patient experience , and the role of ophthalmologists and other
13 health and social care professionals in the certification and registration
14 processes and examine the main barriers to the timely certification of patients.
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22 **Design**

23 Qualitative study.
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25

26 **Setting**

27 Telephone interviews with health and social care professionals and patients in
28 three areas in England.
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33 **Participants**

34 43 health and social care professionals who are part of the certification or
35 registration process. 46 patients certified as blind or partially sighted within the
36 previous 12 months.
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42 **Results**

43 Certification and registration is life changing for patients and the help they
44 receive can substantially improve their lives. Despite this, ophthalmologists often
45 found it difficult to ascertain when it is appropriate to certify patients, particularly
46 for people with long term conditions. Ophthalmologists varied in their
47 comprehension of the certification process and many regarded certification as
48 the 'final stage' in treatment. Administrative procedures meant the process of
49 certification and registration could vary from a few weeks to many months. The
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2 avoidable delays in completing certification can be helped by Eye Clinic Liaison
3
4 Officers (ECLO).
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7

8 **Conclusion**

9
10 A better understanding of the certification and registration processes can help
11
12 drive up standards of support and service provision for blind and partially
13
14 sighted people. Better education and support is required for ophthalmologists in
15
16 recognising the importance of timely referral for rehabilitative support through
17
18 certification and registration. ECLOs can improve the process of certification and
19
20 registration. Finally, better education is needed for patients on the benefits of
21
22 certification and registration.
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30 **Article summary**

31 **Strengths and limitations of this study**

- 32 • This is the first study to focus on all those involved in the certification and
33 registration processes – various health and social care professionals as
34 well as patients.
35
- 36 • The research design includes areas with differing rates of certification
37 demonstrating and show the opportunities to improve practice to ensure
38 the certification process is more consistent.
39
- 40 • The number of participants was small, so findings should be considered
41 indicative, however, saturation/repetition levels were reached in all three
42 interview groups, suggesting confidence in the findings.
43
- 44 • All patients were certified, further research including this group is needed
45 to explore why these patients are declining certification.
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Introduction (count 3863)

The Certificate of Vision Impairment (CVI) was introduced in England in September 2005 and in Wales in April 2007. Its purpose is to provide a reliable route for someone with sight loss to be brought to the attention of social care. Certification and registration are two separate processes: an ophthalmologist completes the CVI based on existing visual function criteria and support needs. Patients can be certified as sight impaired (SI – formerly ‘partial sighted’) or severe sight impairment (SSI – formerly ‘blind’) (see Table 1 for an overview of criteria). Local Social Service Department (SSDs) then initiate the registration process upon receipt of the completed CVI. Registration is voluntary; as such, SSDs ask patients if they would like to be registered. When patients are certified as either blind/ SSI or partially sighted/ SI they are eligible for a range of support including: financial concessions (e.g. tax breaks, free NHS sight tests), welfare benefits and the loan of aids and equipment. Data collected by CVI also provides valuable epidemiological information on the prevalence of sight loss.

There is concern that the 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. The indicator aims to better target financial resources to improve early detection of the three major causes of sight loss (glaucoma, age related macular degeneration (AMD) and diabetic retinopathy).⁽²⁾ As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is therefore important that the number and information in CVIs and subsequent registrations reflect accurate levels of need.

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2
3
4 However, evidence shows the numbers of certifications and registrations have
5
6 varied considerably over time and in many cases numbers have declined. This
7
8 is in addition to the increasing prevalence of sight loss accompanied by the
9
10 ageing population in the UK.⁽³⁾ In the 12-months from April 2008 to March 2009,
11
12 the number of certifications was 23,773, a marked increase on the previous 12-
13
14 months.⁽⁴⁾ Certifications then decreased in 2009/2010 and 2010/2011, before
15
16 rising to 23,616 in 2011/2012.⁽⁵⁾ Similarly, the triennial survey of people
17
18 registered with Councils with Adult Social Services Responsibilities in England
19
20 as being blind or partially sighted showed an overall decreased in new
21
22 registrations in 2010/2011 compared with 2008/2009.⁽⁶⁾
23
24
25 Perhaps even more noteworthy is the large geographical variation found to exist
26
27 in rates of blindness and sight impairment, with an 11-fold difference found to
28
29 exist between the highest and lowest rate, according to 2008/2009 data.⁽⁷⁾
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This paper examines the certification and registration processes in hospitals and
social services departments and identifies the main barriers, delays and
enablers. It also explores the significance of certification and registration for
patients.

48 **Materials and Methods**

49 **Sample**

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51
52 A qualitative study was designed based on semi-structured telephone interviews
53
54 of clinical and social care providers and service users.⁽⁸⁾ The study was
55
56 undertaken in three separate areas of England identified as having fluctuating
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1 rates of sight loss certification between 2006 and 2011⁽⁹⁾. NHS research ethics
2 approval was secured for each hospital site. 43 health and social care
3 professionals and 46 patients were interviewed by an experienced interviewer
4 (See Table 2). The term 'patient' is used throughout the report instead of 'client'
5 or 'service user'. This is for continuity and clarity.
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15 Hospital and social services staff interviews were with: ophthalmologists,
16 optometrists and nurses working in ophthalmology departments, social services
17 rehabilitation officers, social services administrators, Eye Clinic Liaison Officers
18 (ECLOs) and hospital administration staff (See Table 2). All ophthalmologists
19 interviewed were consultants except one trainee registrar. Of the eleven
20 consultants interviewed, two were qualified for less than two years; the
21 remaining nine consultants were qualified for over ten years. Hospital
22 interviewees were identified by their head of department. Social care
23 interviewees were identified by ECLOs and a representative from local visual
24 impairment forums.
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40 Patients with vision impairment (and two primary carers) were interviewed.
41 Patients were identified by ECLOs or social services. As patients' recollections
42 of medical consultations can be poor within relatively short periods after a
43 consultation,⁽¹⁰⁾ only patients certified within the last year were interviewed.
44 Interviewees included patients certified and registered (n = 32), those certified
45 only (n = 5) and those certified but unsure if they were registered (n = 9). A
46 sampling frame was created to direct patient recruitment. The sample frame
47 aimed to ensure a diversity of patients in terms of age, ethnicity, gender and
48 income.⁽¹¹⁾
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Fifteen per cent (n = 7) of patients classified themselves as Asian, seven per cent (n = 3) Black and the remainder White (n = 36). Forty-one per cent (n = 19) stated they had an income below £15,000/annum. Sixty-three per cent (n = 29) of patients were over 60 years of age and fifty-seven per cent (n = 26) were women. Compared to national CVI figures, Black and Minority Ethnic patients were over represented and the gender characteristics of the sample were comparable with national demographics.^(12, 13)

21 Interviews and Data Analysis

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Semi-structured telephone interviews were conducted with individual participants at a time that suited the interviewees. Interviews lasted on average for 15 minutes; although some were substantially longer (patient interviews ranged from 8-40 minutes, interviews with health/social care professionals ranged from 6-50 minutes). Topics for discussion were predefined by the consensus of the research steering group. Interviews with professionals sought to explore: 1) knowledge and understanding of certification and registration; 2) local pathways and the factors affecting certification and registration; 3) the role of different health and social care professionals; and 4) the future of certification and registration and suggestions for improvement. Interviews with patients explored: 1) experiences of being certified and registered; 2) the impact of certification and registration on the lives of patients and their families; 3) and suggestions for improvement (See Box 1-3).

CVI process / when you recommend certification
Purpose of CVI
What you tell patients about CVI
Barriers to approaching patients
Length to complete CVI
Knowledge of benefits of being certified

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Reasons for decline Improvements

Box 1: Themes in ophthalmology/optometrist/nurse questions

CVI process Length from receiving CVI to sending to social services Purpose of CVI Improvements
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Box 2: Themes in administrators/ ECLO questions

Experiences of being certified and registered, length to complete Access to support before certification

Box 3: Themes in patient questions

Interview questions acted as a guide and additional information was also gleaned.

All interviews were recorded, transcribed and analysed using thematic analysis.

A list of deductive codes was initially created; inductive codes emerged during the second level of the thematic analysis.^(14,15,16)

The findings are illustrated with extracts from the interviews. Extracts are referenced with the type of interviewee and interview number – patient (Pat); ophthalmologist (Ophth); secretary/administrator (Adm); nurse (Nur); optometrist (Optom); Eye Clinic Liaison Officer (ECLO) social services staff (managers, rehabilitation officers, administrators) (SS).

It was observed that the terms 'certification' and 'registration' were used incorrectly and inconsistently by most interviewees; hence these terms were amended in the text to provide clarity.

Results

The research findings are grouped into overarching themes. Despite the differences in size, location and demography of the three areas, there was considerable consistency in the findings. There were, however, local variations in the certification and registration processes.

Knowledge and awareness of the purpose and benefits of certification and registration

Many health professionals were poorly informed about the purpose and benefits of certification and registration. Almost every health professional was unaware there was a difference between certification and registration. The terms 'certified' and 'registered' were interchanged throughout all interviews. Most health professionals assumed registration happened automatically once a patient was certified at the hospital.

'That's really weird. I thought if we certified the patients we automatically registered them with social services. I'm really surprised to hear that.' (Nur2)

Consequently, only a small number of health professionals were aware of what SSDs offered to certified and registered patients;

'(SS provide) enormous echelons of help, home visits, advice about lighting, advice about managing in home when you've got visual impairment, enormous levels of support that you don't need to be registered to get that support. Great to have ECLO to access this cause that's their expertise.' (Ophth6)

Uncertainty when to certify the patient

The point at which certification was offered to patients varied between clinicians. The difference was less a geographic trend and more related to the individual clinician's approach.

Ophthalmologists identified difficulties in subjective interpretation of visual field defect and fluctuating visual function as potential reasons why the offer of certification may be inconsistent or delayed. Ophthalmologists also highlighted the impact of recent advancements in treatment on the decision of when to certify a patient.

'The whole issue itself is subjective... It depends on the clinician, assessing the visual field and interpreting that.' (Oph10)

'People with AMD with injections go up and down... Once they have reached certifiable level, a lot of time we couldn't do anything and historically we would have offered certification. Now they will have a few more injections, they get a little better.'

(Oph11)

Most ophthalmologists stated that they based their decisions on *when* to offer certification primarily on visual acuity; they did not consider the patient's functionality or the level of support they might need. Half of the ophthalmologists (n=6) reported relying solely on quantitative visual function (i.e. acuity or visual field).

1
2
3 In contrast, almost all optometrists and nurses interviewed considered a
4
5 patient's functionality when deciding whether or not to recommend certification;
6
7

8
9 'I don't look at it from the medical point of view rather from the
10
11 social point of view. I do try to ask everybody who would fit the
12
13 criteria and I probably try to engage more the people maybe I
14
15 think would benefit from being registered, someone by
16
17 themselves, could do with help from social services.' (Nur2)
18
19

20 21 22 **Certification as the end of the process, not a route to services** 23

24
25 Approximately half of the ophthalmologists (n=5) regarded certification as the
26
27 'final stage' in the management of a patient's condition, only offered to the
28
29 patient at the *end* of their treatment.
30
31

32
33 'I think in practice (certification) does tend to coincide with an
34
35 acknowledgement that there's little more that we can offer them
36
37 medically...Certification can often form part of a process towards
38
39 the end of a period of medical care and so it often coincides with
40
41 their discharge from hospital or their discharge from a period of
42
43 follow-up.' (Oph5).
44
45
46
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48

49
50 In contrast, patients very much regarded certification as a significant point in
51
52 their treatment, stating it was the beginning of a stage of acceptance of their
53
54 sight loss. The offer of certification was emotionally overwhelming for almost
55
56 every patient interviewed (n=41); the help they received at this time vastly
57
58 improved the quality of their lives.
59
60

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2
3
4 Interviewer: 'Has registration helped you?'

5
6 'Absolutely, 100%.' (Pat26)
7
8
9

10 **Administrative barriers to certification and registration**

11
12 The length of time to complete the certification and registration process varied
13 within each area and across the three sites. Patients reported the length of time
14 for them to go through certification and registration ranged from a few weeks to
15 close to one year.
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24
25 'It took quite a while, and for (hospital) to send out information
26 like CVI and all that.' (Pat25)
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31
32 'SS was a long time getting the information from the hospital...My
33 son and daughter- in-law called them because no one contacted
34 us.' (Pat26)
35
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40
41 Social services staff also reported variability in the length of time it took for CVIs
42 to be sent to them, a finding confirmed by hospital administrative staff. Hospital
43 workload and delays in obtaining authorisation for the CVI were cited as key
44 barriers.
45
46
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51
52 'Sometimes (CVIs) are there for a while, sometimes varies.

