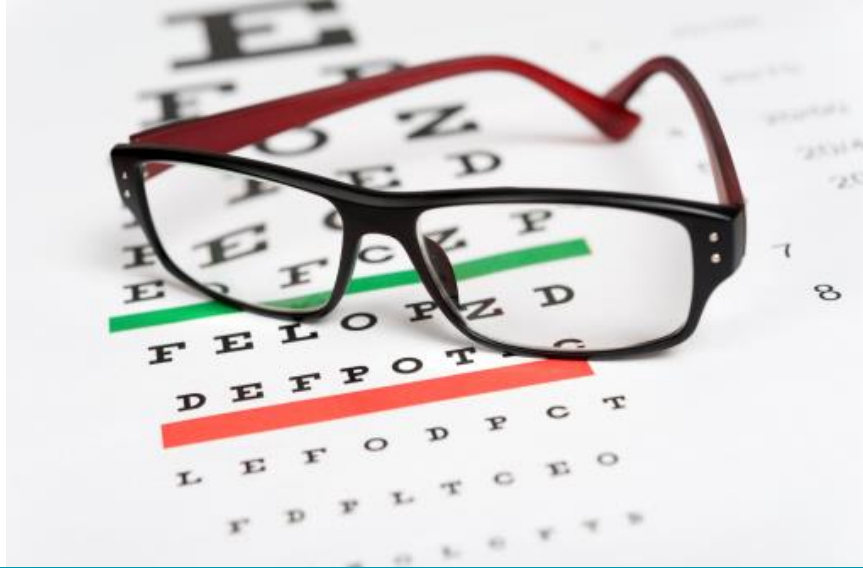


INFORMATION  
ANALYSIS  
DIRECTORATE



# 2017 Northern Ireland Sight Test & Ophthalmic Public Health Survey



Department of  
**Health**

An Roinn Sláinte

Máinnystrie O Poustie

[www.health-ni.gov.uk](http://www.health-ni.gov.uk)

# Contents

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Section	Page
Glossary	3
Foreword	4
Introduction	5 - 7
Design and Methodology	8 - 11
Results – profiles of practices and patient demographics	12 – 20
Results – survey questions and analysis	21 - 39
Concluding Summary	40
Annexes (1-7)	41 - 58
References	59 - 60

# Glossary

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1. CVI – Certificate of Visual Impairment
2. DEP – Developing Eyecare Partnerships: Improving the Commissioning and Provision of Eyecare Services in Northern Ireland
3. DoH – Department of Health
4. DESP – Diabetic Eye Screening Programme
5. GOS – General Ophthalmic Services
6. HSCB – Health and Social Care Board
7. LCG – Local Commissioning Group
8. OCT – Ocular Coherence Tomography
9. ONS – Office for National Statistics
10. OP – Ophthalmic Photography
11. PHA – Public Health Agency
12. RNIB – Royal National Institute for the Blind
13. WHO – World Health Organisation

# Foreword

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The Department of Health conducted the 2017 Northern Ireland Sight Test and Ophthalmic Public Health Survey over a six week period in January and February 2017. The survey was conducted in order to gauge overall sight test activity and the outcomes of this activity in Northern Ireland, building on the previous survey which was undertaken in mid-2014<sup>1</sup>. The information and data from the survey will help to inform the planning and delivery of eyecare services in Northern Ireland.

Supporting the work of Developing Eyecare Partnerships<sup>2</sup>, data in relation to the demography of those accessing eyecare services, the presence of ophthalmic and medical conditions, clinical outcomes, and ophthalmic public health information will be analysed to inform the commissioning and provision of eyecare services in Northern Ireland.

The key findings of the 2017 Sight Test and Ophthalmic Public Survey are as follows:

A total of 92 practices returned survey data out of 274 invited, giving a 33.6% return rate.

- Information from 3,312 patient sight tests were submitted over the survey period – 2,433 were GOS tests (73.5%) and 879 were Private tests (26.5%).
- Spectacles or contact lenses were dispensed with 2,131 of the sight tests carried out (64.3%).
- 94.5% of Private sight tests were provided to those aged 19-59, compared to 22.0% of GOS tests for the same age group.
- The referral rate for patients in the survey period was 4.7%.

DoH would like to extend their thanks and appreciation to all stakeholders involved in the preparation, planning and delivery of the 2017 Sight Test and Ophthalmic Public Health Survey. Particular thanks are extended to the HSCB, PHA, DEP Task Group 1 and all ophthalmic practices and their ophthalmic practitioners who participated in the survey.

# 1. Introduction

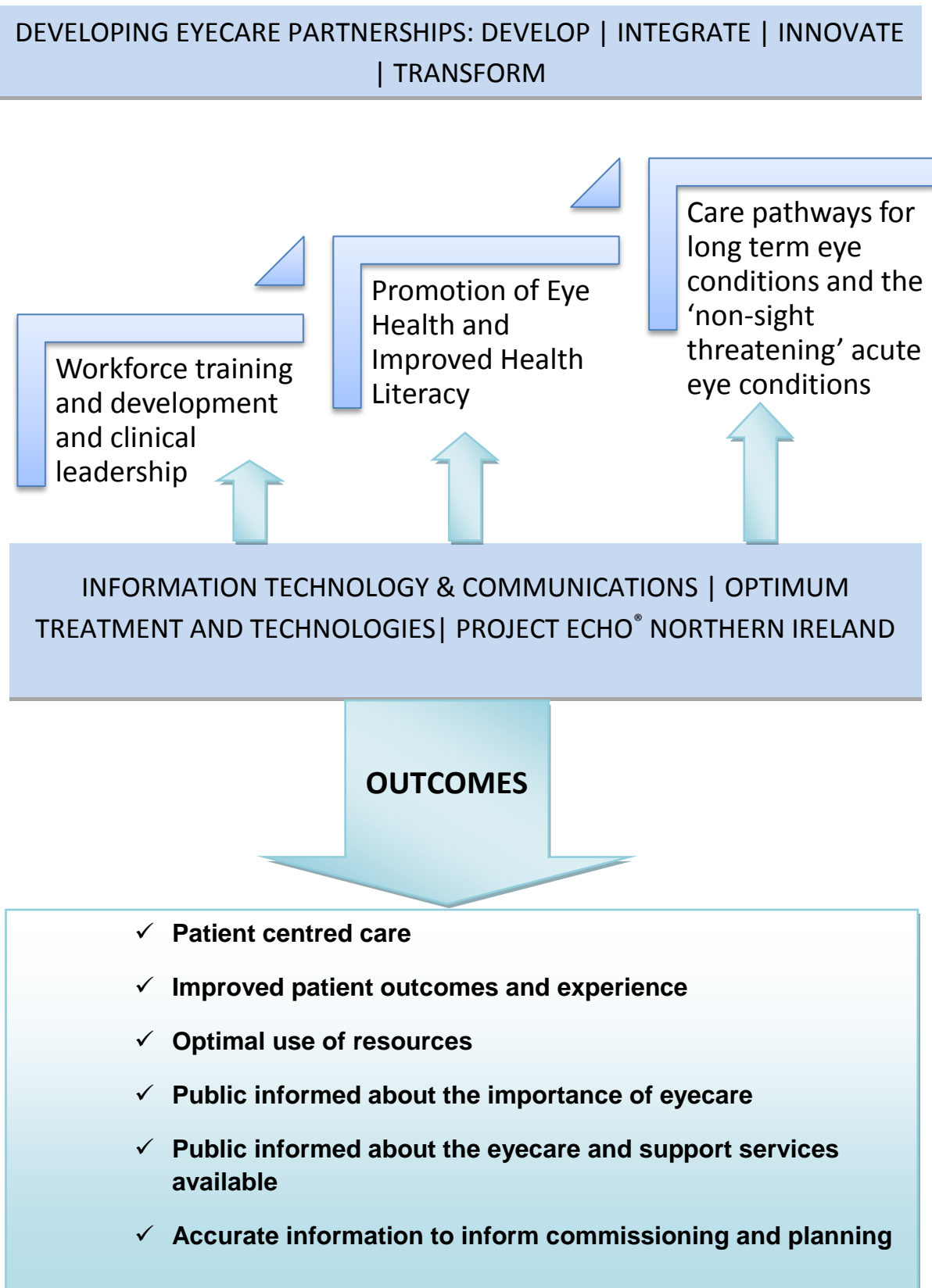
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**1.1** The Department of Health (DoH) in conjunction with the Health and Social Care Board (HSCB) undertook the 2017 Sight Test and Ophthalmic Public Health Survey over a six week period in January and February 2017. The previous Northern Ireland Sight Test and Ophthalmic Public Health Survey<sup>1</sup> was conducted in 2014 and, following the report of the 2014 survey presented to the Developing Eyecare Partnerships Project Board, a commitment was made to undertake another survey.

**1.2** The 2014 Northern Ireland Sight Test and Ophthalmic Public Health Survey report<sup>1</sup> places the survey in the context of “Developing Eyecare Partnerships, Improving the Commissioning and Provision of Eyecare Services in Northern Ireland”<sup>2</sup> (DEP). DEP as a five year strategy aims to nurture and develop integrated eyecare services using a pathway approach to improve patient outcomes, experience and health literacy supported by an ophthalmic public health framework to enable the public to make informed and active choices in regard to eye health. This work is underpinned by the adoption of the ten principles of service change in order to enhance access and improve eye health outcomes. In achieving the aims of DEP, it is acknowledged that how and where care is delivered needs to change and DEP is aligned to and supported by other policies and plans such as Transforming Your Care<sup>3</sup>, Health and Wellbeing 2026: Delivering Together<sup>4</sup> and the current DoH Elective Care Plan: Transformation and Reform of Elective Care Services<sup>5</sup>. In adopting an integrated approach, DEP aims to utilise multidisciplinary ophthalmic teams supported by diagnostic and treatment technologies and integrated information and communication systems to deliver timely, safe and effective eyecare services in the most appropriate location.

Figure 1.2 provides a high level overview of the vision and components of DEP.

Figure 1.2



1.3 Objective four of DEP states:

***“A Northern Ireland Sight test Survey will be re-commissioned in order to fully understand the level and type of demand for sight tests in General Ophthalmic Services, to include referral patterns, demographics, co-morbidities and the level of private practice undertaken”***

This DEP Objective was achieved and delivered and a commitment to undertake a further survey in 2017 was made.

1.4 This report details the methodology adopted, the results of the 2017 survey and contextualises how aspects of the information gathered will assist the DoH, the HSCB and the Public Health Agency (PHA) to deliver the goals of DEP.

## 2. Design and Methodology

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### 2.1 Sample

**2.1.1** The Ophthalmic List consisting of 274 Optometry practices in Northern Ireland providing General Ophthalmic Services<sup>6</sup> (GOS) was used for the survey sample. The number of survey invites issued to each practice was determined by examination of GOS activity data for each practice for a 6 month period (December 2015 – May 2016) and the staff count (practitioners) for each practice. Each practice was first assigned to a survey group relating to number of survey invitations (1 to 6) based on their overall GOS activity during the identified 6 month period. A number of premises were automatically assigned to the '1 survey invite' group based on lower numbers of sight tests carried out in the 6 month period; the remaining premises were evenly distributed across survey invite groups 2-6. It was noted, however, that adopting this criteria alone for survey group assignment would have resulted in 75 premises receiving more invitations for participation than they had optometric staff. Therefore, the optometric staff count of each practice was subsequently used to ensure that no premise was to be assigned to an invite group that would ask for more respondents than it had optometric staff. The remaining premises were assigned to invite groups based on both their staff count and GOS activity i.e. a premise could not be assigned to an invite group which was higher than its number of optometric staff e.g. a premise with only 2 optometric staff could not receive more than 2 invitations; however, a premise with 4 optometric staff but with low GOS activity would not necessarily receive 4 invites, but would receive the number determined by its GOS activity.