53
54 Another consultant who gets a lot, he has a quick turnaround, he
55 fills out the bulk of them, get one day and then a day or two after
56
57
58
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1
2 that...Can sit on desks longer if they are away, week or a bit
3
4 longer.' (Adm4)
5
6
7

8
9 Delays also occurred as a result of incomplete CVIs being sent to SSDs. One
10
11 SS interviewee estimated half of the CVIs they receive have an incorrect or
12
13 missing telephone number and this delayed the registration process.
14

15
16
17 'The ophthalmologist hasn't indicated whether the patient is
18
19 considered SI or SSI or has omitted to sign it or a page could be
20
21 missing altogether. When this happens we have to send the CVI
22
23 back with a covering letter which delays disability registration and
24
25 can delay services for the patient.' (SS5)
26
27

28
29
30
31 An additional practice that unnecessarily delays sending certifications to SS is
32
33 waiting to send CVIs in batches. All SS staff (n=12) stated they received CVIs
34
35 in batches. Patients also reported variations in the length of time it took social
36
37 services to contact and/or visit them. This was confirmed by interviews with
38
39 social services staff.
40

41
42 'Apparently they were meant to put me in touch. I've been on a
43
44 waiting list for nearly 4 months and nobody's got in touch with
45
46 me...I'm still waiting; I'm still on a list.' (Pat42)
47

48
49 'Sensory team used to be part of bigger team that had two admin
50
51 workers, did have bigger team, now have part-time rehab, no
52
53 admin, manager not in the building, massive change.' (SS6)
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1
2 There were repercussions of these delays, close to half (20/46 patients,
3
4 43%) stated they would have liked to have been offered certification
5
6 earlier, to access support. The purpose of the CVI, to prompt access to
7
8 holistic low vision and sensory support, is much valued by patients and
9
10 many would benefit from being offered or receiving this support as early
11
12 as possible.
13

14 15 16 17 18 **The role of clinic support staff and the ECLO**

19
20 Each hospital eye clinic had an ECLO in post but the role of the ECLO in the
21
22 certification and registration process differed in each hospital. The function of
23
24 the ECLO was dictated largely by ophthalmologists' perception of the ECLO's
25
26 role.
27

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29
30
31 The presence of an ECLO was viewed as beneficial by all patients and the
32
33 majority of staff. Most ophthalmologists (N=9) agreed it was more cost-effective
34
35 and a better use of their time if ECLOs helped to complete the CVI and
36
37 participate in the certification process. Although the ECLOs said they were often
38
39 used inconsistently by ophthalmologists.
40
41

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43
44
45 'I must say that ECLO was brilliant. She talked us through what
46
47 was going to happen, what we had to do, literally I didn't do much
48
49 after that... I literally came out of the door and met ECLO, I'm
50
51 glad she was there because you come out and you think right?
52
53 What now? What does it mean? What do I do? How do I cope?
54
55 And she was there. That made a huge difference to me....
56
57 ECLO is the most wonderful person.' (Pat23)
58
59
60

1
2
3
4 'ECLO offered help...gave me time to think about it...and I
5
6 needed time...she was very sympathetic and did her job
7
8 beautifully.' (Pat2)
9

10
11
12
13 'Biggest positive for us has been the ECLO - irons out difficulties
14
15 in liaising with different agencies and informing the patients about
16
17 the benefits and the sources of help they can get. Made a big
18
19 difference in my practice.' (Oph10)
20
21
22
23

24 **The patient benefit of certification and registration**

25
26 The certification and registration processes were an emotionally overwhelming
27
28 time for almost all patients and they described the help they receive at this time
29
30 as substantially improving their lives. The support offered as a result of being
31
32 certified and registered changed lives and made patients more confident.
33
34
35

36
37 'I used to sit crying a great deal before these things started
38
39 feeding through to me, from social services. I have a certain
40
41 amount of confidence back...I lost all of that at one time.' (Pat37)
42
43

44
45 'It's all about confidence, my confidence went to zero. The more
46
47 things you can do for yourself, more confident with, makes your
48
49 life better.' (Pat23)
50

51
52 The practical assistance that resulted from certified and registered was
53
54 also valued by patients;
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56
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1
2 'I faced my fear thinking I'd never walk in the dark anymore and
3
4 thanks to social services, they've trained me to walk in the dark.'
5
6 (Pat14)
7
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9

10
11 '[social services] issued me with bus pass, made me more
12
13 mobile, fold up white stick, recognition stick, helps an immense
14
15 amount.' (Pat31)
16
17
18

19 **Improving the certification and registration process**

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21
22 Suggestions to improve certification and registration included initiatives to
23
24 improve health professionals' level of awareness about the benefits of being
25
26 certified and registered. In one area studied, the SSD worked collaboratively
27
28 with consultants to improve patients' experiences of certification and
29
30 registration.
31
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36 Greater use of the ECLO was also a common theme suggested to improve the
37
38 service. In one area social services said the number of incomplete forms
39
40 decreased since an ECLO was employed, stating that previously 10-15% CVIs
41
42 received would be sent back as they were incomplete. Ophthalmologists also
43
44 commented on the difference ECLOs make to providing accurate and detailed
45
46 information to patients.
47
48
49

50
51 'I'm happy to provide what support I can but I'd readily agree that
52
53 I don't have the time and I don't think I'm as good as the ECLO
54
55 because I think most of us assume what patients want and need.
56
57 We spend our lives making decisions for them with our expertise
58
59
60

1
2 and experience...I don't have the time on the day...and the
3
4 ECLO does and so wonderfully.' (Oph1)
5
6
7

8
9 In many areas the third sector played a key role in providing support to patients
10 who were extremely grateful for this assistance. Where support from SSDs took
11 longer to arrive, the role of the voluntary sector was invaluable.
12
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14
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16
17
18 'We contacted Action for Blind and they helped filled out forms
19 with... I've learned more from RNIB/Action than anyone else.'
20
21 (Pat39)
22
23

24 '...Age Concern was brilliant...people would be in a complete
25 panic quite honestly if you were on your own and you had to
26 come home on your own and then you suddenly got to cope with
27 all this stuff.' (Pat5)
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35 Discussion

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38 The current study examined the process of sight loss certification and
39 registration in three areas in England in order to identify potential barriers and
40 delays in timely certification and registration and possible options for improving
41 the service.
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50 Despite the ageing population and predicted increases in those with sight loss,
51 ⁽¹⁷⁾ the numbers of people certified each year with sight loss have declined in
52 recent years, with the exception of the 12-months from April 2011 to March
53 2012, which showed a marked increase on previous years. A significant
54 geographical variation also exists across England in certification rates of
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1
2 blindness and sight impairment. ⁽⁷⁾ These variations in rates of certification and
3
4 registration have been attributed to differences in the level at which certification
5
6 is being offered, care pathways, perceived value of certification and registration
7
8 and payment for CVI forms. However, this information is largely anecdotal and
9
10 this is the only study to directly explore the sight loss certification and
11
12 registration pathways.
13

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16
17 In our study, ophthalmologists revealed they are often uncertain as to when to
18
19 offer certification. For some patients it is clearly evident when their eye sight
20
21 has reached the point to be certified but for others deciding when to certify is
22
23 more ambiguous. Research finds higher under-registration in patients with
24
25 treatable disease compared to those with untreatable disease. ⁽¹⁸⁾ The
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27 uncertainty of when to certify was also an issue for other eye conditions. ⁽¹⁹⁾ For
28
29 example, certifying patients with atrophic AMD also presents significant timing
30
31 difficulties. ⁽²⁰⁾ These patients often experience severe sight loss after discharge
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33 but need to be referred back into the hospital eye service for certification when
34
35 their vision declines. Introducing these patients to the ECLO/social services
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37 team before they are discharged will improve their access to relevant support
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39 services.
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47 Some ophthalmologists are unclear of the purpose of certification which may
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49 affect when they offer it to patients. Consultants may delay certifying patients as
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51 they regard certification as the *end of a clinical process* and wait to certify
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53 patients until they think they cannot offer any further medical treatments.
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56 Related to the issue of *when* to offer certification is the reason for offering it: the
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58 purpose of certification is to provide access to support for patients. Certification
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1
2 and registration are not simply medical processes but a significant step in
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4 patients' adjusting and accepting of their sight-loss. Interviews with patients
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6 revealed the issuing of certification is often viewed as the beginning of a new
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8 phase and a gateway to much needed support. In contrast, many
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10 ophthalmologists regard certification as the end of the process but this attitude
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12 can lead to patients needing support left without it.
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17 There was variation in the certification process in each of the three areas and
18
19 the process used by each consultant differed within hospitals. The Department
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21 of Health recommends the CVI be sent to the local social services department
22
23 "within five working days".⁽²¹⁾ Across the three areas, interviews with hospital
24
25 and social services staff and patients revealed that only very rarely were CVIs
26
27 sent to SSDs within five days. It was much more common for CVIs to take
28
29 weeks or months to be sent to SSDs. Previous research also found that delays
30
31 often occur when CVIs are sent to SSDs.⁽²²⁾ Each administrator (n=8) confirmed
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33 consultants can 'take a while' to return the CVI to their office. Another significant
34
35 delay is sending incomplete CVIs to SSDs; an unnecessary delay for patients
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37 waiting for support.
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44 These practices lengthen the certification and registration processes, making it
45
46 more complicated and unnecessarily fraught for patients. In each of the three
47
48 areas studied, there were examples of good and bad practice and stories of
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50 both grateful and frustrated patients, thus a good certification process is
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52 achievable in every department.
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2 A more holistic approach to eye health is needed; health professionals,
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4 including registrars, ophthalmologists, optometrists and medical secretaries
5
6 should improve their awareness of when certification should be offered and how
7
8 certification benefits patients. Any additional time needed for CVI discussion in
9
10 clinic may not be readily available due to pressures on quantity (e.g. meeting
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12 Referral to Treatment guidance and other performance targets), therefore
13
14 departments should explore if others, such as optometrists or ECLOs, are better
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16 placed to complete parts of the CVI. It should also be considered who is best
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18 placed to send completed CVIs quickly - ECLOs or secretaries or a designated
19
20 administrator/team.
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26 Understanding how certification and registration operates at a local level will
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28 help commissioners and clinicians better understand the reasons for the
29
30 variations in certification and registration rates and take steps to address the
31
32 inconsistencies. Quantifying the barriers to timely certification and registration,
33
34 and benchmarking against best practice will also help ensure the correct level of
35
36 service provision, enabling health and social care commissioners to deliver
37
38 consistent, high quality services based on an accurate assessment of need.
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44 **Limitations of research**

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46 The interviews include only those who were certified, further research could
47
48 examine patients who are eligible for certification but who either decline to be
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50 certified or are not offered it by clinicians. In addition, as the research used
51
52 qualitative methods, we were able to interview a limited number of health and
53
54 social care professionals. Further research is needed to examine a wider range
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56 of departments over a longer period of time. Research is also needed to
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1
2 understand the impact of the Disability Living Allowance assessment policies
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4 and whether there is any pressure on ophthalmologists not to certify patients.
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10 TB wrote the initial draft. All authors revised the initial draft, FG revised the
11
12 subsequent drafts. TB and SL wrote the final draft. TB is the guarantor. All
13
14 authors have full control of the content of the article.
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Competing interests:

None.

Data Sharing Statement: We will not make any additional unpublished data available.

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Table 1 Definitions of SI and SSI

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To be registered as severely sight impaired (blind), sight has to fall into one of the following categories, while wearing any glasses or contact lenses that one may need:

- 46
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- visual acuity of less than 3 / 60 with a full visual field
 - visual acuity between 3 / 60 and 6 / 60 with a severe reduction of field of vision, such as tunnel vision
 - visual acuity of 6 / 60 or above but with a very reduced field of vision, especially if a lot of sight is missing in the lower part of the field.

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To be registered as sight impaired (partially sighted) sight has to fall into one of the following categories, while wearing any glasses or contact lenses that one may need:

- 57
58
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60
- visual acuity of 3 / 60 to 6 / 60 with a full field of vision

- visual acuity of up to 6 / 24 with a moderate reduction of field of vision or with a central part of vision that is cloudy or blurry
- visual acuity of up to 6 / 18 if a large part of your field of vision, for example a whole half of your vision, is missing or a lot of your peripheral vision is missing.⁽¹⁾

Further information on CVI can be found on the Royal College of Ophthalmology webpage: <[http://www.rcophth.ac.uk/page.asp?section=851&search=>](http://www.rcophth.ac.uk/page.asp?section=851&search=).

Table 2. Number of interviews by type and area

Area A	Area B	Area C
10 Hospital Staff	13 Hospital staff	8 Hospital staff
1 Social Services	9 Social Services	2 Social services
15 Patients	15 Patients	16 Patients
Total: 26	Total: 37	Total: 26

Title:

Certification for vision impairment – perceptions, process and practicalities

Keywords:

Blindness; Visually Impaired Persons; Certification of Vision Impairment;
Professional-Patient Relations

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Abstract (255)

Objectives

To explore the patient experience of sight loss evaluate the processes for certification and registration, of vision impairment (CVI) in clinical practice, examine and the role of ophthalmologists and other health and social care professionals in the certification and registration processes and processes and examine s and the main barriers and causes for delays and to the timely certification enablers of patients.

Design

Qualitative study.

Setting

Telephone interviews were held with health and social care professionals and patients in three areas from three sites in England examining their experiences of the certification and registration processes.

Participants

43 health and social care professionals who are part of the certification or registration process, and 46 patients certified as blind or partially sighted within the previous 12 months.

Results

The number of certificates of vision impairment (CVI) is falling inconsistently across England. Certification and registration is life changing for patients and the help they receive can substantially improve their lives. Despite this,

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~~ophthalmologists often found it difficult to ascertain when it is appropriate to certify patients, particularly for people with long term conditions. The process of being certified is separate from being registered for vision impairment. Deciding at what point a patient should be certified can be uncertain and eOphthalmologists varied in their comprehension of the certification process and many regarded certification as the 'final stage' in treatment. Administrative procedures meant the process of length of time to complete the certification and registration process could varied from a few weeks to many months. The avoidable delays in completing and forwarding of the CVIs to social services certification can be helped by Eye Clinic Liaison Officers (ECLO).~~

Conclusion

~~A better understanding of the certification and registration processes can help drive up standards of support and service provision for blind and partially sighted people. Better education and support is required for ophthalmologists in recognising the importance of timely referral for rehabilitative support through certification and registration. ECLOs can improve the process of certification and registration. Finally, better education is needed for patients on the benefits of certification and registration.~~

~~Visual function is the key aspect to consider when offering a patient CVI. Being certified with vision impairment is a significant process for patients that can substantially change their lives. Eye Clinic Liaison Officers can improve the process of being certified and registered.~~

Article summary

Strengths and limitations of this study

- This is the first study to focus on all those involved in the certification and registration processes – various health and social care professionals as well as patients.
- The research design includes areas with differing rates of certification demonstrating and show the opportunities to improve practice to ensure the certification process is more consistent.
- The number of participants was small, so findings should be considered indicative, however, saturation/repetition levels were reached in all three interview groups, suggesting confidence in the findings.
- All patients were certified, further research including this group is needed to explore why these patients are declining certification.

Funding statement

The Royal National Institute of Blind People funded this research. The funders contributed to the design of the research.

Introduction [\(count 3863\)](#)

The Certificate of Vision Impairment (CVI) was introduced in England in September 2005 and in Wales in April 2007. Its purpose is to provide a reliable route for someone with sight loss to be brought to the attention of social care. Certification and registration are two separate processes: an ophthalmologist completes the CVI based on existing visual function criteria and support needs. Patients can be certified as sight impaired (SI – formerly ‘partial sighted’) or severe sight impairment (SSI – formerly ‘blind’). [\(see Table 1 for an overview of criteria\)](#). Local Social Service Department (SSDs) then initiate the registration process upon receipt of the completed CVI. Registration is ~~a voluntary choice;~~ as such, SSDs ask patients if they would like to be registered.

[When patients are certified as either blind/ SSI or partially sighted/ SI the are eligible for a range of support including: financial concessions \(e.g. tax breaks, free NHS sight tests\), welfare benefits and the loan of aids and equipment.](#)

[Data collected by CVI also provides valuable epidemiological information on the prevalence of sight loss.](#)

[There is concern that the 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. The indicator aims to better target financial resources to improve early detection of the three major causes of sight loss \(glaucoma, age related macular degeneration \(AMD\) and diabetic retinopathy\).^{\(2\)} As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is](#)

1
2 therefore important that the number and information in CVIs and subsequent
3
4 registrations reflect accurate levels of need.
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9 The prevalence of sight loss increases with age. The ageing population in the
10 UK would therefore be expected to result in an increase in sight loss⁽⁴⁾.

11
12 However, evidence shows ~~t~~The numbers of certifications and registrations have
13 varied~~show, however, considerable~~ variation over time and in many cases
14 numbers have declined. This is in addition to the increasing prevalence of sight
15 loss accompanied by the ageing population in the UK.⁽³⁾ In the 12-months from
16 April 2008 to March 2009, the number of certifications was 23,773, a marked
17 increase on the previous 12-months.⁽⁴⁾ Certifications then decreased in
18 2009/2010 and 2010/2011, before rising to 23,616 in 2011/2012.⁽⁵⁾ Similarly,
19 the triennial survey of people registered with Councils with Adult Social Services
20 Responsibilities in England as being blind or partially sighted showed an overall
21 decreased in new registrations in 2010/2011 compared with 2008/2009.⁽⁶⁾
22 Perhaps even more noteworthy is the large geographical variation found to exist
23 in rates of blindness and sight impairment, with an 11-fold difference found to
24 exist between the highest and lowest rate, according to 2008/2009 data.⁽⁷⁾
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44 There has been an inconsistent decline in both the number of certifications and
45 number of registrations in many areas of England, though the ageing population
46 would suggest an increase in certifications.⁽⁴⁾ ~~There~~ There is also concern that
47 the number of CVIs should be is as accurate as possible as the Public Health
48 Outcomes Framework in England, introduced in 2013, includes an indicator for
49 preventable sight loss for the first time. ~~The~~ indicator aims to better target
50 financial resources to improve early detection of the three major causes of sight
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loss (glaucoma, age related macular degeneration (AMD) and diabetic retinopathy).⁽²⁾ As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is therefore important that the number and information in CVIs and subsequent registrations reflect accurate levels of need.

This paper examines the certification and registration processes in hospitals and social services departments and identifies the main barriers, delays and enablers ~~with particular emphasis on the role of ophthalmologists~~. It also explores the significance of certification and registration for patients.

Materials and Methods

Sample

A qualitative study was designed based on semi-structured telephone interviews of clinical and social care providers and service users.^(8,4) The study was undertaken at in three separate areas of England identified as having fluctuating rates of sight loss inconsistent CVI certification registration rates between 2006 and 2011⁽⁹⁹⁾. NHS research ethics approval was secured for each hospital site. 43 health and social care professionals and 46 patients were interviewed by an experienced interviewer (See Table 24). The term 'patient' is used throughout the report instead of 'client' or 'service user'. This is for continuity and clarity.

The interviews with hospital and social services staff interviews were included interviews with: ophthalmologists, optometrists and, nurses working in ophthalmology departments, social services rehabilitation officers, social

1
2 services administrators, Eye Clinic Liaison Officers (ECLOs) and hospital
3
4 administration staff (See Table 2). These interviewed included; ophthalmologists
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6 (12), ECLOs (4), Nurses (3), Optometrists (4) and Administrators (8). All
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8 ophthalmologists interviewed were consultants except one trainee registrar. Of
9
10 the eleven consultants interviewed, two were qualified for less than two years;
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12 the remaining nine consultants were qualified for over ten years. Hospital
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14 interviewees were identified by their head of department. Social care
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16 interviewees were identified by ECLOs and a representative from local the
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18 London Visual Impairment Forums.
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24 Patients with vision impairment (and two primary carers) were interviewed.
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26 Patients were identified by ECLOs or social services. As patients' recollections
27
28 of medical consultations can be poor within relatively short periods after a
29
30 consultation,⁽¹⁰⁴⁾ only patients certified within the last year were interviewed.
31
32 Interviewees included patients certified and registered (n = 32), and those
33
34 certified only certified (n = 5) and those certified but unsure if they were
35
36 registered (n = 9). A sampling frame was created to direct patient recruitment.
37
38 The sample frame aimed to ensure a diversity of patients in terms of age,
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40 ethnicity, gender and income variation.⁽¹¹⁵⁾
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46 Fifteen per cent One fifth (n = 711) of patients identified classified themselves as
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48 Asian, seven per cent (n = 3) Black and the remainder White (n = 36). Forty-
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50 one per cent (n = 19) 41% stated they had an income below £15,000/annum.
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52 Sixty-three per cent (n = 29) of patients 63% were over 60 years of age and fifty-
53
54 seven per cent (n = 26) out of 46 interviews were with women. Compared to
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56 national CVI figures, Black and Minority Ethnic patients were over represented
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and ~~t~~the gender characteristics of the sample were comparable with national demographics.^(12, 13)

Interviews and Data Analysis

~~Semi-structured T~~telephone interviews were ~~arranged-conducted~~ with individual participant's ~~agreement~~ at a time that suited the interviewees. Interviews lasted on average for 15 ~~minutes,~~minutes; although some were substantially longer (~~p~~Patients ~~interviews~~ ranged ~~from~~ 8-40 minutes, ~~interviews with~~ health/social care professionals ~~_ranged from~~ 6-50 minutes). ~~The interviews were based on~~ Topics for discussion were ~~semi-structured questions that were predefined~~ predefined by the consensus of the research ~~steering group~~team. Interviews ~~questions with professionals sought to explore: 1) knowledge and understanding of certification and registration; 2) local pathways and the factors affecting certification and registration; 3) the role of different health and social care professionals; and 4) the future of certification and registration and suggestions for improvement.~~ Interviews with patients explored: 1) experiences of being certified and registered; 2) the impact of certification and registration on the lives of patients and their families; 3) and suggestions for improvement (See Box 1-3).

CVI process / when you recommend certification
 Purpose of CVI
 What you tell patients about CVI
 Barriers to approaching patients
 Length to complete CVI
 Knowledge of benefits of being certified
 Reasons for decline
 Improvements

Box 1: Themes in ophthalmology/optometrist/nurse questions

CVI process
 Length from receiving CVI to sending to social services
 Purpose of CVI

Improvements

Box 2: Themes in administrators/ ECLO questions

Experiences of being certified and registered, length to complete

Access to support before certification
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Box 3: Themes in patient questions

Interview questions acted as a guide and additional information was also gleaned.

All interviews were recorded, transcribed and analysed using thematic analysis.

A list of deductive codes was initially created; inductive codes emerged during the second level of the thematic analysis. [\(14,15,16,7,8\)](#)

~~The findings are illustrated with extracts from the interviews. Extracts are referenced with the type of interviewee and interview number. The interviewees are described using a number and labels – patient (Pat); ophthalmologist (Ophth); secretaryies and /administrators (Adm); nurse (Nur); optometrist (Optom); Eye Clinic Liaison Officer (ECLO) and social services staff – (managers, rehabilitation officers, administrators) (SS).~~

It was observed that the terms ‘certification’ and ‘registration’ were used incorrectly and inconsistently by most interviewees; hence these terms were amended in the text to provide clarity. ~~In addition, the term ‘patient’ is used throughout the report instead of ‘client’ or ‘service user’. This is for continuity and clarity.~~

Results

The research findings are grouped into overarching themes. Despite the differences in size, location and demography of the three areas, there was considerable consistency in the findings. There were, however, local variations in subtle differences the certification and registration processes, in process for certification in the three areas

Knowledge and awareness of the purpose and benefits of certification and registration

Many health professionals were poorly informed about the purpose and benefits of certification and registration. Almost every health professional was unaware there was a difference between certification and registration. The terms 'certified' and 'registered' were interchanged throughout all interviews. Most health professionals assumed registration happened automatically once a patient was certified at the hospital.

'That's really weird. I thought if we certified the patients we automatically registered them with social services. I'm really surprised to hear that.' (Nur2)

Consequently, only a small number of health professionals were aware of what SSDs offered to certified and registered patients;

'(SS provide) enormous echelons of help, home visits, advice about lighting, advice about managing in home when you've got visual impairment, enormous levels of support that you don't

1
2 need to be registered to get that support. Great to have ECLO to
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4 access this cause that's their expertise.' (Ophth6)
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8 Uncertainty when to certify the patient

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11 The point at which certification was offered to patients varied between ~~and the~~
12 clinicians ~~ss differed in the timing of offer of certification to the patients.~~ The
13 difference was ~~not so much~~ less a geographic trend and more ~~but~~ related to the
14 individual clinician's approach. ~~It was not possible to conclude in this research if~~
15 ~~differences in certification processes are due to systematic issues or individual~~
16 ~~practices.~~
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27 Ophthalmologists identified difficulties in subjective interpretation of visual field
28 defect and fluctuating visual function as potential reasons why the offer of
29 certification may be inconsistent or delayed. Ophthalmologists also highlighted
30 the impact of recent advancements in treatment on the decision of when to
31 certify a patient.
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40 'The whole issue itself is subjective... It depends on the clinician,
41 assessing the visual field and interpreting that.' (Oph10)
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47 'People with AMD with injections go up and down... Once they
48 have reached certifiable level, a lot of time we couldn't do
49 anything and historically we would have offered certification. Now
50 they will have a few more injections, they get a little better.'
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56 (Oph11)
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Most ophthalmologists stated that they based their decisions on *when* to offer certification primarily on visual acuity; they did not consider the patient's functionality or the level of support they might need. Half of the ophthalmologists (n=6) reported relying solely on quantitative visual function (i.e. acuity or visual field).

In contrast, almost all optometrists and nurses interviewed considered a patient's functionality when deciding whether or not to recommend certification:

'I don't look at it from the medical point of view rather from the social point of view. I do try to ask everybody who would fit the criteria and I probably try to engage more the people maybe I think would benefit from being registered, someone by themselves, could do with help from social services.' (Nur2)

Certification as the end of the process, not a route to services

Approximately half of the ophthalmologists (n=5) regarded certification as the 'final stage' in the management of a patient's condition, only offered to the patient at the *end* of their treatment.

'I think in practice (certification) does tend to coincide with an acknowledgement that there's little more that we can offer them medically...Certification can often form part of a process towards the end of a period of medical care and so it often coincides with their discharge from hospital or their discharge from a period of follow-up.' (Oph5).

1
2 In contrast, patients very much regarded certification as a significant point in
3 their treatment, stating it was the beginning of a stage of acceptance of their
4 sight loss. The offer of certification was emotionally overwhelming for almost
5 every patient interviewed (n=41); the help they received at this time vastly
6 improved the quality of their lives.

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15 Interviewer: 'Has registration helped you?'

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17 'Absolutely, 100%.' (Pat26)

18 19 20 21 Administrative barriers to certification and registration

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25 The length of time to complete the certification and registration process varied
26 within each area and across the three sites. Patients reported the length of time
27 for them to go through certification and registration ranged from a few weeks to
28 close to one year.