### 2.2 Survey Format

**2.2.1** Development of the 2014 Sight Test Survey noted an appetite for a survey method that could be completed electronically. Due to time constraints, it was not possible to develop a web based survey for the 2014 survey, and a spreadsheet method was selected and administered in conjunction with paper surveys.



The 2017 survey benefited from the development and availability of suitable survey software and it was possible to develop an online electronic sight test survey using Citizen Space® software. The online survey approach was considered to have multiple benefits, both for practices and practitioners and in terms of the data collected. For practitioners, it was hoped the survey would be:

- accessible;
- easier and quicker to input answers; and
- could be completed using a computer, tablet device or mobile phone.

Benefits in relation to data collection included:

- scope to add validation and prompts to ensure full completion of each survey;
- routing of questions presented in the survey dependent on how certain questions are answered;
- data input at the time of the response, making manual processing and input unnecessary; and
- straightforward extraction and analysis of the resulting data file into Microsoft Excel.

A small number of premises requested paper versions of the survey and the resulting returns were processed and input into the online survey on their behalf.

Members of the DEP Project Board and each of the DEP Task Groups were consulted on the questions for the survey and two volunteer optometry practices agreed to test the survey. The feedback from the principal optometrists in the volunteer practices was generally very positive with minor suggestions for improvements. Where it was possible to incorporate changes to the survey, taking into account the feedback, these changes were made and the final version of the survey was agreed and finalised.

## 2.3 Survey Timetable and Invitation

**2.3.1** It was agreed with the HSCB to conduct the survey across a 4 week period between mid-January and mid-February 2017, with the aim of avoiding the influence of the holiday period at the start of January 2017.

Each practice was contacted via e-mail to notify them of the forthcoming survey for their nominated survey week, outlining the survey background and rationale, advising them of the number of individual practitioners in the practice who were requested to complete the survey (recording all sight tests conducted during their nominated survey week), and providing instructions and a link to the online survey. Follow-up e-mails were sent and phone calls were made to those practices that failed to respond.

**2.3.2** To avoid any 'time-of-month bias', practice invitations were divided across 4 weeks by the number of practices and practitioners being invited to take part. Any requests from practitioners/practices to be moved to an alternative week/invite group were accommodated, in order to encourage and optimise participation. The data collection period was extended by 2 weeks, to allow non-respondents from weeks 1-4 to participate.

**Table 2.3.2 – Distribution of survey invitations by week**

<b>Number of survey invitations</b>	<b>Week1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Total</b>
<b>1</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>58</b>
<b>2</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>50</b>
<b>3</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>12</b>	<b>46</b>
<b>4</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>43</b>
<b>5</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>37</b>
<b>6</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>40</b>

## 2.4 Design of Survey Questionnaire

2.4.1 As in the 2014 Sight Test survey<sup>1</sup>, the 2017 survey sought to gather information about the practice and the patient. In addition to Practice Code and the Personal Code of the individual optometrist conducting the sight test, the 2017 questionnaire also captured the following information:

- Presence of specialist equipment at the practice – OCT; Visual Fields; Digital Imaging – Fundus; Digital Imaging – Anterior; Topography
- Sight test date
- Sight tests taking place ‘after hours’ – after 5.30pm
- Patient postcode
- GOS or Private Patient
- Patient ethnicity, month/year of birth and gender
- Reason for attendance for a sight test
- Presence of conditions – diabetes, glaucoma, ocular hypertension and family history of glaucoma
- Attendance at Diabetic Eye Screening Programme (DESP) in past 12-15 months for those with diabetes
- Smoking status of patient
- Whether smoking cessation advice was offered
- CVI eligibility
- Referrals and reasons for referral
- Prescribing and GOS voucher provision

A sample survey and accompanying documentation can be found in Annexes 1- 4.

## 3. Results – profiles of practices and patient demographics

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Note: Unless otherwise stated, the base/denominator for patient level figures and percentages is all 3,312 patient tests.

### 3.1 Practice profile

**3.1.1** In total, 92 practices from 274 invited submitted survey returns to DoH, giving a response rate of 33.6%, compared to a response rate of 34.4% (90 practices out of 262) in 2014. A total of 3,312 surveys were returned, compared to 3,708 in 2014. Table 3.1.1 shows the geographical distribution of all Northern Ireland practices and those that returned a survey.

**Table 3.1.1 – LCG area of NI Practices and Survey Returns**

	<b>Belfast</b>	<b>Northern</b>	<b>South Eastern</b>	<b>Southern</b>	<b>Western</b>	<b>Northern Ireland</b>
<b>All practices (% of NI practices)</b>	60 (21.9%)	77 (28.1%)	47 (17.2%)	47 (17.2%)	43 (15.7%)	<b>274</b>
<b>Practices that returned surveys (% of total returns)</b>	17 (18.5%)	34 (37.0%)	11 (12.0%)	20 (21.7%)	10 (10.9%)	<b>92</b>
<b>LCG response rate</b>	28.3%	44.2%	23.4%	42.6%	23.3%	<b>33.6%</b>
<b>Number or returned surveys (% of total returns)</b>	349 (10.5%)	1,393 (42.1%)	830 (25.1%)	517 (15.6%)	223 (6.7%)	<b>3,312</b>

**3.1.2** LCG Response rate (i.e. the percentage of practices in each LCG that responded out of total practices in the LCG) and the number of practices that returned surveys were greater in 2017 in the Belfast, Northern and Southern LCGs, and lower in the South Eastern and Western LCGs. The response rate from practices in the Western LCG area was notably lower, with only 23.3% of practices participating, compared to 52.5% in the 2014 survey (10 out of 43 practices participated in 2017, compared to 21 out of 41 in 2014).

Also worth noting are the numbers of returned surveys by each LCG, as a higher number of practices responding in an LCG did not necessarily equate to a higher number of surveys returned. For example, the returns from the South Eastern LCG demonstrated the 2<sup>nd</sup> lowest number of practices that returned surveys (accounting for 12% of all practices that responded) , but the number of actual surveys returned by practices in the South Eastern LCG accounted for 25.1% of all surveys returned.

**3.1.3** The average number of practitioners invited across all practices was 3.26, and the average survey return from practices was from 1.86 practitioners. In total, 171 individual practitioners responded to the survey.

**3.1.4** In order to determine if the practices which participated in the survey were representative of the type of practices regionally e.g. independent or multiple, the optometry practices were classified into three categories – independent practice, local multiple practice and national multiple practice.

The criteria applied in this categorisation were as follows:

- Independent – 1 or 2 practices owned by the same GOS contractor
- Local Multiple – 3 or more practices owned by the same GOS contractor
- National Multiple – practices ‘affiliated’ to or owned by a UK-based or other international business/corporate.

The category breakdown of all 274 optometry practices invited to participate, and of the 92 practices that responded, are shown in table 3.1.4. The number of responding practices is also presented as a percentage of the total number of practices in each of the three categories.

**Table 3.1.4 Category breakdown of invited and responding optometry practices**

Category of practice	Number of invited practices	% of total invited practices	Number of responding practices	% of total responding practices	Number of responding practices as percentage of invited practices
Independent	183	66.8%	67	72.8%	36.6%
Local multiple	43	15.7%	9	9.8%	20.9%
National multiple	48	17.5%	16	17.4%	33.3%
<b>Total</b>	<b>274</b>	<b>100%</b>	<b>92</b>	<b>100%</b>	<b>33.6%</b>

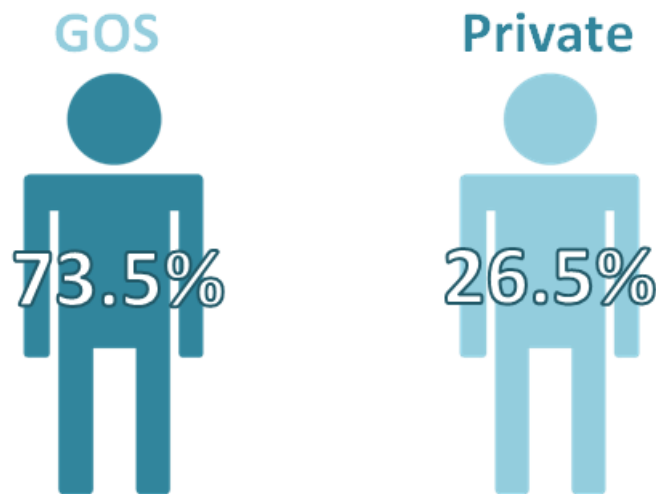
The table shows that a majority of the practices invited to participate (66.8%) and a majority of responding practices (72.8%) were independent practices. Also, a greater percentage of independent practices than the other categories of practices invited to participate did so (36.6%), although the differences between the three categories were smaller in relation to this.

It is noted that the proportion of ‘national multiple’ practices in the survey responses is closely aligned and representative of the proportion of ‘national multiple’ practices in Northern Ireland as a region, whilst ‘local multiple practices’ were slightly under-represented in the survey responses.

## **3.2 Patient profile – NHS/Private**

**3.2.1** In total, 3,312 patient sight tests were recorded during the survey period from 92 practices. Of these, 73.5% were funded by General Ophthalmic Services<sup>6</sup> (GOS) and 26.5% were recorded as ‘Private’ patients, paying for their own eyecare and ophthalmic service. Section 3.2.2 outlines the eligibility criteria which apply for the provision of General Ophthalmic Services<sup>6</sup>.

**Figure 3.2.1 Patient type: GOS and Private**



**3.2.2** A patient's access to a GOS sight test is affirmed if they meet one or more of the following eligibility criteria:

- aged under 16;
- aged 16, 17 or 18 and are in full-time education;
- aged 60 or over;
- registered as partially sighted (sight impaired) or blind (severely sight impaired);
- diagnosed with diabetes or glaucoma;
- aged 40 or over, and your mother, father, brother, sister, son or daughter has been diagnosed with glaucoma;
- advised by an ophthalmologist (eye doctor) that you are at risk of glaucoma;
- a prisoner on leave from prison;
- eligible for a Health Service complex lens voucher;
- receive Income Support;
- receive Income-based Jobseeker's Allowance (not Contribution-based);
- receive Pension Credit Guarantee Credit;
- receive Income-based Employment and Support Allowance (not Contribution-based);
- entitled to, or named on, a valid Health Service tax credit exemption certificate;
- on a low income and named on a valid HC2 (full help) or HC3 (partial help) certificate.

### 3.3 Patient profile – Age

3.3.1 Analysis of the age bands of patients accessing sight tests during the survey period was undertaken and is recorded in Table 3.3.1 below.

**Table 3.3.1 Age bands of GOS and Private Tests**

Age band	GOS	% GOS	Private	% Private	Total	Total %
Under 4	20	0.8%	2	0.2%	22	0.7%
4 - 15	555	22.9%	6	0.7%	561	17.0%
16-18	109	4.5%	9	1.0%	118	3.6%
19-59	535	22.0%	830	94.5%	1365	41.3%
60 and over	1208	49.8%	31	3.5%	1239	37.5%
<b>Total</b>	<b>2427</b>	<b>100.0%</b>	<b>878</b>	<b>100.0%</b>	<b>3305</b>	<b>100.0%</b>

*Note: N=3,305 – age could not be calculated for 7 patients, due to inaccuracies in the date of birth information recorded in these survey returns*

3.3.2 More than 90% of Private tests were carried out on the 19-59 age group, with GOS tests largely being taken by younger (<16, 23.7%) and older (>=60, 49.8%) age groups.

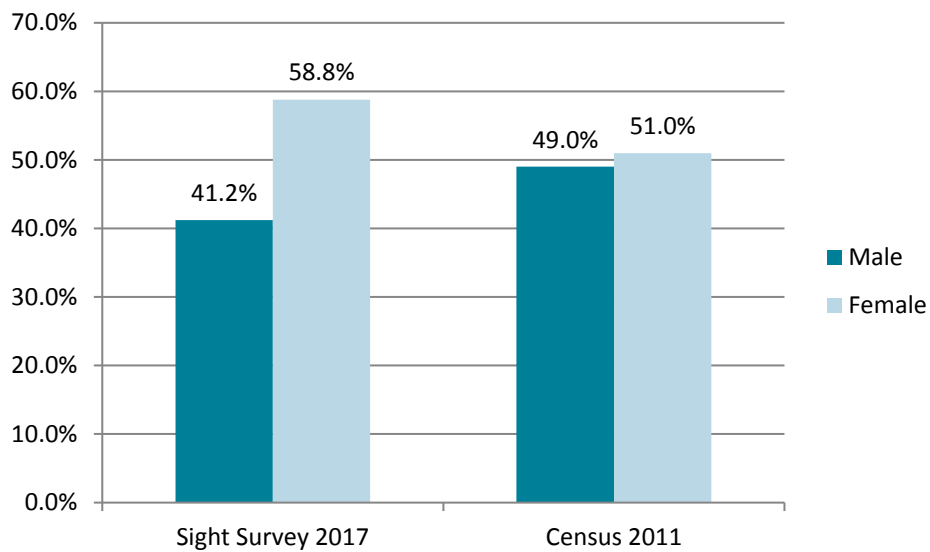
3.3.3 This finding is expected, as persons in full time education under 19 and those aged 60 and over are age groups eligible for GOS sight tests and would be encouraged to avail of routine and regular sight tests. The 22.0% of GOS patients in the 19 to 59 age group can be accounted for by the application of other GOS eligibility criteria for example presence of diabetes/glaucoma, persons aged over 40 with a family history of glaucoma, those in receipt of certain types of benefits and those registered as partially sighted or blind (See 3.2.2 for full list).

3.3.4 Those receiving ‘Private’ sight tests are almost exclusively in what might be loosely and collectively termed the ‘working age’ group, 19 to 59 years. A small proportion of those in the 60 and over age group (3.5%) also received Private sight tests, despite eligibility for a HSC funded GOS test. The reason(s) for this figure cannot be gleaned from any other survey variable and suggestions can only be posed for this finding. For example, these patients may be ineligible for other reasons, perhaps being non-UK residents, having previously accessed GOS within the minimum recommended GOS sight test interval, or, not providing the necessary information to access GOS.



### 3.4 Patient profile – Gender and Ethnicity

Figure 3.4.1 Sight test survey population compared to Census 2011 - Gender

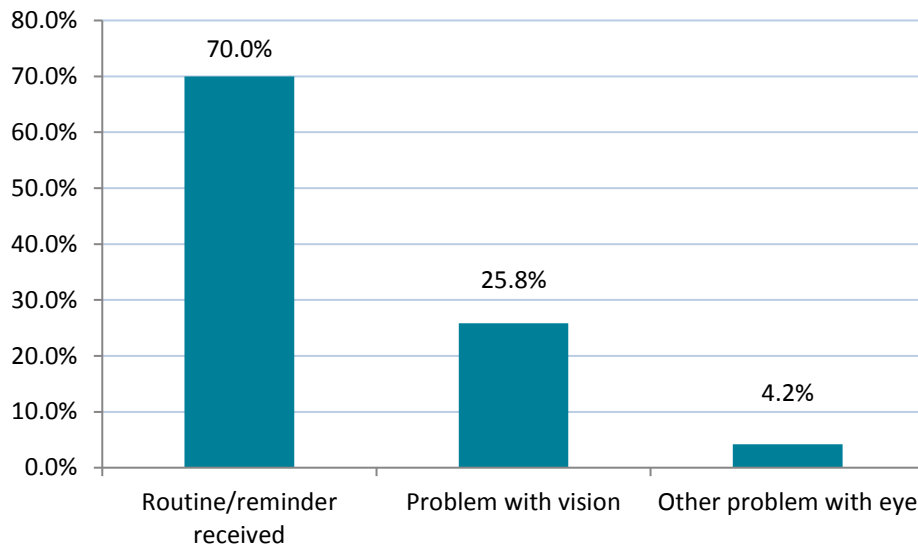


**3.4.2** A greater proportion of the survey returns were for sight tests provided to females than males – this difference is greater than the Census 2011<sup>7</sup> population figures for gender. The gender breakdown observed above closely mirrors that evidenced in the 2014 Sight Test survey (41.6% males and 58.4% females). While this may suggest that females have greater need for ophthalmic care, an alternative explanation could be that males are less proactive in seeking or attending for sight tests. Recent analysis of dental procedures showed a possibly comparable trend in male/female attendance – more women attended for ‘preventative’ and ‘routine’ procedures such as cleaning and polishing, whereas men attended for noticeably more ‘treatments’ such as dental cavity fillings.

**3.4.3** Following a recommendation arising from the 2014 report, a question relating to ‘reason for attendance’ at the sight test was included in the 2017 survey, with the three response options of ‘Routine/reminder received’, ‘Problem with vision’ and ‘Other problem with eye’ listed for this question. Figure 3.4.3 shows that the majority of sight tests in the survey (70.0%) were routine or carried out as a result of a reminder being received.

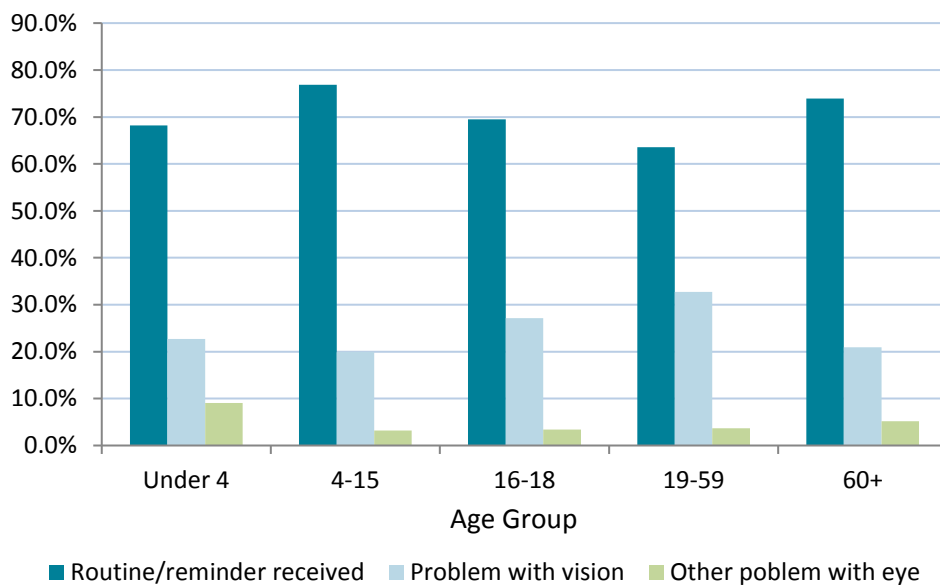
### Figures 3.4.3(a) and (b) Reason for attendance at sight test

Figure 3.4.3(a)



A similar pattern as shown in the chart above was apparent in all age groups, as shown below.

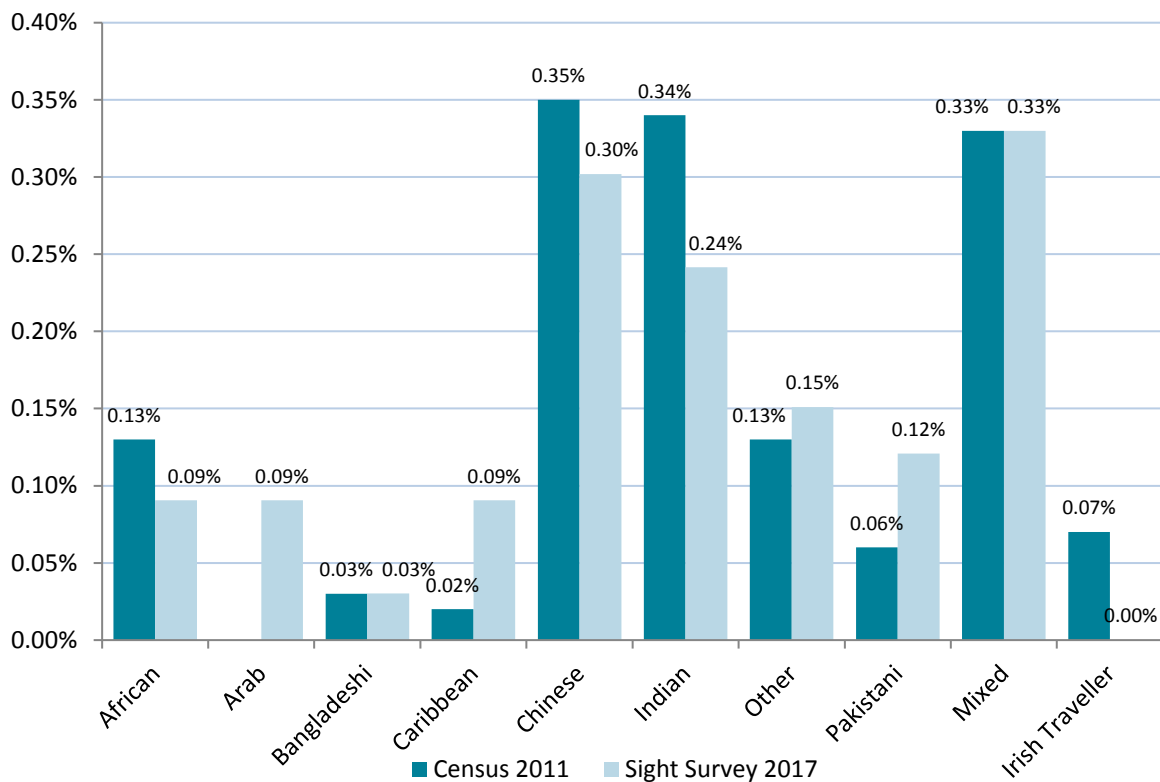
Figure 3.4.3(b)