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37 'It took quite a while, and for (hospital) to send out information
38 like CVI and all that.' (Pat25)

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44 'SS was a long time getting the information from the hospital...My
45 son and daughter- in-law called them because no one contacted
46 us.' (Pat26)

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51
52 A significant difference between hospitals was the length of time for CVIs to be
53 sent to SSDs. Within each of the three geographic areas studied sSocial
54 services staff also responderportedd variability in the length of time it took that
55 it took from one week to many months for CVIs to be sent to them, a finding

1
2 confirmed by hospital administrative staff. Hospital workload and delays in
3
4 obtaining authorisation for the CVI were cited as key barriers. ∴
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6

7
8 'Sometimes (CVIs) are there for a while, sometimes varies.
9

10 Another consultant who gets a lot, he has a quick turnaround, he
11 fills out the bulk of them, get one day and then a day or two after
12 that...Can sit on desks longer if they are away, week or a bit
13 longer.' (Adm4)
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16 'Between 10 days and three or four months.' (SS2)
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18 'Some received few days later, others take 3 months.' (SS4)
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26 Delays also ~~occur~~occurred as a result of incomplete CVIs being~~are~~ sent to
27
28 SSDs. One SS interviewee estimated half of the CVIs they receive have an
29 incorrect or missing ~~the wrong or no~~ telephone number and this delayed the
30 registration~~G&R~~ process.
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37 'The ophthalmologist hasn't indicated whether the patient is
38 considered SI or SSI or has omitted to sign it or a page could be
39 missing altogether. When this happens we have to send the CVI
40 back with a covering letter which delays disability registration and
41 can delay services for the patient.' (SS5)
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47 'The standard of completion of CVIs is extraordinarily poor...You
48 have to tick whether SSI or SI, quite regularly they'll have ticked
49 the wrong box.' (SS11)
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2 ~~An additional practice that unnecessarily delays sending certifications to SS is~~
3 ~~waiting to send CVIs in batches. All SS staff (n=12) stated they received CVIs~~
4 ~~in batches.~~

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10 ~~In each of the three areas, patients confirmed the length of time for them to go~~
11 ~~through both C&R varied from a few weeks to close to one year. There was~~
12 ~~also variation within each department, with some patients stating C&R took a~~
13 ~~few weeks whilst others stated it took many months. An additional practice that~~
14 ~~unnecessarily delays sending certifications to SS is waiting to send CVIs in~~
15 ~~batches. All SS staff (n=12) stated they received CVIs in batches. Patients~~
16 ~~also reported variations in the length of time it took social services to contact~~
17 ~~and/or visit them. This was confirmed by interviews with social services staff.~~

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32 'Apparently they were meant to put me in touch. I've been on a
33 waiting list for nearly 4 months and nobody's got in touch with
34 me...I'm still waiting; I'm still on a list.' (Pat42)

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38 'Sensory team used to be part of bigger team that had two admin
39 workers, did have bigger team, now have part-time rehab, no
40 admin, manager not in the building, massive change.' (SS6)

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47 There were repercussions of these delays, close to half (20/46 patients,
48 43%) stated they would have liked to have been offered certification
49 earlier, to access support. The purpose of the CVI, to prompt access to
50 holistic low vision and sensory support, is much valued by patients and
51 many would benefit from being offered or receiving this support as early
52 as possible.

The role of clinic support staff and the ECLO

Each hospital eye clinic had an ECLO in post but the role of the ECLO in the certification and registration process differed in each hospital. The function of the ECLO was dictated largely by ~~The eye clinics differed in their approach to use of the ECLO service for certification and registration process. ECLOs helped complete the CVI in two areas, however one factor that contributed to the inconsistent certification process in hospitals was ophthalmologists' perception of the attitudes towards ECLO's role ECLOs.~~ All four ECLOs said ophthalmologists used them inconsistently. One consultant agreed;

'At the moment I keep forgetting (laughs). I'm meant to send to ECLO...He's not here for all of my clinics.' (Oph1)

The presence of an ECLO was viewed as beneficial by all patients and the majority of staff. Most ophthalmologists (N=9) agreed it was more cost-effective and a better use of their time if ECLOs helped to complete the CVI and participate in the certification process. Although the ECLOs said they were often used inconsistently by ophthalmologists.

'I must say that ECLO was brilliant. She talked us through what was going to happen, what we had to do, literally I didn't do much after that... I literally came out of the door and met ECLO, I'm glad she was there because you come out and you think right? What now? What does it mean? What do I do? How do I cope?

1
2 And she was there. That made a huge difference to me....

3
4 ECLO is the most wonderful person.' (Pat23)

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9 'ECLO offered help...gave me time to think about it...and I

10
11 needed time...she was very sympathetic and did her job

12
13 beautifully.' (Pat2)

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17 ~~Three quarters of the ophthalmologists (N=9) agreed it would be~~

18 ~~cost-effective and would be better use of their time if ECLOs~~

19 ~~helped to complete the CVI (Part 3) and participate in the~~

20 ~~certification process;~~

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28 'Biggest positive for us has been the ECLO - irons out difficulties

29 in liaising with different agencies and informing the patients about

30 the benefits and the sources of help they can get. Made a big

31 difference in my practice.' (Oph10)

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36
37 ~~'I'm fairly senseless when it comes to a list of benefits they are~~

38 ~~entitled to, I think the ECLO is brilliant at explaining the other benefits~~

39 ~~like tax, entitled to this and that, parking.'~~ (Oph9)

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44 ~~'(Completing CVI) does eat into clinic time, someone else can do it.'~~

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47 ~~(Oph2)~~

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51 ~~The interviewed ophthalmologists identified difficulties in subjective~~

52 ~~interpretation of visual field defect and fluctuating visual function as potential~~

53 ~~reasons why the offer of certification may be delayed.~~

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~~'The whole issue itself is subjective... It depends on the clinician, assessing the visual field and interpreting that.'~~ (Oph10)

~~One ophthalmologist described the difficulty of certifying people with AMD, as with recent antiVEGF treatments visual improvement may be possible, and fluctuating visual acuity levels can influence certification process.~~

~~'People with AMD with injections go up and down like a yo-yo. Once they have reached certifiable level, a lot of time we couldn't do anything and historically we would have offered certification. Now they will have a few more injections, they get a little better.'~~
(Oph11)

~~Similarly, some of the Consultants responded highlighting that similar issues in certifying patients with other eye conditions for example for patients with diabetic retinopathy⁽⁹⁾:~~

~~'We know with diabetics when you've got some degree of visual impairment you've also got peripheral field changes because of the diabetic retinopathy and the lasering – there's a whole mass of grey area in there.'~~ (Oph6)

~~Most ophthalmologists stated they based their decisions on when to offer certification on visual acuity: many did not consider a patient's functionality or the level of support a patient might need. Half of the ophthalmologists (n=6) admitted they relied only on quantitative visual function (acuity or field) when~~

1
2 deciding whether or not to offer certification, they did not consider a patients'
3 support needs.
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9 'making the decision, use visual acuity, based on visual fields, and then
10 work out if eligible (Interviewer: Do you think about support at home?)
11 You decide whether or not they are eligible and whether or not it will be of
12 benefit for them is a separate issue.' (Oph8)
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19 Some of the ophthalmologists (n=4) took account of a patient's practical visual
20 needs when considering to offer certification.
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26 '(If patients) highlight particular problems they are
27 having...problems with seeing dials for thermostats, looking for
28 instructions for things, could do with help regarding lighting even,
29 if they ever talk about safety issues like gas fires or cookers or
30 have burnt themselves I tend to worry more about safety...I think
31 of offering low vision support as a package.' (Oph1)
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42 Similar to the majority of the ophthalmologists, all three nurses interviewed
43 stated that visual function was a primary factor in their decision whether to
44 recommend certification.
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51 Consultants appeared more likely to offer certification at the end of their
52 treatment, they (n=5) often described how they regard certification as the 'final
53 stage' in the management of the eye condition;
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~~'I think in practice (certification) does tend to coincide with an acknowledgement that there's little more that we can offer them medically...Certification can often form part of a process towards the end of a period of medical care and so it often coincides with their discharge from hospital or their discharge from a period of follow-up.'~~ (Oph5)

~~In contrast, patients very much regarded certification as a significant point in their treatment, stating it was the beginning of a stage of acceptance of their sight loss. The offer of certification was emotionally overwhelming for almost every patient interviewed (n=41); the help they received at this time vastly improved the quality of their lives.~~

~~Interviewer: 'Has registration helped you?'~~

~~Pat26: 'Absolutely, 100%.'~~

The patient benefit of certification and registration

The certification and registration processes were an emotionally overwhelming time for almost all patients and they described the help they receive at this time as substantially improving their lives. The support offered as a result of being certified and registered changed lives and made patients more confident.

'I used to sit crying a great deal before these things started feeding through to me, from social services. I have a certain amount of confidence back...I lost all of that at one time.' (Pat37)

1
2 'It's all about confidence, my confidence went to zero. The more
3 things you can do for yourself, more confident with, makes your
4 life better.' (Pat23)
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10 The practical assistance that resulted from certified and registered was
11 also valued ~~most~~ by patients;
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17 'I faced my fear thinking I'd never walk in the dark anymore and
18 thanks to social services(SS), they've trained me to walk in the
19 dark.' (Pat14)
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25 [social services](SS) issued me with bus pass, made me more
26 mobile, fold up white stick, recognition stick, helps an immense
27 amount.' (Pat31)
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33 Improving the certification and registration process

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37 Suggestions to improve certification and registration included initiatives to
38 improve health professionals' level of awareness about the benefits of being
39 certified and registered. In one area studied, the SSD worked collaboratively
40 with consultants to improve patients' experiences of certification and
41 registration.
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50 Greater use of the ECLO was also a common theme suggested to improve the
51 service. In one area social services said the number of incomplete forms
52 decreased since an ECLO was employed, stating that previously 10-15% CVIs
53 received would be sent back as they were incomplete. Ophthalmologists also
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1
2 commented on the difference ECLOs make to providing accurate and detailed
3 information to patients.
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8 'I'm happy to provide what support I can but I'd readily agree that
9 I don't have the time and I don't think I'm as good as the ECLO
10 because I think most of us assume what patients want and need.
11 We spend our lives making decisions for them with our expertise
12 and experience...I don't have the time on the day...and the
13 ECLO does and so wonderfully.' (Oph1)
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23 In many areas the third sector played a key role in providing support to patients
24 who were extremely grateful for this assistance. Where support from SSDs took
25 longer to arrive, the role of the voluntary sector was invaluable.
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32 'We contacted Action for Blind and they helped filled out forms
33 with... I've learned more from RNIB/Action than anyone else.'
34 (Pat39)
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38 '...Age Concern was brilliant...people would be in a complete
39 panic quite honestly if you were on your own and you had to
40 come home on your own and then you suddenly got to cope with
41 all this stuff.' (Pat5)
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53 Discussion

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56 The aim of this current study research was to examine the process of sight loss
57 certification and registration in three areas in England in order to identify
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1
2 potential barriers and delays in timely certification and registration and possible
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4 options for improving the service.
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11 Despite the ageing population and predicted increases in those with sight loss,
12 (179) the numbers of people certified each year with sight loss have declined in
13 recent years, with the exception of the 12-months from April 2011 to March
14 2012, which showed a marked increase on previous years. A significant
15 geographical variation also exists across England in certification rates of
16 blindness and sight impairment. (472) These variations in rates of certification
17 and registration have been attributed to differences in the level at which
18 certification is being offered, care pathways, perceived value of certification and
19 registration and payment for CVI forms. However, this information is largely
20 anecdotal and this is the only study to - directly explore the sight loss
21 certification and registration pathways.
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55 In our study, the inconsistent decline in the number of certifications issued since
56 the CVI was introduced in England in September 2005. Despite the ageing
57 population and predicted increases in those with sight loss⁽¹⁰⁾, there has been
58 an inconsistent decline in both the number of certifications and number of
59 registrations. Between 2010/11 and 2011/12 there was a 4% increase in the
60 number of certifications in England⁽¹⁰⁾. In contrast, between 2008/09 and 2009/10
there was a 5% decrease in the number of certifications.⁽¹¹⁾

55 In addition the decline in new blind registrations at regional level reveals wide
56 variations in the numbers registered.⁽¹²⁾—The largest decline in new
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~~registrations was observed in the East Midlands, where new blind registrations decreased by 52%, while the smallest decline was in the North East – only 10% (See Figure 1).⁽¹²⁾ Even in small geographical areas the number of CVIs and associated registrations varied widely, e.g. in inner London new registrations fell by 41% whereas in outer London the decrease was 24%.⁽¹²⁾ Reasons for the inconsistent declines in certifications and registrations are poorly understood.⁽¹³⁾~~

~~Interviews with~~ ophthalmologists revealed they are often uncertain as to when to offer certification. For some patients it is clearly evident when their eye sight has reached the point to be certified but for others deciding when to certify is more ambiguous. Research finds higher under-registration in patients with treatable disease compared to those with untreatable disease.⁽¹⁸⁴⁾ The uncertainty of when to certify was also an issue for other eye conditions.⁽¹⁹⁵⁾ For example, certifying patients with atrophic AMD also presents significant timing difficulties.⁽²⁰⁺⁶⁾ These patients often experience severe sight loss after discharge but need to be referred back into the hospital eye service for certification when their vision declines. Introducing these patients to the ECLO/social services team before they are discharged will improve their access to relevant support services.