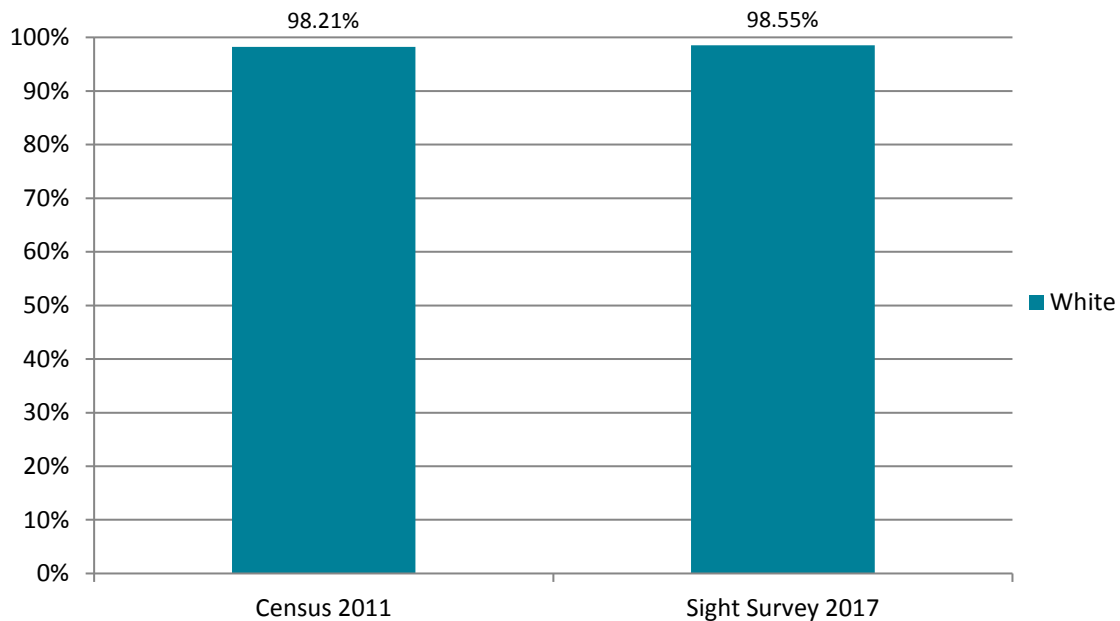
**3.4.4** The 2017 Sight Test and Ophthalmic Public Health Survey included an option for ‘Other’ genders to be specified within the responses. This was included to ensure inclusivity of those individuals who do not identify with a male or female gender. There were no instances of this option being used within the survey – this may be a result of the surveys being filled in by practitioners and not the individual patients, who may not have needed to share their gender identity for the purposes of the test or may not have been comfortable doing so.

**3.4.5** The following charts show the ethnicity breakdown of the survey population, compared to the Census 2011 breakdown

**Figure 3.4.5 Sight test survey population compared to Census 2011 – Ethnicity - Minorities**



**Figure 3.4.6 Sight Test survey population compared to Census 2011 – Ethnicity - White**



Note:

1) Due to the high prevalence of 'White' ethnicity in the survey, the charts comparing Sight Survey and Census 2011 have been split into two charts above allowing for easier visual comparison.

2) Ethnic categories for our survey were adapted from ONS guidance<sup>8</sup> on surveys in Northern Ireland. Due to space constraints on our surveys, some categories were omitted based on expected low prevalence – an 'Other' option was provided for any results that did not fit within the provided categories.

3) The full question and answer options for ethnicity can be found in Annex 2 at Question 4. For the purposes of comparison to Census 2011 data, 'White and Black Caribbean', 'White and Black African' and 'White and Asian' have been recoded as 'Mixed'. The 'Arab' category from our survey did not have a directly comparable Census 2011 option.

**3.4.7** Given the number of returns, we would expect some variation in the survey returns compared to Census 2011<sup>7</sup> data. These small differences are observed in Figure 3.4.5 and include some groups that are slightly over-represented, and some groups that are slightly under-represented.

## 4. Results – survey questions

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### 4.1 Presence of medical and ophthalmic conditions

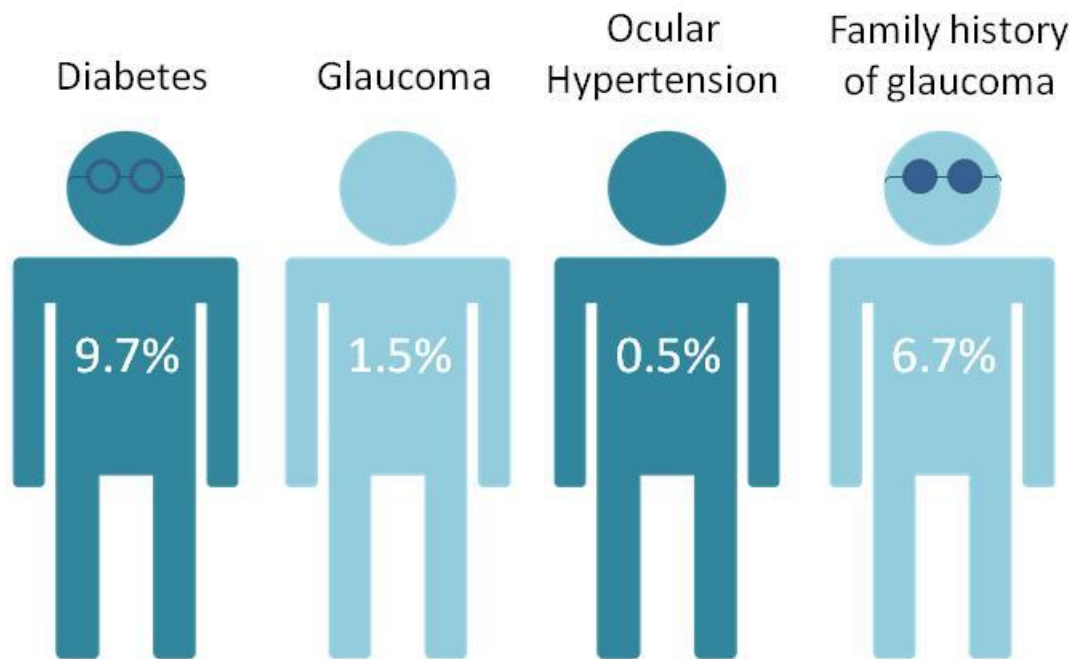
4.1.1 The incidence of three medical and ophthalmic conditions and one risk factor were investigated in the survey – the presence of diabetes, glaucoma, ocular hypertension and a family history of glaucoma. A Yes/No option was available and the results are outlined below in Table 4.1.1 and in Figure 4.1. 1 (b):

**Table 4.1.1(a) Results for survey question: ‘Are any of the following conditions present?’**

<b>Diabetes</b>	Yes	321	9.7%
	No	2,991	90.3%
	<b>Total</b>	<b>3,312</b>	<b>100.0%</b>
<b>Glaucoma</b>	Yes	51	1.5%
	No	3,261	98.5%
	<b>Total</b>	<b>3,312</b>	<b>100.0%</b>
<b>Ocular Hypertension</b>	Yes	16	0.5%
	No	3,296	99.5%
	<b>Total</b>	<b>3,312</b>	<b>100.0%</b>
<b>Family History of Glaucoma</b>	Yes	221	6.7%
	No	3,091	93.3%
	<b>Total</b>	<b>3,312</b>	<b>100.0%</b>

The figures are broadly similar to those evidenced in the 2014 survey.

**Figure 4.1.1(b) Presence of Diabetes, Glaucoma, Ocular Hypertension and Family History of Glaucoma - % of all sight test survey patients with each condition present**



**4.1.2** Figure 4.1.1(b) shows the percentages of those who were noted as having each condition or status at the time of their sight test. For comparison, the General Practice Quality and Outcomes Framework (QOF) published data<sup>9</sup> for 2015/16 shows prevalence of Diabetes in Northern Ireland to be approximately 4.5% (note that QOF figures include only those aged 17 and over, whereas the Sight Test Survey figures relate to all ages where diabetes is present).

**4.1.3** Those recorded with diabetes (with the exception of those under 12 years of age) will be referred for Diabetic Retinopathy screening as part of their holistic care. Presence of diabetes can result in the development of ophthalmic conditions such as diabetic retinopathy and an increased risk of other conditions, both ophthalmic and systemic. Diabetic Retinopathy is a major cause of blindness and visual impairment nationally and globally.

**Table 4.1.4(a) Presence of diabetes in survey patients with glaucoma**

<b>Patients with glaucoma</b>	<b>Number of patients</b>	<b>Number of patients as % of total glaucoma patients</b>	<b>Number of patients as % of total survey sample (n=3312)</b>
<i>With diabetes</i>	7	13.7%	0.2%
<i>Without diabetes</i>	44	86.3%	1.3%
<i>Total glaucoma patients</i>	51	100.0%	1.5%

**Table 4.1.4(b) Presence of glaucoma in survey patients with diabetes**

<b>Patients with diabetes</b>	<b>Number of patients</b>	<b>Number of patients as % of total diabetic patients</b>	<b>Number of patients as % of total survey sample (n=3312)</b>
<i>With glaucoma</i>	7	2.2%	0.2%
<i>Without glaucoma</i>	314	97.8%	9.5%
<i>Total diabetes patients</i>	321	100.0%	9.7%

**4.1.4** Tables 4.1.4(a) and (b) provide information on those patients with and without glaucoma and diabetes, and the co-existence of the two conditions. Particularly notable from the tables above are that 13.7% of glaucoma patients in the survey had diabetes, compared to 9.7% of all survey patients having diabetes. There are several identified risk factors for glaucoma, and diabetes as an associated risk factor for glaucoma has been the subject of significant academic debate. It is suggested, however, that clinicians and ophthalmic professionals should be aware of the potential for persons with diabetes to have an increased risk of developing glaucoma.

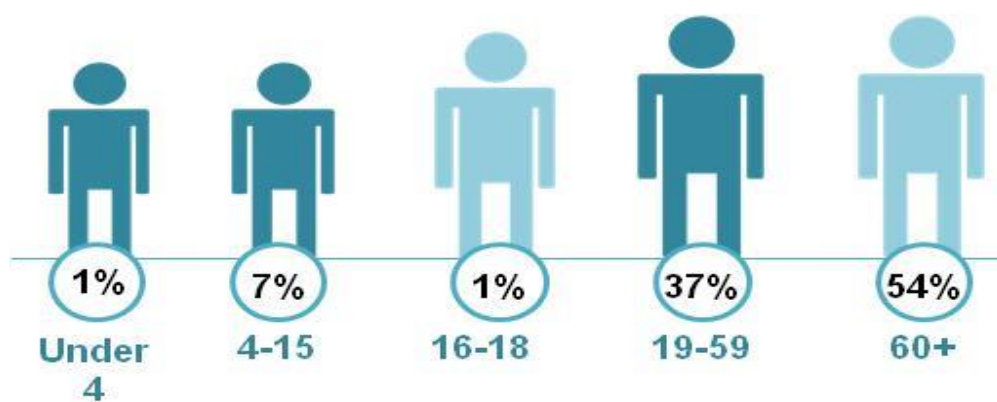
## **4.2 Diabetes and Diabetic Eye Screening Programme (DESP)**

**4.2.1** One survey question looked at those who had been recorded as having Diabetes, and how many had attended the Northern Ireland Diabetic Eye Screening Programme (DESP) in the previous 12-15 months. Attendance at the screening service is seen as key to identifying diabetic retinopathy and using early detection to help prevent possible diabetic eye complications.

**4.2.2** Of the 321 patients identified as having diabetes, 218 (67.9%) of those were recorded as having attended DESP in the recommended time frame. This finding is highly comparable to the findings of the 2014 survey and the same suggestion as to why approximately one third of persons with diabetes within the survey return data reported not having attended DESP can be posed. Some of the 103 patients who responded that they had not attended DESP in the recommended time frame may only recently have been given a diagnosis of diabetes and were scheduled to attend, but the information gathered from the survey does not provide satisfactory evidence to validate this suggestion. The strategic direction of DEP is to allow primary care optometry access to the Northern Ireland Electronic Care Record (NIECR). In addition, modernisation of the diabetic eye screening programme (DESP) will see the uploading of the DESP screening report onto NIECR. This sharing of information will integrate systems and allow primary care optometrists to better engage with their patients who are also living with diabetes, making “every contact count” and improving the uptake of diabetic eye screening.

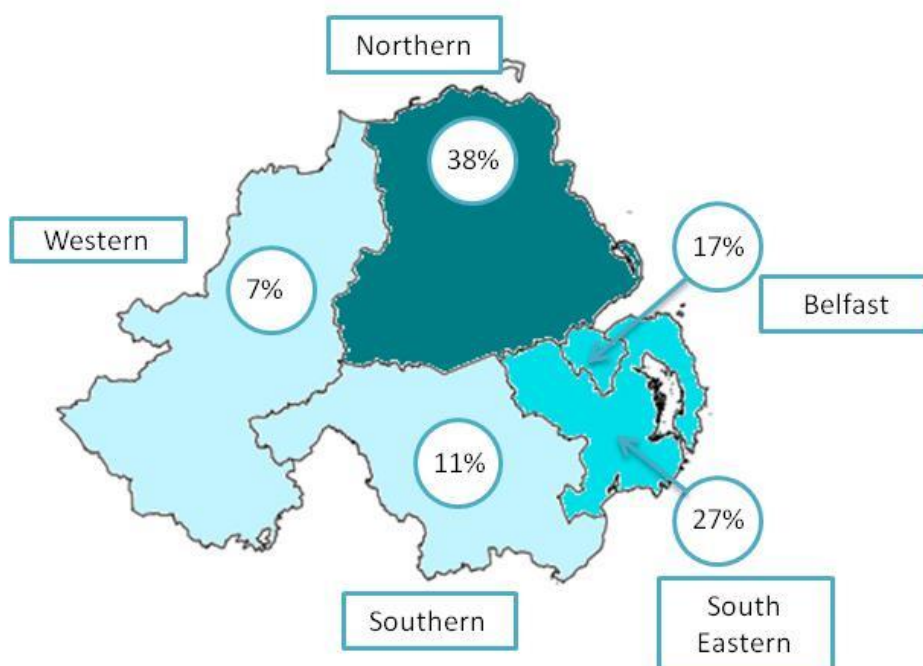
**4.2.3** For those 103 patients who reported not having attended DESP, the age breakdown is illustrated in Figure 4.2.3(a). Figure 4.2.3(b) illustrates the LCG for these patients. DEP Objective 6 cites diabetic retinopathy as a long term eye condition and the HSCB and PHA as joint leads for the implementation of DEP are working collaboratively with the NI DESP to ensure that all patients who require this service have ready access to the service in order to improve eye health outcomes.

**4.2.3(a) Percentage of patients who did not attend DESP by age group**





**Figure 4.2.3(b) Total percentage of those not attending DESP by Practice LCG**



**4.2.4** Given the importance of screening in the process of early detection and prevention of sight loss, there is merit in investigating if the 67.9% DESP attendance rate in the survey is representative of attendance rates for the service. The most recent figures available for comparison suggest an uptake rate of 70% and approximately 85,000 patients offered screening during 2015/16. Of note, however, is the relatively small sample size involved in the sight test survey, so some variation in relation to the two sets of figures can be expected.

### **4.3 Certificate of Visual Impairment (CVI) Eligibility**

**4.3.1** 92 persons, or 2.8% of all the sight tests recorded in the survey period, were eligible to receive a Certificate of Visual Impairment (CVI). The majority of these patients (66.3%) were in the 60+ age group. Table 4.3.1 shows the age breakdown of all those considered to have a visual impairment according to the World Health Organisation (WHO)<sup>10</sup> definition. Certification of visual impairment is currently undertaken by a Consultant Ophthalmologist. Guidance provided to practices in relation to CVI is included in Annex 6 and 7.

**Table 4.3.1 Age breakdown of patients eligible to receive a Certificate of Visual Impairment**

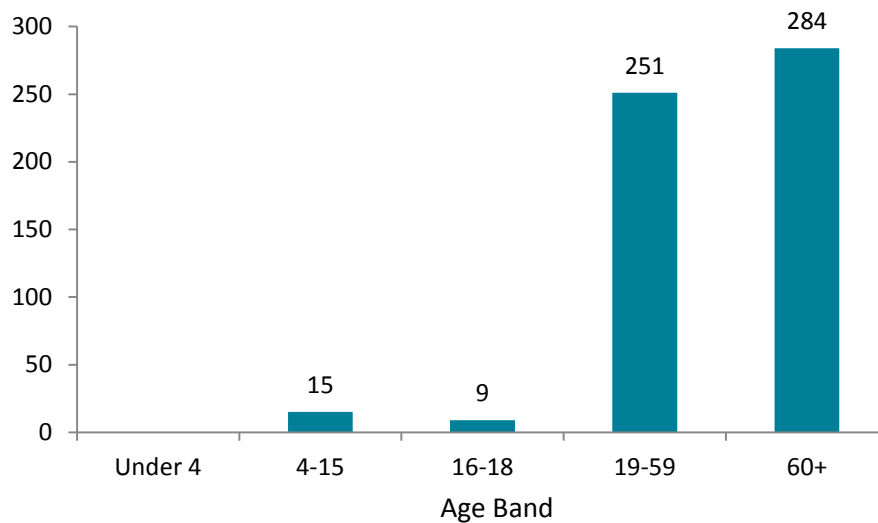
<b>Age group</b>	<b>Number of patients</b>	<b>% of all patients eligible for CVI</b>
Under 4	0	0.0%
4-15	10	10.9%
16-18	5	5.4%
19-59	16	17.4%
60+	61	66.3%
<b>Total</b>	<b>92</b>	<b>100.0%</b>

**4.3.2** In recognition of the importance of ensuring that adults and children with visual impairment are supported by health and social care services where necessary and appropriate, the CVI sub-group of DEP Task Group 5 has examined the pathway for CVI in Northern Ireland. Working with key stakeholders and the DoH, a streamlined regional process and pathway for CVI has been implemented including; a revised CVI form which will capture epidemiological information to inform HSC planning, implementation of direct and effective channels of communication to social care and sensory support services, a CVI identity card and patient resources and information on voluntary and community support services.

## **4.4 Ophthalmic Public Health – Smoking and Eye Health**

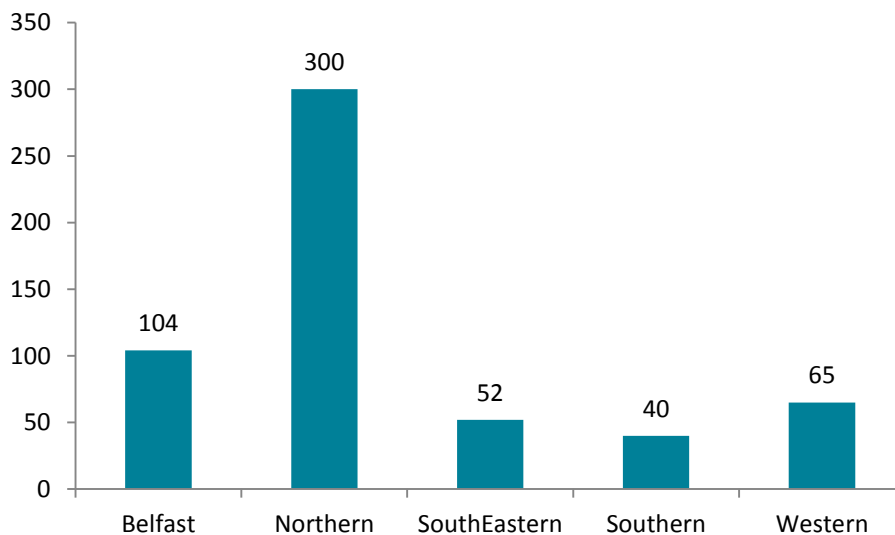
**4.4.1** A new set of questions was added to the 2017 survey, relating to smoking status and advice on smoking cessation. Of the 3,312 sight tests covered in the survey, 16.9% (561) of the patients were asked if they were smokers. The age breakdown of these patients is shown in Figure 4.4.1(a) and the LCG breakdown is shown in Figure 4.4.1(b)

**Figure 4.4.1(a) Number of patients asked if they were a smoker, by age band\***



\* 2 of the patients asked if they were a smoker could not be assigned to an age group due to inaccurate date of birth information provided

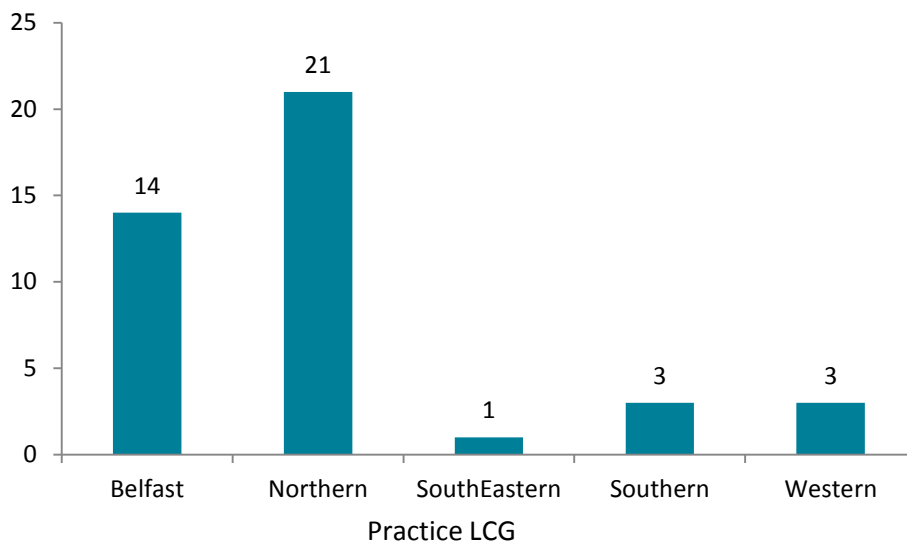
**Figure 4.4.1(b) Number of patients asked if they were a smoker, by practice LCG**



**4.4.2** Of the 561 patients asked if they were smokers, 80 responded that they were. The survey then asked if these patients were offered smoking cessation advice during the sight test; 42 of these patients (52.5%) were offered smoking cessation advice and 38 (47.5%) were not offered any such advice.

The practice LCG of the 42 patients who were smokers and were offered cessation advice is shown in Figure 4.4.2, which shows that 50% of those smoking patients who were offered cessation advice received sight tests in the Northern LCG area.