~~In addition, Some~~ ophthalmologists are unclear of the purpose of certification which may affect when they offer it to patients. Consultants may delay certifying patients as they regard certification as the *end of a clinical process* and wait to certify patients until they think they cannot offer any further medical treatments. Related to the issue of *when* to offer certification is the reason for offering it: the purpose of certification is to provide access to support for patients.⁽¹⁷⁾

1
2 Certification and registration are not simply medical processes but a significant
3
4 step in patients' adjusting and accepting of their sight-loss. Interviews with
5
6 patients revealed the issuing of certification is often viewed as the beginning of
7
8 a new phase and a gateway to much needed support. In contrast, many
9
10 ophthalmologists regard certification as the end of the process but this attitude
11
12 can lead to patients needing support left without it. ~~f the 46 patients interviewed,~~
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14 ~~20 stated they would have liked to have been offered certification earlier, to~~
15
16 ~~access support.~~
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22 There was variation in the certification process in each of the three areas and
23
24 the process used by each consultant differed within hospitals. The [Department](#)
25
26 [of Health](#) ~~H~~ recommends the CVI be sent to the local social services department
27
28 "within five working days".⁽²¹⁴⁸⁾ Across the three areas, interviews with hospital
29
30 and social services staff and patients revealed that only very rarely were CVIs
31
32 sent to SSDs within five days. It was much more common for CVIs to take
33
34 weeks or months to be sent [to SSDs](#). Previous research also found that delays
35
36 often occur when CVIs are sent to SSDs.⁽²²⁴⁹⁾ Each administrator (n=8)
37
38 confirmed consultants can 'take a while' to return the CVI to their office. Another
39
40 significant delay is sending incomplete CVIs to SSDs; an unnecessary delay for
41
42 patients waiting for support.
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49 These practices lengthen the [C&R certification and registration](#) processes,
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51 making it more complicated and [unnecessarily](#) fraught for patients. In each of
52
53 the three areas studied, there were examples of good and bad practice and
54
55 stories of both grateful and frustrated patients, thus a good certification process
56
57 is achievable in ~~every aeh~~ department.
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4 A more holistic approach to eye health is needed; health professionals,
5 including registrars, ophthalmologists, optometrists and medical secretaries
6 should improve their awareness of when certification should be offered and how
7 certification benefits patients.⁽¹⁵⁾ Any additional time needed for CVI discussion
8 in clinic may not be readily available due to pressures on quantity (e.g. meeting
9 Referral to Treatment guidance and other performance targets), therefore
10 departments should explore if others, such as optometrists or ECLOs, are better
11 placed to complete parts of the CVI. It should also be considered who is best
12 placed to send completed CVIs quickly - ECLOs or secretaries or a designated
13 administrator/team.
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28 [Understanding how certification and registration operates at a local level will](#)
29 [help commissioners and clinicians better understand the reasons for the](#)
30 [variations in certification and registration rates and take steps to address the](#)
31 [inconsistencies. Quantifying the barriers to timely certification and registration,](#)
32 [and benchmarking against best practice will also help ensure the correct level of](#)
33 [service provision, enabling health and social care commissioners to deliver](#)
34 [consistent, high quality services based on an accurate assessment of need.](#)
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46 **Limitations of research**

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48 [The interviews include only those who were certified, further research could](#)
49 [examine patients who are eligible for certification but who either decline to be](#)
50 [certified or are not offered it by clinicians. In addition, as the research used](#)
51 [qualitative methods, we were able to interview a limited small number of](#)
52 [health and social care professionals. Further research is needed to examine](#)
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2 | ~~look at~~ a wider range of departments over a longer period of time. Research is
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4 | also needed to understand the impact of ~~the new~~ Disability Living Allowance
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6 | assessment policies and whether there is any pressure on ophthalmologists not
7
8 | to certify patients.
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10 11 12 13 14 | **Discussion**

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16 | ~~The certification of vision impairment is inconsistently offered by~~
17
18 | ~~ophthalmologists. The uncertainty of when to certify may be contributing to the~~
19
20 | ~~decline in certifications. Many ophthalmologists regard certification as the end~~
21
22 | ~~of a process instead of regarding it as a formal route to support.~~
23
24

25
26 | ~~Patients have both positive and negative experiences of certification. When the~~
27
28 | ~~C&R processes 'work', patients access support within weeks, however often~~
29
30 | ~~patients with vision impairment need and wish to access support before they are~~
31
32 | ~~offered certification.~~
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36 | ~~EGLOs play an important role in improving the C&R process, by making it more~~
37
38 | ~~efficient and improving the process for consultants. Ophthalmologists may wish~~
39
40 | ~~to consider their role beyond clinical care and utilise their skills better to offer the~~
41
42 | ~~appropriate support to their patients. Certification changes patients' lives;~~
43
44 | ~~ophthalmologists should acknowledge the significant role they play in helping~~
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46 | ~~patients access support and improve their quality of life.~~
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1
2 TB wrote the initial draft. All authors revised the initial draft, FG revised the
3
4 subsequent drafts. TB and SL wrote the final draft. TB is the guarantor. All
5
6 authors have full control of the content of the article.
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For peer review only

Competing interests:

None.

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[19 Bunce C, Smyth L, Xing W, Zekite A \(ND\) Research into drop in registrations of blind and partially sighted people. \(Available from TB\).](#)

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Certification for vision impairment – Researching perceptions, processes and practicalities in health and social care professionals and patients

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Title:

Certification for vision impairment – Researching perceptions, processes and practicalities in health and social care professionals and patients

Keywords:

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10

11 12 13 14 **Abstract**

15 **Objectives**

16 To explore the patient experience , and the role of ophthalmologists and other
17 health and social care professionals in the certification and registration
18 processes and examine the main barriers to the timely certification of patients.
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20

21 **Design**

22 Qualitative study.
23
24

25 **Setting**

26 Telephone interviews with health and social care professionals and patients in
27 three areas in England.
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30 **Participants**

31 43 health and social care professionals who are part of the certification or
32 registration process. 46 patients certified as severely sight impaired (blind) or
33 sight impaired (partially sighted) within the previous 12 months.
34
35

36 **Results**

37 Certification and registration is life changing for patients and the help they
38 receive can substantially improve their lives. Despite this, ophthalmologists often
39 found it difficult to ascertain when it is appropriate to certify patients, particularly
40 for people with long term conditions. Ophthalmologists varied in their
41 comprehension of the certification process and many regarded certification as
42 the 'final stage' in treatment. Administrative procedures meant the process of
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2 certification and registration could vary from a few weeks to many months. The
3
4 avoidable delays in completing certification can be helped by Eye Clinic Liaison
5
6 Officers (ECLO).
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10 **Conclusion**

11
12 A better understanding of the certification and registration processes can help
13
14 drive up standards of support and service provision for people who are severely
15
16 sighted impaired or sight impaired. Better education and support is required for
17
18 ophthalmologists in recognising the importance of timely referral for
19
20 rehabilitative support through certification and registration. ECLOs can improve
21
22 the process of certification and registration. Finally, better education is needed
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24 for patients on the benefits of certification and registration.
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32 **Article summary**

33 **Strengths and limitations of this study**

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- This is the first study to focus on all those involved in the certification and registration processes – various health and social care professionals as well as patients.
 - The research design includes areas with differing rates of certification demonstrating and showing the opportunities to improve practice to ensure the certification process is more consistent.
 - The number of participants was small, so findings should be considered indicative, however, saturation/repetition levels were reached in all three interview groups, suggesting confidence in the findings.

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- All patients were certified, further research including this group is needed to explore why these patients are declining certification.

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Introduction (count 3863)

The Certificate of Vision Impairment (CVI) was introduced in England in September 2005 and in Wales in April 2007. Its purpose is to provide a reliable route for someone with sight loss to be brought to the attention of social care. Certification and registration are two separate processes: an ophthalmologist completes the CVI based on existing visual function criteria and support needs and the hospital sends this to the patient's social services. Patients can be certified as sight impaired (SI – formerly 'partial sighted') or severe sight impairment (SSI – formerly 'blind') (see Table 1 for an overview of criteria). Local Social Service Department (SSDs) then initiate the registration process upon receipt of the completed CVI. Registration is voluntary; as such, SSDs ask patients if they would like to be registered. When patients are certified as either SSI or SI they are eligible for a range of support including: financial concessions (e.g. tax breaks, free NHS sight tests), welfare benefits and the loan of aids and equipment. Data collected by CVI also provides valuable epidemiological information on the prevalence of sight loss.

There is concern that the 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. The indicator aims to better target financial resources to improve early detection of the three major causes of sight loss (glaucoma, age related macular degeneration (AMD) and diabetic retinopathy).⁽²⁾ As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is therefore important that the number and information in CVIs and subsequent registrations reflect accurate levels of need.

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4 However, evidence shows the numbers of certifications and registrations have
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6 varied considerably over time and in many cases numbers have declined. This
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8 is in addition to the increasing prevalence of sight loss accompanied by the
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10 ageing population in the UK.⁽³⁾ In the 12-months from April 2008 to March 2009,
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12 the number of certifications was 23,773, a marked increase on the previous 12-
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14 months.⁽⁴⁾ Certifications then decreased in 2009/2010 and 2010/2011, before
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16 rising to 23,616 in 2011/2012.⁽⁵⁾ Similarly, the triennial survey of people
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18 registered with Councils with Adult Social Services Responsibilities in England
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20 as being SSI or SI showed an overall decrease in new registrations in
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22 2010/2011 compared with 2008/2009.⁽⁶⁾

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24 Perhaps even more noteworthy is the large geographical variation found to exist
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26 in rates of severe sight impairment and sight impairment, with an 11-fold
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28 difference found to exist between the highest and lowest rate, according to
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30 2008/2009 data.⁽⁷⁾

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40 This paper examines the certification and registration processes in hospitals and
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42 social services departments and identifies the main barriers, delays and
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44 enablers. It also explores the significance of certification and registration for
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46 patients.

47 48 49 50 **Materials and Methods**

51 52 **Sample**

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56 A qualitative study was designed based on semi-structured telephone interviews
57
58 of clinical and social care providers and service users.⁽⁸⁾ The study was

1
2 undertaken in three separate areas of England identified as having fluctuating
3
4 rates of sight loss certification between 2006 and 2011⁽⁹⁾. NHS research ethics
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6 approval was secured for each hospital site. 43 health and social care
7
8 professionals and 46 patients were interviewed by an experienced interviewer
9
10 (See Table 2). The term 'patient' is used throughout the report instead of 'client'
11
12 or 'service user'. This is for continuity and clarity.
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17 Hospital and social services staff interviews were with: ophthalmologists,
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19 optometrists and nurses working in ophthalmology departments, social services
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21 rehabilitation officers, social services administrators, Eye Clinic Liaison Officers
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23 (ECLOs) and hospital administration staff (See Table 2). All ophthalmologists
24
25 interviewed were consultants except one trainee registrar. Of the eleven
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27 consultants interviewed, two were qualified for less than two years; the
28
29 remaining nine consultants were qualified for over ten years. Hospital
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31 interviewees were identified by their head of department. Social care
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33 interviewees were identified by ECLOs and a representative from local visual
34
35 impairment forums.
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41 Patients with vision impairment (and two primary carers) were interviewed.
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43 Patients were identified by ECLOs or social services. As patients' recollections
44
45 of medical consultations can be poor within relatively short periods after a
46
47 consultation,⁽¹⁰⁾ only patients certified within the last year were interviewed.
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49 Interviewees included patients certified and registered (n = 32), those certified
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51 only (n = 5) and those certified but unsure if they were registered (n = 9). A
52
53 sampling frame was created to direct patient recruitment. The sample frame
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1
2 aimed to ensure a diversity of patients in terms of age, ethnicity, gender and
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4 income.⁽¹¹⁾
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8 Fifteen per cent (n = 7) of patients classified themselves as Asian, seven per
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10 cent (n = 3) Black and the remainder White (n = 36). Forty-one per cent (n = 19)
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12 stated they had an income below £15,000/annum. Sixty-three per cent (n = 29)
13
14 of patients were over 60 years of age and fifty-seven per cent (n = 26) were
15
16 women. Compared to national CVI figures, Black and Minority Ethnic patients
17
18 were over represented and the gender characteristics of the sample were
19
20 comparable with national demographics.^(12, 13)
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22
23

24 **Interviews and Data Analysis**

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28 Semi-structured telephone interviews were conducted with individual
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30 participants at a time that suited the interviewees. Interviews lasted on average
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32 for 15 minutes; although some were substantially longer (patient interviews
33
34 ranged from 8-40 minutes, interviews with health/social care professionals
35
36 ranged from 6-50 minutes). Topics for discussion were predefined by the
37
38 consensus of the research steering group. Interviews with professionals sought
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40 to explore: 1) knowledge and understanding of certification and registration; 2)
41
42 local pathways and the factors affecting certification and registration; 3) the role
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44 of different health and social care professionals; and 4) the future of certification
45
46 and registration and suggestions for improvement. Interviews with patients
47
48 explored: 1) experiences of being certified and registered; 2) the impact of
49
50 certification and registration on the lives of patients and their families; 3) and
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52 suggestions for improvement (See Box 1-3).
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57 CVI process / when you recommend certification
58 Purpose of CVI

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What you tell patients about CVI Barriers to approaching patients Length to complete CVI Knowledge of benefits of being certified Reasons for decline Improvements

Box 1: Themes in ophthalmology/optometrist/nurse questions

CVI process Length from receiving CVI to sending to social services Purpose of CVI Improvements
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Box 2: Themes in administrators/ ECLO questions

Experiences of being certified and registered, length to complete Access to support before certification

Box 3: Themes in patient questions

Interview questions acted as a guide and additional information was also gleaned.

All interviews were recorded, transcribed and analysed using thematic analysis. A list of deductive codes was initially created; inductive codes emerged during the second level of the thematic analysis.^(14,15,16)

The findings are illustrated with extracts from the interviews. Extracts are referenced with the type of interviewee and interview number – patient (Pat); ophthalmologist (Ophth); secretary/administrator (Adm); nurse (Nur); optometrist (Optom); Eye Clinic Liaison Officer (ECLO) social services staff (managers, rehabilitation officers, administrators) (SS).

It was observed that the terms ‘certification’ and ‘registration’ were used incorrectly and inconsistently by most interviewees; hence these terms were amended in the text to provide clarity.

Results

The research findings are grouped into overarching themes. Despite the differences in size, location and demography of the three areas, there was considerable consistency in the findings. There were, however, local variations in the certification and registration processes.

Knowledge and awareness of the purpose and benefits of certification and registration

Many health professionals were poorly informed about the purpose and benefits of certification and registration. Almost every health professional was unaware there was a difference between certification and registration. The terms 'certified' and 'registered' were interchanged throughout all interviews. Most health professionals assumed registration happened automatically once a patient was certified at the hospital.

'That's really weird. I thought if we certified the patients we automatically registered them with social services. I'm really surprised to hear that.' (Nur2)

Consequently, only a small number of health professionals were aware of what SSDs offered to certified and registered patients;

'(SS provide) enormous echelons of help, home visits, advice about lighting, advice about managing in home when you've got visual impairment, enormous levels of support that you don't need to be registered to get that support. Great to have ECLO to access this cause that's their expertise.' (Ophth6)

Uncertainty when to certify the patient

The point at which certification was offered to patients varied between clinicians. The difference was less a geographic trend and more related to the individual clinician's approach.

Ophthalmologists identified difficulties in subjective interpretation of visual field defect and fluctuating visual function as potential reasons why the offer of certification may be inconsistent or delayed. Ophthalmologists also highlighted the impact of recent advancements in treatment on the decision of when to certify a patient.