**Figure 4.4.2 Number of patients offered smoking cessation advice, by practice LCG**



**4.4.3** The importance of ophthalmic public health is acknowledged within DEP and DEP Task Group 5 is actively working to develop a framework to ensure that ophthalmic public health is embedded within eyecare pathways. The promotion of eye health and the dissemination of important public health messages in relation to eye health, such as the link between smoking and eye disease, are being actively addressed by DEP. Primary care optometrists are seen as a valuable resource in this work and optometrists working in community and high street settings can now avail of brief intervention training in smoking cessation. Optometrists as front-line health care professionals are ideally placed to deliver advice and information in relation to eye health, including smoking cessation. In doing so, they are making ‘every contact count’ and maximising the opportunity to provide more holistic care to their patients.

## 4.5 Analysis of Referrals – Numbers and Reason for Referral

**4.5.1** The number of patients referred and the primary reason for referral were captured for all practices. In total, 155 patients (4.7%) were referred to secondary care; the format of the survey ensured that reasons were captured for all referrals. Within these 155 responses, the option of ‘other’ was selected in relation to 59 referrals, as shown in Table 4.5.1.

**Table 4.5.1 Survey responses for ‘reason for referral’ question**

Reason for referral	Number of referrals	% of all referrals
Anterior eye	19	12.3%
Cataracts	38	24.5%
Glaucoma	16	10.3%
Low Vision	2	1.3%
Macular Condition - DMO (Diabetic Macular Oedema)	1	0.6%
Macular Condition - Dry AMD	4	2.6%
Macular Condition - Wet AMD	5	3.2%
Ocular Hypertension	1	0.6%
Orthoptics	10	6.5%
Other	59	38.1%
<b>Total</b>	<b>155</b>	<b>100%</b>

**4.5.2** With a very high proportion of identified reasons being ‘Other’ (38.1%), an exercise was carried out by ophthalmic clinical staff in the HSCB to reclassify these into categories that would provide a better picture of the ‘clinical origin’ of referrals that had been generated by the practices that participated in the survey. When the option for ‘Other’ was selected as a reason for referral, the practitioner was requested to enter a descriptor for the referral. Table 4.5.2 below outlines the re-categorisation of referrals and Annex 5 includes a full explanation of how each response was re-categorised. Of the 59 referrals marked as ‘Other’, three were moved to the main classification of Anterior eye, one was moved to the main classification of Glaucoma and one was moved to a new main classification of Macular – other. The remaining 54 ‘other’ referrals were then classified into 7 sub-classifications (three were unclassifiable as no information was provided).

**Table 4.5.2 Referral reasons including ‘Other’ referrals re-categorized into 17 groups**

Reason for referral		Number of referrals	% of all referrals
Anterior eye		22	14.2%
Cataracts		38	24.5%
Glaucoma		17	11.0%
Low Vision		2	1.3%
Macular Condition - DMO (Diabetic Macular Oedema)		1	0.6%
Macular Condition - Dry AMD		4	2.6%
Macular Condition - other		1	0.6%
Macular Condition - Wet AMD		5	3.2%
Ocular Hypertension		1	0.6%
Orthoptics		10	6.5%
Other	Eye Casualty (including flashes and floaters)	9	5.8%
	Neuro-ophthalmic	9	5.8%
	Retinal	14	9.0%
	GP /Medical	6	3.9%
	Visual Loss / Visual Field Loss	8	5.2%
	YAG Laser	5	3.2%
	Unclassifiable	3	1.9%
<b>Total Referrals</b>		<b>155</b>	<b>100%</b>

**Note:** Annex 5 details the original categories (including ‘others’) and their reclassification

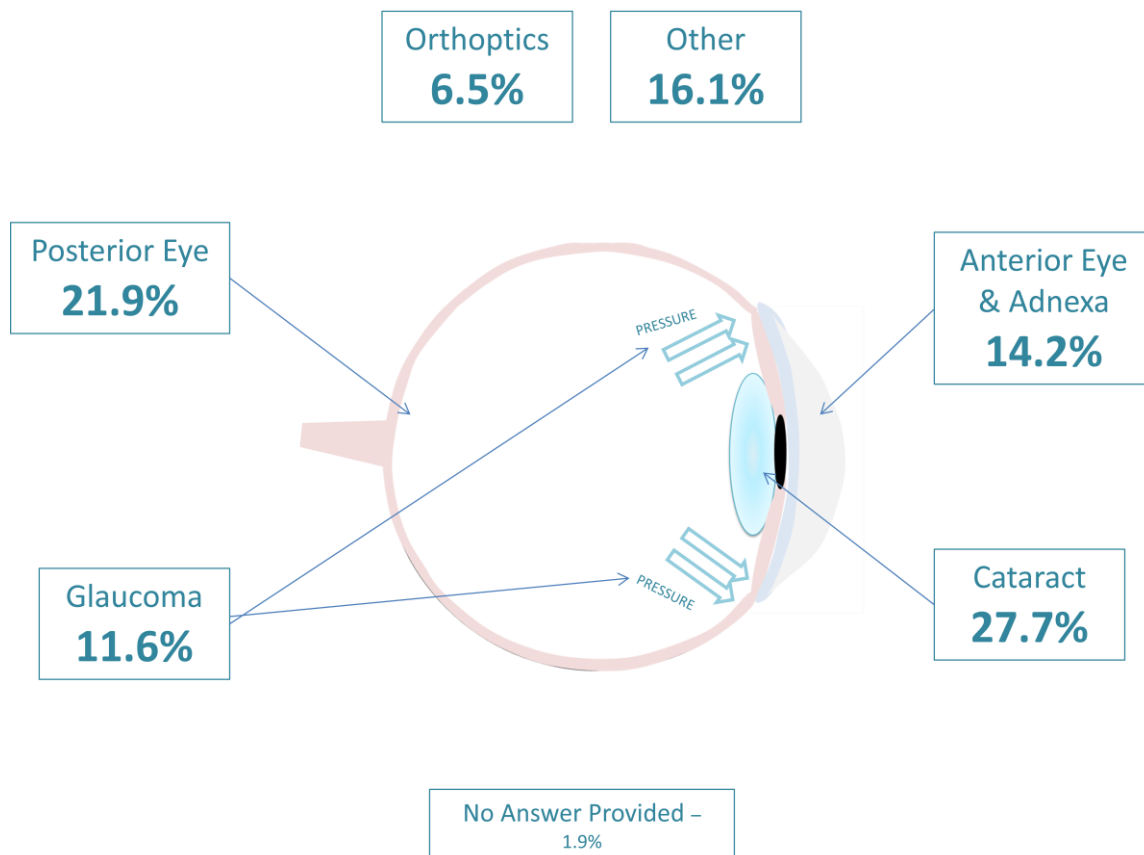
**4.5.3** Following this re-categorization, analysis showed that the top reasons for referral in the survey were Cataract (24.5%), Anterior Eye problems (14.2%) and suspect Glaucoma/Ocular Hypertension (OHT) (11.6%, Glaucoma Service referrals).

**4.5.4** In order to illustrate the broad spectrum of referrals and relate these to the ‘part/anatomy’ of the eye where a potential problem existed and which necessitated referral and further investigation, all 155 referrals (where information was available) were grouped into the following categories for ease of interpretation and analysis:

- a) Anterior Eye and Adnexa
- b) Cataract
- c) Glaucoma
- d) Posterior Eye
- e) Paediatric
- f) Others

Figure 4.5.4 provides a visual representation of the broad referral categories relative to the basic anatomical structure of the eye.

**Figure 4.5.4 - Referral reasons by area of the eye to which they relate (N=155)**



\* the category of 'Paediatrics' was included in the 2014 survey; this has been replaced with 'Orthoptics' as some of the referrals in this group related to adults.

## 4.6 Analysis of Referrals – Clinical Condition and Geographical Area

**4.6.1** The information from the 2017 Sight Test and Ophthalmic Public Health Survey informs the work of DEP in the provision of valuable data in relation to the patterns of ophthalmic referrals across Northern Ireland. In late 2016, the HSCB initiated the phased roll-out of electronic referral (eReferral) by optometrists in primary care. This innovation enables optometrists to refer their patients directly to secondary care via the Clinical Communications Gateway (CCG) using a variety of bespoke and tailored referral templates for several sub-specialities within ophthalmology. Direct eReferral options now exist for the following eyecare pathways:

- a) Cataract
- b) Macular Service – rapid access Neovascular Macular Degeneration(WetAMD), Diabetic Macular Oedema, Retinal Vein Occlusions
- c) Glaucoma Service – suspect Ocular Hypertension and Glaucoma
- d) General Ophthalmology
- e) Paediatric Ophthalmology
- f) Hospital based Optometry Services (including Low Vision and Contact Lens)

In addition to the above eReferral pathways, HSCB are progressing work to develop and implement eReferral for Orthoptic services.

The benefits of eReferral are three-fold:

1. For optometrists, eReferral is a secure and immediate means of referral ensuring the patient is directed to the service with the most clinically relevant information in view of the suspected condition.
2. For secondary care providers, referrals are received efficiently and are immediately visible in the patient's Northern Ireland Electronic Care Record (NIECR). This enables electronic triage of the referral and ensures that patients are placed on the correct eye care pathway and correctly assigned the appropriate clinically indicated degree of urgency.