'The whole issue itself is subjective... It depends on the clinician, assessing the visual field and interpreting that.' (Ophth10)

'People with AMD with injections go up and down... Once they have reached certifiable level, a lot of time we couldn't do anything and historically we would have offered certification. Now they will have a few more injections, they get a little better.'

(Ophth11)

Most ophthalmologists stated that they based their decisions on *when* to offer certification primarily on visual acuity; they did not consider the patient's functionality or the level of support they might need. Half of the ophthalmologists (n=6) reported relying solely on quantitative visual function (i.e. acuity or visual field).

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3 In contrast, almost all optometrists and nurses interviewed considered a
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5 patient's functionality when deciding whether or not to recommend certification;
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9 'I don't look at it from the medical point of view rather from the
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11 social point of view. I do try to ask everybody who would fit the
12
13 criteria and I probably try to engage more the people maybe I
14
15 think would benefit from being registered, someone by
16
17 themselves, could do with help from social services.' (Nur2)
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20 21 22 **Certification as the end of the process, not a route to services** 23

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25 Approximately half of the ophthalmologists (n=5) regarded certification as the
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27 'final stage' in the management of a patient's condition, only offered to the
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29 patient at the *end* of their treatment.
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33 'I think in practice (certification) does tend to coincide with an
34
35 acknowledgement that there's little more that we can offer them
36
37 medically...Certification can often form part of a process towards
38
39 the end of a period of medical care and so it often coincides with
40
41 their discharge from hospital or their discharge from a period of
42
43 follow-up.' (Ophth5).
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50 In contrast, patients very much regarded certification as a significant point in
51
52 their treatment, stating it was the beginning of a stage of acceptance of their
53
54 sight loss. The offer of certification was emotionally overwhelming for almost
55
56 every patient interviewed (n=41); the help they received at this time vastly
57
58 improved the quality of their lives.
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4 Interviewer: 'Has registration helped you?'

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6 'Absolutely, 100%.' (Pat26)
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10 **Administrative barriers to certification and registration**

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14 The length of time to complete the certification and registration process varied
15 within each area and across the three sites. Patients reported the length of time
16 for them to go through certification and registration ranged from a few weeks to
17 close to one year.
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26 'It took quite a while, and for (hospital) to send out information
27 like CVI and all that.' (Pat25)
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32 'SS was a long time getting the information from the hospital...My
33 son and daughter- in-law called them because no one contacted
34 us.' (Pat26)
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41 Social services staff also reported variability in the length of time it took for CVIs
42 to be sent to them, a finding confirmed by hospital administrative staff. Hospital
43 workload and delays in obtaining authorisation for the CVI were cited as key
44 barriers.
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51
52 'Sometimes (CVIs) are there for a while, sometimes varies.

53
54 Another consultant who gets a lot, he has a quick turnaround, he
55 fills out the bulk of them, get one day and then a day or two after
56
57
58
59
60

1
2 that...Can sit on desks longer if they are away, week or a bit
3
4 longer.' (Adm4)
5
6
7

8
9 Delays also occurred as a result of incomplete CVIs being sent to SSDs. One
10
11 SS interviewee estimated half of the CVIs they receive have an incorrect or
12
13 missing telephone number and this delayed the registration process.
14

15
16
17 'The ophthalmologist hasn't indicated whether the patient is
18
19 considered SI or SSI or has omitted to sign it or a page could be
20
21 missing altogether. When this happens we have to send the CVI
22
23 back with a covering letter which delays disability registration and
24
25 can delay services for the patient.' (SS5)
26
27

28
29
30 An additional practice that unnecessarily delays sending certifications to SS is
31
32 waiting to send CVIs in batches. All SS staff (n=12) stated they received CVIs
33
34 in batches. Patients also reported variations in the length of time it took social
35
36 services to contact and/or visit them. This was confirmed by interviews with
37
38 social services staff.
39

40
41
42 'Apparently they were meant to put me in touch. I've been on a
43
44 waiting list for nearly 4 months and nobody's got in touch with
45
46 me...I'm still waiting; I'm still on a list.' (Pat42)
47

48
49 'Sensory team used to be part of bigger team that had two admin
50
51 workers, did have bigger team, now have part-time rehab, no
52
53 admin, manager not in the building, massive change.' (SS6)
54
55
56
57
58
59
60

1
2 There were repercussions of these delays, close to half (20/46 patients,
3
4 43%) stated they would have liked to have been offered certification
5
6 earlier, to access support. The purpose of the CVI, to prompt access to
7
8 holistic low vision and sensory support, is much valued by patients and
9
10 many would benefit from being offered or receiving this support as early
11
12 as possible.
13

14 15 16 17 18 **The role of clinic support staff and the ECLO**

19
20 Each hospital eye clinic had an ECLO in post but the role of the ECLO in the
21
22 certification and registration process differed in each hospital. The function of
23
24 the ECLO was dictated largely by ophthalmologists' perception of the ECLO's
25
26 role.
27

28
29
30
31 The presence of an ECLO was viewed as beneficial by all patients and the
32
33 majority of staff. Most ophthalmologists (N=9) agreed it was more cost-effective
34
35 and a better use of their time if ECLOs helped to complete the CVI and
36
37 participate in the certification process. Although the ECLOs said they were often
38
39 used inconsistently by ophthalmologists.
40
41
42
43

44
45 'I must say that ECLO was brilliant. She talked us through what
46
47 was going to happen, what we had to do, literally I didn't do much
48
49 after that... I literally came out of the door and met ECLO... That
50
51 made a huge difference to me.' (Pat23)
52
53
54
55
56
57
58
59
60

1
2 'ECLO offered help...gave me time to think about it...and I
3
4 needed time...she was very sympathetic and did her job
5
6 beautifully.' (Pat2)
7
8
9

10
11 'I much prefer (sending patients to ECLO) because when you're
12
13 in a situation where you're seeing patients in clinical setting
14
15 you're under a lot of pressure because you've got a certain
16
17 number of patients to see and the time is ticking.' (Opt3)
18
19
20

21
22 'Biggest positive for us has been the ECLO - irons out difficulties
23
24 in liaising with different agencies and informing the patients about
25
26 the benefits and the sources of help they can get. Made a big
27
28 difference in my practice.' (Ophth10)
29
30
31

32 33 **The patient benefit of certification and registration** 34

35 The certification and registration processes were an emotionally overwhelming
36
37 time for almost all patients and they described the help they receive at this time
38
39 as substantially improving their lives. The support offered as a result of being
40
41 certified and registered changed lives and made patients more confident.
42
43
44

45
46 'I used to sit crying a great deal before these things started
47
48 feeding through to me, from social services. I have a certain
49
50 amount of confidence back...I lost all of that at one time.' (Pat37)
51
52

53
54 'It's all about confidence, my confidence went to zero. The more
55
56 things you can do for yourself, more confident with, makes your
57
58 life better.' (Pat23)
59
60

1
2
3 The practical assistance that resulted from certified and registered was
4
5 also valued by patients;
6
7
8
9

10 'I faced my fear thinking I'd never walk in the dark anymore and
11
12 thanks to social services, they've trained me to walk in the dark.'
13

14 (Pat14)
15
16
17
18

19 '[social services] issued me with bus pass, made me more
20
21 mobile, fold up white stick, recognition stick, helps an immense
22
23 amount.' (Pat31)
24
25
26

27 **Improving the certification and registration process**

28
29

30
31 Suggestions to improve certification and registration included initiatives to
32
33 improve health professionals' level of awareness about the benefits of being
34
35 certified and registered. In one area studied, the SSD worked collaboratively
36
37 with consultants to improve patients' experiences of certification and
38
39 registration.
40
41
42

43
44 Greater use of the ECLO was also a common theme suggested to improve the
45
46 service. In one area social services said the number of incomplete forms
47
48 decreased since an ECLO was employed, stating that previously 10-15% CVIs
49
50 received would be sent back as they were incomplete. Ophthalmologists also
51
52 commented on the difference ECLOs make to providing accurate and detailed
53
54 information to patients.
55
56
57
58
59
60

1
2 'I'm happy to provide what support I can but I'd readily agree that
3
4 I don't have the time and I don't think I'm as good as the ECLO
5
6 because I think most of us assume what patients want and need.
7
8 We spend our lives making decisions for them with our expertise
9
10 and experience...I don't have the time on the day...and the
11
12 ECLO does and so wonderfully.' (Ophth1)
13
14
15
16
17

18 In many areas the third sector played a key role in providing support to patients
19
20 who were extremely grateful for this assistance. Where support from SSDs took
21
22 longer to arrive, the role of the voluntary sector was invaluable.
23
24
25

26 'We contacted Action for Blind and they helped filled out forms
27
28 with... I've learned more from RNIB/Action than anyone else.'
29
30 (Pat39)
31
32

33 '...Age Concern was brilliant...people would be in a complete
34
35 panic quite honestly if you were on your own and you had to
36
37 come home on your own and then you suddenly got to cope with
38
39 all this stuff.' (Pat5)
40
41
42
43

44 Discussion

45
46
47 The current study examined the process of sight loss certification and
48
49 registration in three areas in England in order to identify potential barriers and
50
51 delays in timely certification and registration and possible options for improving
52
53 the service.
54
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1
2 Despite the ageing population and predicted increases in those with sight loss,
3
4 ⁽¹⁷⁾ the numbers of people certified each year with sight loss have declined in
5
6 recent years, with the exception of the 12-months from April 2011 to March
7
8 2012, which showed a marked increase on previous years. A significant
9
10 geographical variation also exists across England in certification rates of severe
11
12 sight impairment and sight impairment. ⁽⁷⁾ These variations in rates of
13
14 certification and registration have been attributed to differences in the level at
15
16 which certification is being offered, care pathways, perceived value of
17
18 certification and registration and payment for CVI forms. However, this
19
20 information is largely anecdotal and this is the only study to directly explore the
21
22 sight loss certification and registration pathways.
23
24
25
26
27

28
29 In our study, ophthalmologists revealed they are often uncertain as to when to
30
31 offer certification. For some patients it is clearly evident when their eye sight
32
33 has reached the point to be certified but for others deciding when to certify is
34
35 more ambiguous. Research finds higher under-registration in patients with
36
37 treatable disease compared to those with untreatable disease. ⁽¹⁸⁾ The
38
39 uncertainty of when to certify was also an issue for other eye conditions. ⁽¹⁹⁾ For
40
41 example, certifying patients with atrophic AMD also presents significant timing
42
43 difficulties. ⁽²⁰⁾ These patients often experience severe sight loss after discharge
44
45 but need to be referred back into the hospital eye service for certification when
46
47 their vision declines. Introducing these patients to the ECLO/social services
48
49 team before they are discharged will improve their access to relevant support
50
51 services.
52
53
54
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1
2 Some ophthalmologists are unclear of the purpose of certification which may
3
4 affect when they offer it to patients. Consultants may delay certifying patients as
5
6 they regard certification as the *end of a clinical process* and wait to certify
7
8 patients until they think they cannot offer any further medical treatments.
9

10
11 Related to the issue of *when* to offer certification is the reason for offering it: the
12
13 purpose of certification is to provide access to support for patients. Certification
14
15 and registration are not simply medical processes but a significant step in
16
17 patients' adjusting and accepting of their sight-loss. Interviews with patients
18
19 revealed the issuing of certification is often viewed as the beginning of a new
20
21 phase and a gateway to much needed support. In contrast, many
22
23 ophthalmologists regard certification as the end of the process but this attitude
24
25 can lead to patients needing support left without it.
26
27
28
29

30
31 There was variation in the certification process in each of the three areas and
32
33 the process used by each consultant differed within hospitals. The Department
34
35 of Health recommends the CVI be sent to the local social services department
36
37 "within five working days".⁽²¹⁾ Across the three areas, interviews with hospital
38
39 and social services staff and patients revealed that only very rarely were CVIs
40
41 sent to SSDs within five days. It was much more common for CVIs to take
42
43 weeks or months to be sent to SSDs. Previous research also found that delays
44
45 often occur when CVIs are sent to SSDs.⁽²²⁾ Each administrator (n=8) confirmed
46
47 consultants can 'take a while' to return the CVI to their office. Another significant
48
49 delay is sending incomplete CVIs to SSDs; an unnecessary delay for patients
50
51 waiting for support.
52
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54
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1
2 These practices lengthen the certification and registration processes, making it
3
4 more complicated and unnecessarily fraught for patients. In each of the three
5
6 areas studied, there were examples of good and bad practice and stories of
7
8 both grateful and frustrated patients, thus a good certification process is
9
10 achievable in every department.
11
12

13
14
15 A more holistic approach to eye health is needed; health professionals,
16
17 including registrars, ophthalmologists, optometrists and medical secretaries
18
19 should improve their awareness of when certification should be offered and how
20
21 certification benefits patients. Any additional time needed for CVI discussion in
22
23 clinic may not be readily available due to pressures on quantity (e.g. meeting
24
25 Referral to Treatment guidance and other performance targets), therefore
26
27 departments should explore if others, such as optometrists or ECLOs, are better
28
29 placed to complete parts of the CVI. It should also be considered who is best
30
31 placed to send completed CVIs quickly - ECLOs or secretaries or a designated
32
33 administrator/team.
34
35
36
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39

40 Understanding how certification and registration operates at a local level will
41
42 help commissioners and clinicians better understand the reasons for the
43
44 variations in certification and registration rates and take steps to address the
45
46 inconsistencies. Quantifying the barriers to timely certification and registration,
47
48 and benchmarking against best practice will also help ensure the correct level of
49
50 service provision, enabling health and social care commissioners to deliver
51
52 consistent, high quality services based on an accurate assessment of need.
53
54
55
56

57 **Limitations of research**

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59
60

1
2 The interviews include only those who were certified, further research could
3
4 examine patients who are eligible for certification but who either decline to be
5
6 certified or are not offered it by clinicians. In addition, as the research used
7
8 qualitative methods, we were able to interview a limited number of health and
9
10 social care professionals. Further research is needed to examine a wider range
11
12 of departments over a longer period of time. Research is also needed to
13
14 understand the impact of the Disability Living Allowance assessment policies
15
16 and whether there is any pressure on ophthalmologists not to certify patients.
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23
24 TB wrote the initial draft. All authors revised the initial draft, FG revised the
25
26 subsequent drafts. TB and SL wrote the final draft. TB is the guarantor. All
27
28 authors have full control of the content of the article.
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Contributorship Statement

TB wrote the initial draft. All authors revised the initial draft, FG revised the subsequent drafts. TB and SL wrote the final draft. TB is the guarantor. All authors have full control of the content of the article.

Competing interests:

None.

Data Sharing Statement

No additional data

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39 Table 1 Definitions of SI and SSI

40
41
42 To be registered as severely sight impaired (blind), sight has to fall into one of
43 the following categories, while wearing any glasses or contact lenses that one
44 may need:

- 45 • visual acuity of less than 3 / 60 with a full visual field
- 46 • visual acuity between 3 / 60 and 6 / 60 with a severe reduction of field of
47 vision, such as tunnel vision
- 48 • visual acuity of 6 / 60 or above but with a very reduced field of vision,
49 especially if a lot of sight is missing in the lower part of the field.

50
51
52 **To be registered as sight impaired (partially sighted) sight has to fall into**
53 **one of the following categories, while wearing any glasses or contact**
54 **lenses that one may need:**

- 55 • visual acuity of 3 / 60 to 6 / 60 with a full field of vision
- 56 • visual acuity of up to 6 / 24 with a moderate reduction of field of vision or with
57 a central part of vision that is cloudy or blurry

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- visual acuity of up to 6 / 18 if a large part of your field of vision, for example a whole half of your vision, is missing or a lot of your peripheral vision is missing.⁽¹⁾

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Further information on CVI can be found on the Royal College of Ophthalmology webpage: <<http://www.rcophth.ac.uk/page.asp?section=851&search=>>>.

Table 2. Number of interviews by type and area

Area A	Area B	Area C
10 Hospital Staff	13 Hospital staff	8 Hospital staff
1 Social Services	9 Social Services	2 Social services
15 Patients	15 Patients	16 Patients
Total: 26	Total: 37	Total: 26

Title:

Certification for vision impairment – Researching perceptions, processes and practicalities in health and social care professionals and patients

Keywords:

Blindness; Visually Impaired Persons; Certification of Vision Impairment; Professional-Patient Relations

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9

10 11 12 13 **Abstract**

14 **Objectives**

15
16 To explore the patient experience , and the role of ophthalmologists and other
17 health and social care professionals in the certification and registration
18 processes and examine the main barriers to the timely certification of patients.
19
20
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22
23

24 **Design**

25
26 Qualitative study.
27

28 **Setting**

29
30 Telephone interviews with health and social care professionals and patients in
31 three areas in England.
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34

35 **Participants**

36
37 43 health and social care professionals who are part of the certification or
38 registration process. 46 patients certified as severely sight impaired (blind) or
39 sight impaired (partially sighted) within the previous 12 months.
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42
43

44 **Results**

45
46 Certification and registration is life changing for patients and the help they
47 receive can substantially improve their lives. Despite this, ophthalmologists often
48 found it difficult to ascertain when it is appropriate to certify patients, particularly
49 for people with long term conditions. Ophthalmologists varied in their
50 comprehension of the certification process and many regarded certification as
51 the 'final stage' in treatment. Administrative procedures meant the process of
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1 certification and registration could vary from a few weeks to many months. The
2
3 avoidable delays in completing certification can be helped by Eye Clinic Liaison
4
5 Officers (ECLO).
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10 **Conclusion**

11 A better understanding of the certification and registration processes can help
12
13 drive up standards of support and service provision for people who are severely
14
15 sighted impaired or sight impaired. Better education and support is required for
16
17 ophthalmologists in recognising the importance of timely referral for
18
19 rehabilitative support through certification and registration. ECLOs can improve
20
21 the process of certification and registration. Finally, better education is needed
22
23 for patients on the benefits of certification and registration.
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32 **Article summary**

33 **Strengths and limitations of this study**

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38 • This is the first study to focus on all those involved in the certification and
39 registration processes – various health and social care professionals as
40 well as patients.
41
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- 43
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45 • The research design includes areas with differing rates of certification
46 demonstrating and showing the opportunities to improve practice to
47 ensure the certification process is more consistent.
48
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- 50
51
52 • The number of participants was small, so findings should be considered
53 indicative, however, saturation/repetition levels were reached in all three
54 interview groups, suggesting confidence in the findings.
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7
- All patients were certified, further research including this group is needed to explore why these patients are declining certification.

8
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Funding statement

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For peer review only

Introduction (count 3863)

The Certificate of Vision Impairment (CVI) was introduced in England in September 2005 and in Wales in April 2007. Its purpose is to provide a reliable route for someone with sight loss to be brought to the attention of social care. Certification and registration are two separate processes: an ophthalmologist completes the CVI based on existing visual function criteria and support needs and the hospital sends this to the patient's social services. Patients can be certified as sight impaired (SI – formerly 'partial sighted') or severe sight impairment (SSI – formerly 'blind') (see Table 1 for an overview of criteria). Local Social Service Department (SSDs) then initiate the registration process upon receipt of the completed CVI. Registration is voluntary; as such, SSDs ask patients if they would like to be registered. When patients are certified as either SSI or SI they are eligible for a range of support including: financial concessions (e.g. tax breaks, free NHS sight tests), welfare benefits and the loan of aids and equipment. Data collected by CVI also provides valuable epidemiological information on the prevalence of sight loss.

There is concern that the 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. The indicator aims to better target financial resources to improve early detection of the three major causes of sight loss (glaucoma, age related macular degeneration (AMD) and diabetic retinopathy).⁽²⁾ As the CVI includes causes of vision impairment, it will provide a metric for levels of avoidable sight loss for the indicator. It is therefore important that the number and information in CVIs and subsequent registrations reflect accurate levels of need.

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2
3
4 However, evidence shows the numbers of certifications and registrations have
5
6 varied considerably over time and in many cases numbers have declined. This
7
8 is in addition to the increasing prevalence of sight loss accompanied by the
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10 ageing population in the UK.⁽³⁾ In the 12-months from April 2008 to March 2009,
11
12 the number of certifications was 23,773, a marked increase on the previous 12-
13
14 months.⁽⁴⁾ Certifications then decreased in 2009/2010 and 2010/2011, before
15
16 rising to 23,616 in 2011/2012.⁽⁵⁾ Similarly, the triennial survey of people
17
18 registered with Councils with Adult Social Services Responsibilities in England
19
20 as being **SSI or SI** showed an overall **decrease** in new registrations in
21
22 2010/2011 compared with 2008/2009.⁽⁶⁾

23
24 Perhaps even more noteworthy is the large geographical variation found to exist
25
26 in rates of **severe sight impairment** and sight impairment, with an 11-fold
27
28 difference found to exist between the highest and lowest rate, according to
29
30 2008/2009 data.⁽⁷⁾

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40 This paper examines the certification and registration processes in hospitals and
41
42 social services departments and identifies the main barriers, delays and
43
44 enablers. It also explores the significance of certification and registration for
45
46 patients.

50 **Materials and Methods**

53 **Sample**

54
55
56
57 A qualitative study was designed based on semi-structured telephone interviews
58
59 of clinical and social care providers and service users.⁽⁸⁾ The study was

1
2 undertaken in three separate areas of England identified as having fluctuating
3
4 rates of sight loss certification between 2006 and 2011⁽⁹⁾. NHS research ethics
5
6 approval was secured for each hospital site. 43 health and social care
7
8 professionals and 46 patients were interviewed by an experienced interviewer
9
10 (See Table 2). The term 'patient' is used throughout the report instead of 'client'
11
12 or 'service user'. This is for continuity and clarity.
13
14

15
16
17 Hospital and social services staff interviews were with: ophthalmologists,
18
19 optometrists and nurses working in ophthalmology departments, social services
20
21 rehabilitation officers, social services administrators, Eye Clinic Liaison Officers
22
23 (ECLOs) and hospital administration staff (See Table 2). All ophthalmologists
24
25 interviewed were consultants except one trainee registrar. Of the eleven
26
27 consultants interviewed, two were qualified for less than two years; the
28
29 remaining nine consultants were qualified for over ten years. Hospital
30
31 interviewees were identified by their head of department. Social care
32
33 interviewees were identified by ECLOs and a representative from local visual
34
35 impairment forums.
36
37
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39

40
41 Patients with vision impairment (and two primary carers) were interviewed.
42
43 Patients were identified by ECLOs or social services. As patients' recollections
44
45 of medical consultations can be poor within relatively short periods after a
46
47 consultation,⁽¹⁰⁾ only patients certified within the last year were interviewed.
48
49 Interviewees included patients certified and registered (n = 32), those certified
50
51 only (n = 5) and those certified but unsure if they were registered (n = 9). A
52
53 sampling frame was created to direct patient recruitment. The sample frame
54
55
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60

1
2 aimed to ensure a diversity of patients in terms of age, ethnicity, gender and
3
4 income.⁽¹¹⁾
5
6
7

8 Fifteen per cent (n = 7) of patients classified themselves as Asian, seven per
9
10 cent (n = 3) Black and the remainder White (n = 36). Forty-one per cent (n = 19)
11
12 stated they had an income below £15,000/annum. Sixty-three per cent (n = 29)
13
14 of patients were over 60 years of age and fifty-seven per cent (n = 26) were
15
16 women. Compared to national CVI figures, Black and Minority Ethnic patients
17
18 were over represented and the gender characteristics of the sample were
19
20 comparable with national demographics.^(12, 13)
21
22
23

24 **Interviews and Data Analysis**

25
26
27
28 Semi-structured telephone interviews were conducted with individual
29
30 participants at a time that suited the interviewees. Interviews lasted on average
31
32 for 15 minutes; although some were substantially longer (patient interviews
33
34 ranged from 8-40 minutes, interviews with health/social care professionals
35
36 ranged from 6-50 minutes). Topics for discussion were predefined by the
37
38 consensus of the research steering group. Interviews with professionals sought
39
40 to explore: 1) knowledge and understanding of certification and registration; 2)
41
42 local pathways and the factors affecting certification and registration; 3) the role
43
44 of different health and social care professionals; and 4) the future of certification
45
46 and registration and suggestions for improvement. Interviews with patients
47
48 explored: 1) experiences of being certified and registered; 2) the impact of
49
50 certification and registration on the lives of patients and their families; 3) and
51
52 suggestions for improvement (See Box 1-3).
53
54
55

57 CVI process / when you recommend certification
58 Purpose of CVI

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What you tell patients about CVI Barriers to approaching patients Length to complete CVI Knowledge of benefits of being certified Reasons for decline Improvements

Box 1: Themes in ophthalmology/optometrist/nurse questions

CVI process Length from receiving CVI to sending to social services Purpose of CVI Improvements
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Box 2: Themes in administrators/ ECLO questions

Experiences of being certified and registered, length to complete Access to support before certification

Box 3: Themes in patient questions

Interview questions acted as a guide and additional information was also gleaned.

All interviews were recorded, transcribed and analysed using thematic analysis. A list of deductive codes was initially created; inductive codes emerged during the second level of the thematic analysis.^(14,15,16)

The findings are illustrated with extracts from the interviews. Extracts are referenced with the type of interviewee and interview number – patient (Pat); ophthalmologist (Ophth); secretary/administrator (Adm); nurse (Nur); optometrist (Optom); Eye Clinic Liaison Officer (ECLO) social services staff (managers, rehabilitation officers, administrators) (SS).

It was observed that the terms ‘certification’ and ‘registration’ were used incorrectly and inconsistently by most interviewees; hence these terms were amended in the text to provide clarity.

Results

The research findings are grouped into overarching themes. Despite the differences in size, location and demography of the three areas, there was considerable consistency in the findings. There were, however, local variations in the certification and registration processes.

Knowledge and awareness of the purpose and benefits of certification and registration

Many health professionals were poorly informed about the purpose and benefits of certification and registration. Almost every health professional was unaware there was a difference between certification and registration. The terms 'certified' and 'registered' were interchanged throughout all interviews. Most health professionals assumed registration happened automatically once a patient was certified at the hospital.

'That's really weird. I thought if we certified the patients we automatically registered them with social services. I'm really surprised to hear that.' (Nur2)

Consequently, only a small number of health professionals were aware of what SSDs offered to certified and registered patients;

'(SS provide) enormous echelons of help, home visits, advice about lighting, advice about managing in home when you've got visual impairment, enormous levels of support that you don't need to be registered to get that support. Great to have ECLO to access this cause that's their expertise.' (Ophth6)

Uncertainty when to certify the patient

The point at which certification was offered to patients varied between clinicians. The difference was less a geographic trend and more related to the individual clinician's approach.

Ophthalmologists identified difficulties in subjective interpretation of visual field defect and fluctuating visual function as potential reasons why the offer of certification may be inconsistent or delayed. Ophthalmologists also highlighted the impact of recent advancements in treatment on the decision of when to certify a patient.

'The whole issue itself is subjective... It depends on the clinician, assessing the visual field and interpreting that.' (Ophth10)

'People with AMD with injections go up and down... Once they have reached certifiable level, a lot of time we couldn't do anything and historically we would have offered certification. Now they will have a few more injections, they get a little better.'

(Ophth11)

Most ophthalmologists stated that they based their decisions on *when* to offer certification primarily on visual acuity; they did not consider the patient's functionality or the level of support they might need. Half of the ophthalmologists (n=6) reported relying solely on quantitative visual function (i.e. acuity or visual field).