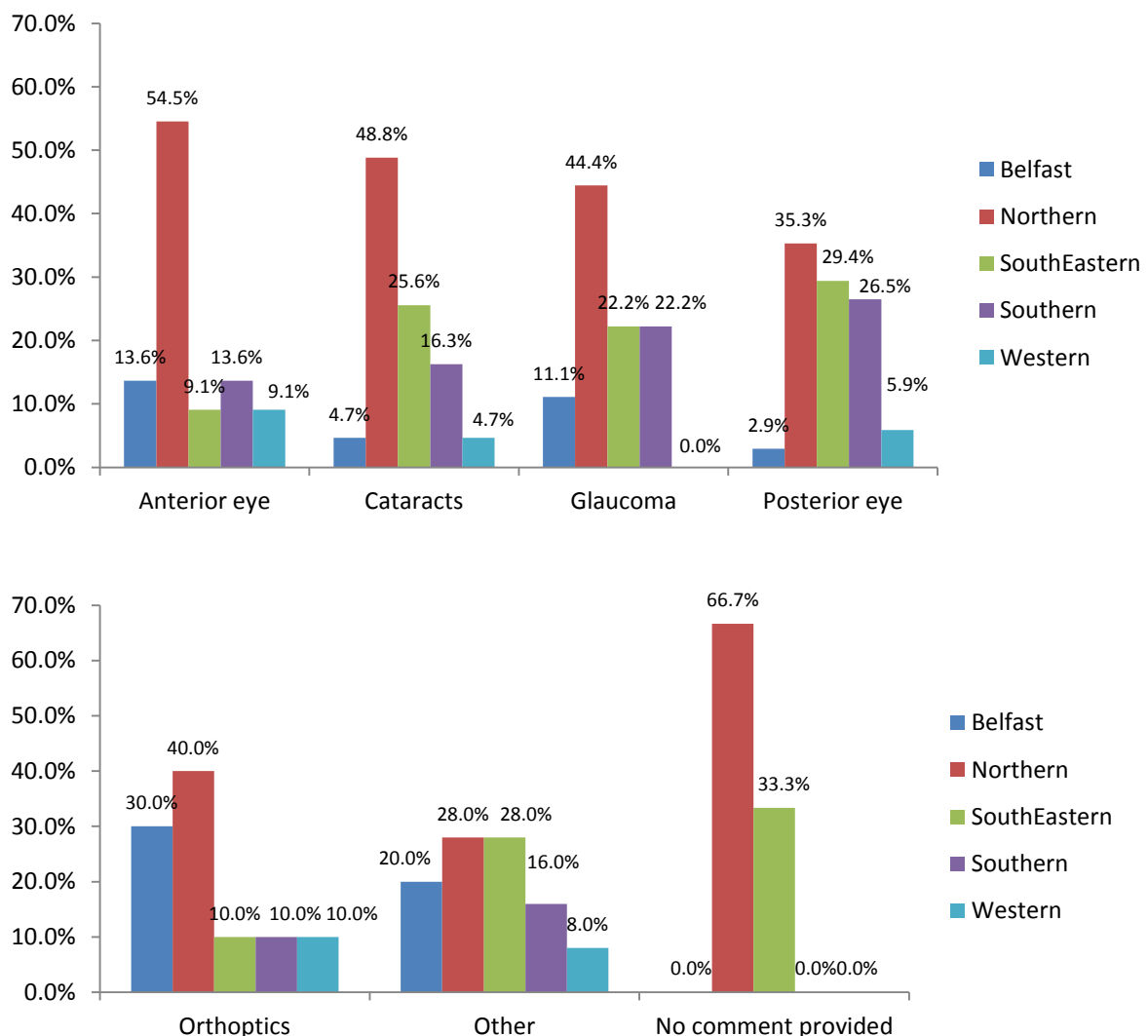


3. For commissioners and planners of eyecare services and those leading the work of DEP, the information from eReferral can be used to analyse overall demand for ophthalmology services. Interrogation of demand for ophthalmology services at sub-speciality level also has the potential to inform workforce planning within ophthalmology and wider ophthalmic services.

#### 4.6.2 Referrals by Geographical Area

Analysis of the 'referral activity' for participating optometry practices based in each Local Commissioning Group during the survey period (grouped into the six high level categories) is shown in Figure 4.6.2(a). Local Commissioning Groups (LCGs) commission health and social care services for the population they serve, based on identified needs.

**Figure 4.6.2(a) Referral categories by Practice LCG area**



Given the small numbers of patients within some of these referral reason groups, it is also important and useful to consider the numbers rather than just percentages, as shown in table 4.6.2(b) below.

**Table 4.6.2(b) Number of referrals in each category, by LCG of ophthalmic practice**

Reason for referral category	Belfast	Northern	South Eastern	Southern	Western	NI
Anterior eye	3	12	2	3	2	22
Cataracts	2	21	11	7	2	43
Glaucoma	2	8	4	4		18
Posterior eye	1	12	10	9	2	34
Orthoptics	3	4	1	1	1	10
Other	5	7	7	4	2	25
No comment provided	-	2	1	-	-	3
<b>Total</b>	<b>16</b>	<b>66</b>	<b>36</b>	<b>28</b>	<b>9</b>	<b>155</b>

## 4.7 Referrals by Clinical Condition – Cataract and Anterior Eye Conditions

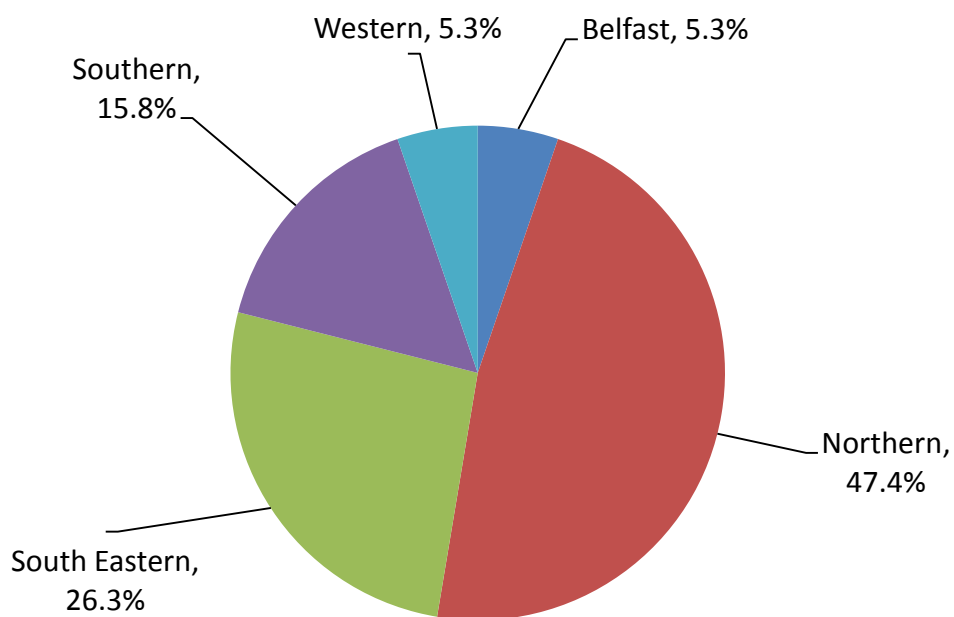
### 4.7.1 Cataract

Cataract is a common eye condition which, if not treated, can cause severe visual impairment and is a leading cause of visual impairment in the elderly. Demand within ophthalmology services attributed to cataract is estimated to be in the region of 25% of all new referrals. Both the 2014 and 2017 Sight Test and Ophthalmic Public Health Surveys provide evidence to support this, with cataract cited as the reason for 24.5% of referrals in the 2017 survey.

Following a brief pilot, all Optometrists in Northern Ireland now implement refinement of their cataract referrals to ensure that patients are referred at the most clinically appropriate time i.e. when the patient's vision and quality of life is being impacted and they are willing to undergo cataract extraction surgery. This approach places the patient at the centre of the decision making process and ensures that they are fully informed about their eye condition and the options available to them for care and treatment.

Figure 4.7.1 annotates cataract referrals during the survey period by LCG area. Similar to the findings of the 2014 survey, it is acknowledged that Belfast LCG as a whole provided the second lowest total number of surveys, and the area had the joint lowest referral rate for cataract (2 referrals, 5.3% of all referrals, for cataracts were made by both the Belfast and Western LCGs; Belfast LCG had 5 referrals, 2.8% of all referrals in the 2014 survey result). Information on referral rates per LCG prior to the surveys is not readily available.

**Figure 4.7.1 LCG breakdown of cataract referrals during survey period**



#### **4.7.2. Anterior Eye Conditions**

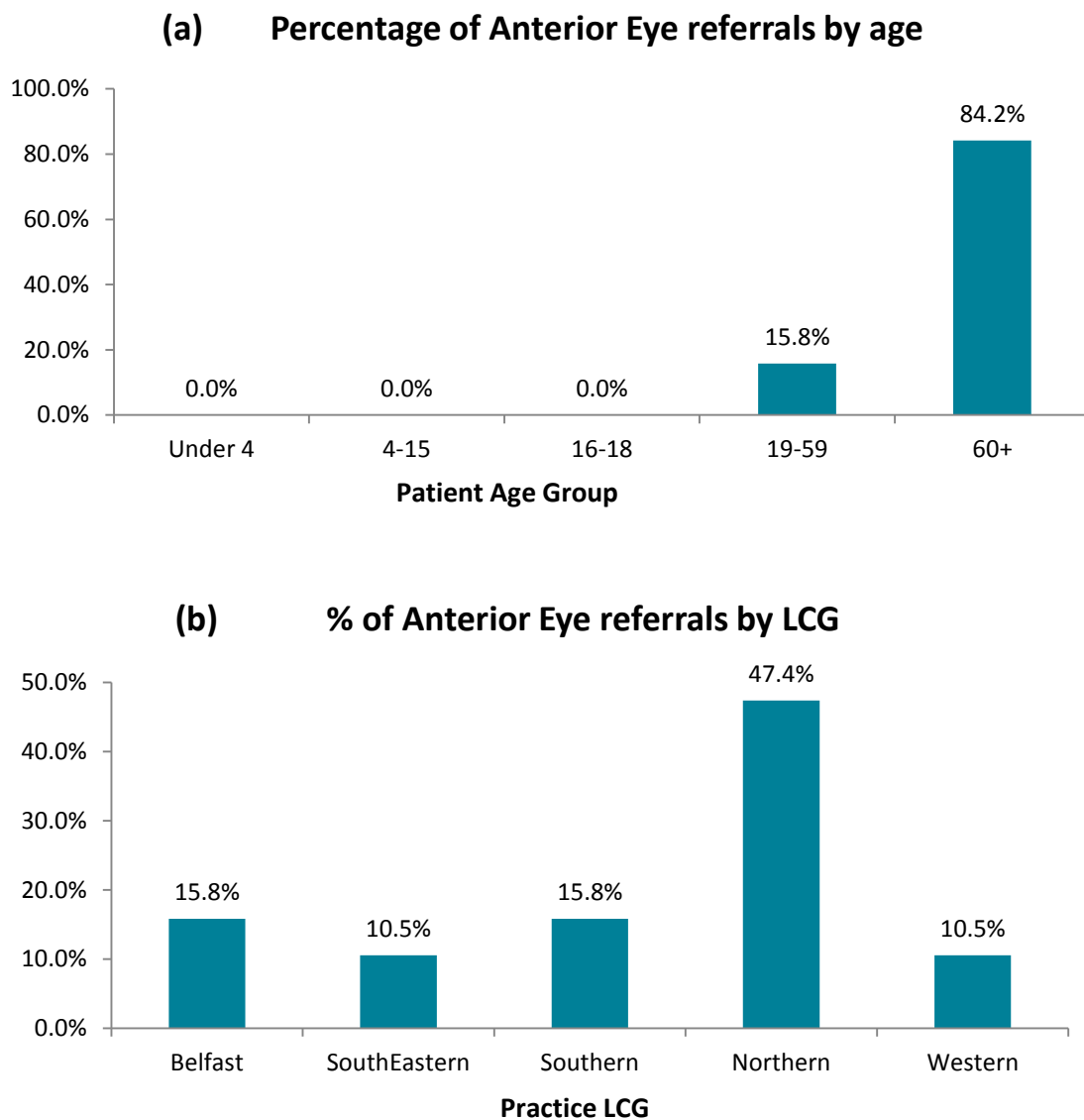
Anterior eye conditions include those which are sight threatening and non-sight threatening. DEP Task Group 4 has undertaken to work to develop and implement a service to deliver safe and accessible primary care optometry-based care for patients who present with a non-sight threatening acute eye conditions.

The types of ophthalmic conditions which can be effectively assessed, managed and treated by this service include problems such as: conjunctivitis (bacterial/viral/allergic), episcleritis, sub-conjunctival haemorrhage, corneal foreign body, corneal abrasion and blepharitis. After an initial successful pilot, the service,

known as the Southern Primary Eyecare Assessment and Referral Service<sup>11</sup> (SPEARS), has been rolled out across the entire Southern LCG area.

Figure 4.7.2 illustrates the ages of patients who were referred for assessment of an anterior eye problem and the LCG of the Optometry practice which they attended. This information is valuable as a snap-shot of referral activity for anterior eye problems and will assist the HSCB in planning for future regional roll-out of the (S)PEARS service in other LCG areas or extended throughout Northern Ireland regionally should funding be provided.