1
2
3 In contrast, almost all optometrists and nurses interviewed considered a
4
5 patient's functionality when deciding whether or not to recommend certification;
6
7

8
9 'I don't look at it from the medical point of view rather from the
10
11 social point of view. I do try to ask everybody who would fit the
12
13 criteria and I probably try to engage more the people maybe I
14
15 think would benefit from being registered, someone by
16
17 themselves, could do with help from social services.' (Nur2)
18
19

20 21 22 **Certification as the end of the process, not a route to services** 23

24
25 Approximately half of the ophthalmologists (n=5) regarded certification as the
26
27 'final stage' in the management of a patient's condition, only offered to the
28
29 patient at the *end* of their treatment.
30
31

32
33 'I think in practice (certification) does tend to coincide with an
34
35 acknowledgement that there's little more that we can offer them
36
37 medically...Certification can often form part of a process towards
38
39 the end of a period of medical care and so it often coincides with
40
41 their discharge from hospital or their discharge from a period of
42
43 follow-up.' (Ophth5).
44
45
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48

49
50 In contrast, patients very much regarded certification as a significant point in
51
52 their treatment, stating it was the beginning of a stage of acceptance of their
53
54 sight loss. The offer of certification was emotionally overwhelming for almost
55
56 every patient interviewed (n=41); the help they received at this time vastly
57
58 improved the quality of their lives.
59
60

1
2
3
4 Interviewer: 'Has registration helped you?'

5
6 'Absolutely, 100%.' (Pat26)
7
8
9

10 **Administrative barriers to certification and registration**

11
12
13
14 The length of time to complete the certification and registration process varied
15 within each area and across the three sites. Patients reported the length of time
16 for them to go through certification and registration ranged from a few weeks to
17 close to one year.
18
19
20
21
22

23
24
25
26 'It took quite a while, and for (hospital) to send out information
27 like CVI and all that.' (Pat25)
28
29

30
31
32 'SS was a long time getting the information from the hospital...My
33 son and daughter- in-law called them because no one contacted
34 us.' (Pat26)
35
36
37
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39

40
41 Social services staff also reported variability in the length of time it took for CVIs
42 to be sent to them, a finding confirmed by hospital administrative staff. Hospital
43 workload and delays in obtaining authorisation for the CVI were cited as key
44 barriers.
45
46
47
48
49

50
51
52 'Sometimes (CVIs) are there for a while, sometimes varies.

53
54 Another consultant who gets a lot, he has a quick turnaround, he
55 fills out the bulk of them, get one day and then a day or two after
56
57
58
59
60

1
2 that...Can sit on desks longer if they are away, week or a bit
3
4 longer.' (Adm4)
5
6
7

8
9 Delays also occurred as a result of incomplete CVIs being sent to SSDs. One
10
11 SS interviewee estimated half of the CVIs they receive have an incorrect or
12
13 missing telephone number and this delayed the registration process.
14

15
16
17 'The ophthalmologist hasn't indicated whether the patient is
18
19 considered SI or SSI or has omitted to sign it or a page could be
20
21 missing altogether. When this happens we have to send the CVI
22
23 back with a covering letter which delays disability registration and
24
25 can delay services for the patient.' (SS5)
26
27

28
29
30
31 An additional practice that unnecessarily delays sending certifications to SS is
32
33 waiting to send CVIs in batches. All SS staff (n=12) stated they received CVIs
34
35 in batches. Patients also reported variations in the length of time it took social
36
37 services to contact and/or visit them. This was confirmed by interviews with
38
39 social services staff.
40

41
42 'Apparently they were meant to put me in touch. I've been on a
43
44 waiting list for nearly 4 months and nobody's got in touch with
45
46 me...I'm still waiting; I'm still on a list.' (Pat42)
47

48
49 'Sensory team used to be part of bigger team that had two admin
50
51 workers, did have bigger team, now have part-time rehab, no
52
53 admin, manager not in the building, massive change.' (SS6)
54
55
56
57
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1
2 There were repercussions of these delays, close to half (20/46 patients,
3
4 43%) stated they would have liked to have been offered certification
5
6 earlier, to access support. The purpose of the CVI, to prompt access to
7
8 holistic low vision and sensory support, is much valued by patients and
9
10 many would benefit from being offered or receiving this support as early
11
12 as possible.
13

14 15 16 17 18 **The role of clinic support staff and the ECLO**

19
20 Each hospital eye clinic had an ECLO in post but the role of the ECLO in the
21
22 certification and registration process differed in each hospital. The function of
23
24 the ECLO was dictated largely by ophthalmologists' perception of the ECLO's
25
26 role.
27

28
29
30
31 The presence of an ECLO was viewed as beneficial by all patients and the
32
33 majority of staff. Most ophthalmologists (N=9) agreed it was more cost-effective
34
35 and a better use of their time if ECLOs helped to complete the CVI and
36
37 participate in the certification process. Although the ECLOs said they were often
38
39 used inconsistently by ophthalmologists.
40
41
42
43
44

45 'I must say that ECLO was brilliant. She talked us through what
46
47 was going to happen, what we had to do, literally I didn't do much
48
49 after that... I literally came out of the door and met ECLO... That
50
51 made a huge difference to me.' (Pat23)
52
53
54
55
56
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1
2 'ECLO offered help...gave me time to think about it...and I
3
4 needed time...she was very sympathetic and did her job
5
6 beautifully.' (Pat2)
7
8
9

10 'I much prefer (sending patients to ECLO) because when you're
11
12 in a situation where you're seeing patients in clinical setting
13
14 you're under a lot of pressure because you've got a certain
15
16 number of patients to see and the time is ticking.' (Opt3)
17
18
19

20
21
22 'Biggest positive for us has been the ECLO - irons out difficulties
23
24 in liaising with different agencies and informing the patients about
25
26 the benefits and the sources of help they can get. Made a big
27
28 difference in my practice.' (Ophth10)
29
30
31

32 33 **The patient benefit of certification and registration** 34

35 The certification and registration processes were an emotionally overwhelming
36
37 time for almost all patients and they described the help they receive at this time
38
39 as substantially improving their lives. The support offered as a result of being
40
41 certified and registered changed lives and made patients more confident.
42
43
44

45 'I used to sit crying a great deal before these things started
46
47 feeding through to me, from social services. I have a certain
48
49 amount of confidence back...I lost all of that at one time.' (Pat37)
50
51
52

53 'It's all about confidence, my confidence went to zero. The more
54
55 things you can do for yourself, more confident with, makes your
56
57 life better.' (Pat23)
58
59
60

1
2
3 The practical assistance that resulted from certified and registered was
4
5 also valued by patients;
6
7
8
9

10 'I faced my fear thinking I'd never walk in the dark anymore and
11
12 thanks to social services, they've trained me to walk in the dark.'
13

14 (Pat14)
15
16
17
18

19 '[social services] issued me with bus pass, made me more
20
21 mobile, fold up white stick, recognition stick, helps an immense
22
23 amount.' (Pat31)
24
25
26

27 **Improving the certification and registration process**

28
29
30

31 Suggestions to improve certification and registration included initiatives to
32
33 improve health professionals' level of awareness about the benefits of being
34
35 certified and registered. In one area studied, the SSD worked collaboratively
36
37 with consultants to improve patients' experiences of certification and
38
39 registration.
40
41
42

43
44 Greater use of the ECLO was also a common theme suggested to improve the
45
46 service. In one area social services said the number of incomplete forms
47
48 decreased since an ECLO was employed, stating that previously 10-15% CVIs
49
50 received would be sent back as they were incomplete. Ophthalmologists also
51
52 commented on the difference ECLOs make to providing accurate and detailed
53
54 information to patients.
55
56
57
58
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1
2 'I'm happy to provide what support I can but I'd readily agree that
3
4 I don't have the time and I don't think I'm as good as the ECLO
5
6 because I think most of us assume what patients want and need.
7
8 We spend our lives making decisions for them with our expertise
9
10 and experience...I don't have the time on the day...and the
11
12 ECLO does and so wonderfully.' (Ophth1)

13
14
15
16
17 In many areas the third sector played a key role in providing support to patients
18
19 who were extremely grateful for this assistance. Where support from SSDs took
20
21 longer to arrive, the role of the voluntary sector was invaluable.
22
23

24
25
26 'We contacted Action for Blind and they helped filled out forms
27
28 with... I've learned more from RNIB/Action than anyone else.'
29
30 (Pat39)

31
32
33 '...Age Concern was brilliant...people would be in a complete
34
35 panic quite honestly if you were on your own and you had to
36
37 come home on your own and then you suddenly got to cope with
38
39 all this stuff.' (Pat5)

40 41 42 43 **Discussion**

44
45
46 The current study examined the process of sight loss certification and
47
48 registration in three areas in England in order to identify potential barriers and
49
50 delays in timely certification and registration and possible options for improving
51
52 the service.
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1
2 Despite the ageing population and predicted increases in those with sight loss,
3
4 ⁽¹⁷⁾ the numbers of people certified each year with sight loss have declined in
5
6 recent years, with the exception of the 12-months from April 2011 to March
7
8 2012, which showed a marked increase on previous years. A significant
9
10 geographical variation also exists across England in certification rates of **severe**
11
12 **sight impairment** and sight impairment. ⁽⁷⁾ These variations in rates of
13
14 certification and registration have been attributed to differences in the level at
15
16 which certification is being offered, care pathways, perceived value of
17
18 certification and registration and payment for CVI forms. However, this
19
20 information is largely anecdotal and this is the only study to directly explore the
21
22 sight loss certification and registration pathways.
23
24
25
26
27

28
29 In our study, ophthalmologists revealed they are often uncertain as to when to
30
31 offer certification. For some patients it is clearly evident when their eye sight
32
33 has reached the point to be certified but for others deciding when to certify is
34
35 more ambiguous. Research finds higher under-registration in patients with
36
37 treatable disease compared to those with untreatable disease. ⁽¹⁸⁾ The
38
39 uncertainty of when to certify was also an issue for other eye conditions. ⁽¹⁹⁾ For
40
41 example, certifying patients with atrophic AMD also presents significant timing
42
43 difficulties. ⁽²⁰⁾ These patients often experience severe sight loss after discharge
44
45 but need to be referred back into the hospital eye service for certification when
46
47 their vision declines. Introducing these patients to the ECLO/social services
48
49 team before they are discharged will improve their access to relevant support
50
51 services.
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Some ophthalmologists are unclear of the purpose of certification which may affect when they offer it to patients. Consultants may delay certifying patients as they regard certification as the *end of a clinical process* and wait to certify patients until they think they cannot offer any further medical treatments.

Related to the issue of *when* to offer certification is the reason for offering it: the purpose of certification is to provide access to support for patients. Certification and registration are not simply medical processes but a significant step in patients' adjusting and accepting of their sight-loss. Interviews with patients revealed the issuing of certification is often viewed as the beginning of a new phase and a gateway to much needed support. In contrast, many ophthalmologists regard certification as the end of the process but this attitude can lead to patients needing support left without it.

There was variation in the certification process in each of the three areas and the process used by each consultant differed within hospitals. The Department of Health recommends the CVI be sent to the local social services department "within five working days".⁽²¹⁾ Across the three areas, interviews with hospital and social services staff and patients revealed that only very rarely were CVIs sent to SSDs within five days. It was much more common for CVIs to take weeks or months to be sent to SSDs. Previous research also found that delays often occur when CVIs are sent to SSDs.⁽²²⁾ Each administrator (n=8) confirmed consultants can 'take a while' to return the CVI to their office. Another significant delay is sending incomplete CVIs to SSDs; an unnecessary delay for patients waiting for support.

1
2 These practices lengthen the certification and registration processes, making it
3
4 more complicated and unnecessarily fraught for patients. In each of the three
5
6 areas studied, there were examples of good and bad practice and stories of
7
8 both grateful and frustrated patients, thus a good certification process is
9
10 achievable in every department.
11
12

13
14
15 A more holistic approach to eye health is needed; health professionals,
16
17 including registrars, ophthalmologists, optometrists and medical secretaries
18
19 should improve their awareness of when certification should be offered and how
20
21 certification benefits patients. Any additional time needed for CVI discussion in
22
23 clinic may not be readily available due to pressures on quantity (e.g. meeting
24
25 Referral to Treatment guidance and other performance targets), therefore
26
27 departments should explore if others, such as optometrists or ECLOs, are better
28
29 placed to complete parts of the CVI. It should also be considered who is best
30
31 placed to send completed CVIs quickly - ECLOs or secretaries or a designated
32
33 administrator/team.
34
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40 Understanding how certification and registration operates at a local level will
41
42 help commissioners and clinicians better understand the reasons for the
43
44 variations in certification and registration rates and take steps to address the
45
46 inconsistencies. Quantifying the barriers to timely certification and registration,
47
48 and benchmarking against best practice will also help ensure the correct level of
49
50 service provision, enabling health and social care commissioners to deliver
51
52 consistent, high quality services based on an accurate assessment of need.
53
54
55

56 57 **Limitations of research** 58 59 60

1
2 The interviews include only those who were certified, further research could
3
4 examine patients who are eligible for certification but who either decline to be
5
6 certified or are not offered it by clinicians. In addition, as the research used
7
8 qualitative methods, we were able to interview a limited number of health and
9
10 social care professionals. Further research is needed to examine a wider range
11
12 of departments over a longer period of time. Research is also needed to
13
14 understand the impact of the Disability Living Allowance assessment policies
15
16 and whether there is any pressure on ophthalmologists not to certify patients.
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23
24 TB wrote the initial draft. All authors revised the initial draft, FG revised the
25
26 subsequent drafts. TB and SL wrote the final draft. TB is the guarantor. All
27
28 authors have full control of the content of the article.
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Competing interests:

None.

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