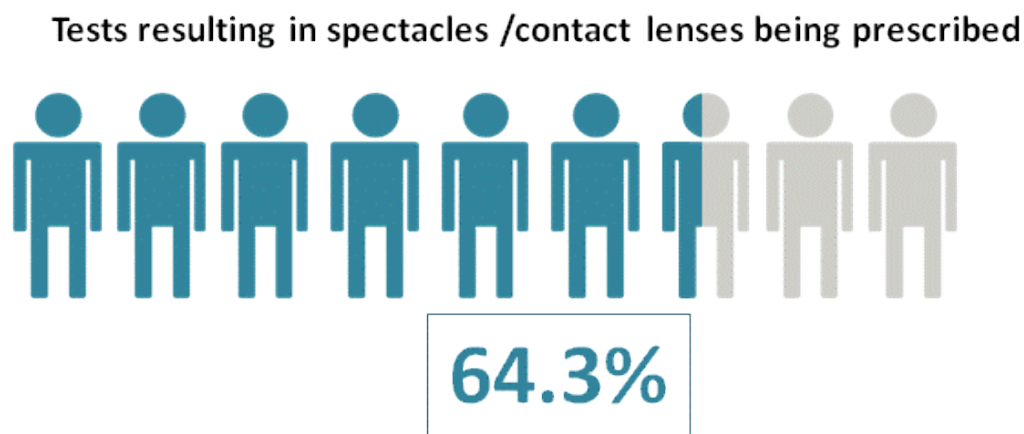
**Figure 4.7.2 (a) and (b) 'Anterior Eye' category referrals by Patient Age (group) and by LCG area**



## 4.8 Sight Tests Outcomes - Prescribing and General Ophthalmic Services (GOS) Vouchers

**4.8.1** Of the 3,312 sight tests carried out during the survey period, 2,131 (64.3%) of them resulted in spectacles and/or contact lenses being prescribed to the patient, a similar percentage as in the 2014 survey.

**Figure 4.8.1 Sight test outcome – prescribing of appliances**



**4.8.2** The 2,131 tests with prescribed items were split into 71.2% GOS and 28.8% Private patients. Dispensed items under GOS are facilitated by the issue of a GOS Voucher (GOSV), which a patient can use towards the cost of an optical appliance.

**4.8.3** In consideration of the fact that the majority of patients within the survey population had accessed eyecare under GOS (73.5%), the finding in respect of eligibility for GOSV is to be expected. However, it is important to point out that GOS Sight Test eligibility does not automatically entitle a patient to assistance with their optical appliance/spectacles.

**4.8.4** In the survey, 69.7% (613 of 879) of Private patients were prescribed spectacles or contact lenses following their test, compared to 62.4% (1,518 of 2,433) of GOS patients.

## 4.9 Specialist Ophthalmic Equipment Availability in Practice

**4.9.1** Another additional question added to the 2017 survey asked about any specialist ophthalmic equipment available at the optometric premises. The question presented 5 types of specialist equipment, as well as categories of 'none of the above' and 'other'. Table 4.9.1 shows how many practices reported that they had each piece of specialist equipment, by practice LCG. The numbers of practices in each LCG that participated in the survey are also in this table for ease of reference.

Most responding practices reported having specialist equipment, with only one ophthalmic practice answering that they had no specialist ophthalmic equipment on the premises (this finding is to be expected, as this one practice provides home visits). Most practices which reported having specialist equipment had both Visual Fields and Digital Imaging Fundus equipment (n=64). Only 7 practices reported that they had 'Other' pieces of specialist ophthalmic equipment; these included an Intuitive Colorimeter, Optomap and Keratometer.

**Table 4.9.1 Number of practices recording availability of specialist equipment\***

Practice LCG	Number of responding practices	Specialist Ophthalmic Equipment					
		OCT	Visual Fields	Digital Imaging Fundus	Digital Imaging Anterior	Topography	Other
Belfast	17	2	16	12	3	3	1
Northern	34	2	31	22	7	4	5
South Eastern	11	2	11	10	4	2	0
Southern	20	6	20	16	7	1	1
Western	10	1	10	6	3	0	0
<b>Total</b>	<b>92</b>	<b>13</b>	<b>88</b>	<b>66</b>	<b>24</b>	<b>10</b>	<b>7</b>

\*it is important to note that these figures apply only to those practices which participated in the 2017 Sight Test survey and cannot be taken as representative of all available specialist equipment.

A wide variety of makes and models were noted by those practices that had Ocular Coherence Tomography (OCT) and Visual Fields equipment.

A breakdown of survey responses, by practice LCG, is shown in Table 4.9.2. As evidenced in Table 4.9.1, most survey responses reported that that the premises at which the sight test was carried out had both Visual Fields Equipment and Digital Imaging – Fundus equipment (n=2,757).

**Table 4.9.2 Availability of Specialist Ophthalmic Equipment, by survey responses, at practice LCG level**

Practice LCG	Specialist Ophthalmic Equipment*						
	OCT	Visual Fields	Digital Imaging - Fundus	Digital Imaging - Anterior	Topography	None of the above	Other
Belfast	25	349	270	59	36		16
Northern	44	1386	1126	108	110	5	352
South Eastern	110	827	776	139	92	0	
Southern	197	501	439	159	10		1
Western	23	223	154	24			
<b>Total</b>	<b>399</b>	<b>3286</b>	<b>2765</b>	<b>489</b>	<b>248</b>	<b>5</b>	<b>369</b>

\* the figures in this table refer to responses to each survey, not to the number of pieces of equipment in Northern Ireland i.e 399 sight tests surveys recorded that their practice had OCT equipment

## 5. Concluding Summary

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Developing Eyecare Partnerships and other ongoing HSC reforms require effective and collaborative work between commissioners of care, service users, community and voluntary sector and primary and secondary care professionals from a variety of health care disciplines, not just ophthalmic. Through the vehicle of DEP, the Health and Social Care Board and Public Health Agency have developed a framework, creating a model of engagement which allows work on a shared agenda to progress. As DEP moves into the final year of its 'primary' phase, the strength in the structures which have been created will enable evolution and a continued cohesive and strategic approach to the aims and objectives of DEP.

The provision of integrated evidenced-based and patient-centred care is a top priority for commissioners and planners, given the current and rising demand for ophthalmic services. The causative factors for the rising demand in ophthalmic services which give rise to the current demand-capacity issues are well evidenced and acknowledged. DEP will continue to foster and nurture critical thinking and creativity amongst key stakeholders, to ensure that solutions to the challenges are identified and presented to commissioners and the DoH.

Primary care optometry is an important component in the provision of clinically safe and effective care and, crucially, care that can be provided closer to home. Through investment in education and training, including engagement with professional regulators and providers of education, and utilising supportive innovation such as Project ECHO<sup>®</sup>, the Health and Social Care Board are working with primary care optometry to ensure optimum participation in the redesign of care pathways and the transformative work of DEP. The 2017 Northern Ireland Sight Test and Ophthalmic Public Health Survey provides data on primary care ophthalmic service activity that will help inform the work of DEP to develop improved, integrated and sustainable eyecare pathways and services. Any future survey which may be undertaken will take into account feedback from the DEP Project Board, DEP Stakeholders and survey respondents, including feedback in regard to the timing, format, content and anticipated outputs.



Dear Optometrist,

The Department of Health in conjunction with the Health and Social Care Board are undertaking the 2017 Sight Test and Ophthalmic Public Health Survey, which will build on the information and evidence provided by the previous survey, conducted in 2014.

The 2017 Northern Ireland Sight Test and Ophthalmic Public Health Survey has been commissioned to gather important information on the provision of eyecare services by primary care optometrists and aspects of ophthalmic public health in Northern Ireland and will provide information to enable the planning, commissioning and delivery of eyecare services to support the work of the Health and Social Care Board and Public Health Agency in implementing the Developing Eyecare Partnerships strategy.

Thank you for providing the HSCB with an email address and point of contact for the 2017 Sight Test and Ophthalmic Public Health Survey. All optometry practices in Northern Ireland will be surveyed. The number of actual optometrists participating in the survey in any one practice has been stratified to take into account both the GOS Sight Test activity and number of staff within each optometry practice.

**SIX OPTOMETRISTS WITHIN YOUR PRACTICE ARE REQUESTED TO COMPLETE THE SURVEY OVER THE ONE WEEK PERIOD COMMENCING MONDAY 16<sup>th</sup> JANUARY AND ENDING SUNDAY 22<sup>nd</sup> JANUARY 2017.**

PLEASE NOTE: For those practices where more than one optometrist has been requested to participate in the survey, the decision as to which optometrists complete the survey will be a matter for the practice to decide.

The 2017 Sight Test and Ophthalmic Public Health Survey:

1. The survey will be undertaken over a four week timeframe, with a sample of all the NI optometry practices participating in each of the four weeks.
2. The survey will be for sight test activity for **ONE SPECIFIC WEEK**, as highlighted above. All the sight test activity (per patient episode) during that week should be recorded (one survey per patient episode) by the participating optometrist(s).
4. Please ensure that when you are completing the survey that you answer and complete all relevant parts and questions, as a partially completed entry for any one patient episode renders it an invalid entry.
5. Please note the following:
  - Within the survey, particular questions are noted to be 'required'; you must answer these in order to progress to the next page of the survey. Your answer to certain questions will determine which question you are then asked next. This routing of questions aims to only ask those questions that are relevant to that particular sight test and patient.
  - All questions are mandatory except Question 14, 16, 17, 20 and 22 – you will only be routed to answer these questions dependent on how you answer the previous question. For example, you will only be taken to Question 14 if you have answered no to Question 13 (attendance at DESP in last 12-15 months).

- Question 18: When answering this question, please use the World Health Organisation guidance to determine if the patient has a Visual Impairment; this guidance can be found in the related links section of the survey and I have attached it to this e-mail for your convenience.
- Upon completion of a survey, you will arrive at a page confirming that your completed survey has been submitted. On this page, there is a link 'To start a new survey, please click here'. You can click on this link to begin a new survey (for a new sight test) or you can return to the original link within this e-mail in order to complete the survey for the next patient sight test episode (which you will need to do on each new day of survey completion).

Please find below the link which will take you to the survey, which has been developed using Citizen Space consultation software, a company which works with governments all around the world. This link will take you to a secure home page, containing an overview of the survey as well as links to related information and documents, which you may find useful.

**Link to survey (please press Ctrl and click on link):**  
<https://consultations.nidirect.gov.uk/doh/3a575cbb/>

The 'Begin Survey' link beneath the 'Why we are consulting' section will take you to the actual survey. You can click on this link each time you want to complete a survey for one sight test, or there is an option on completion of each survey input to begin a new survey.

If you have any queries in relation to the survey, please contact me using the details below.

We would ask that you take the time to complete the survey as it is an essential tool which the Department of Health and the Health and Social Care Board will use to gather important and relevant information on eyecare provision and ophthalmic public health in Northern Ireland. Your contribution is greatly appreciated and all practices which return their surveys will receive a copy of the report in Autumn 2017.

Many thanks in advance for your help.

Yours faithfully,

Laura

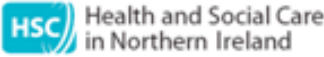

**Laura Baird**

Project Support Analysis Branch  
Department of Health  
Annex 2  
Castle Buildings  
Belfast  
BT4 3SQ

Tel: 02890522160  
[Laura.Baird@health-ni.gov.uk](mailto:Laura.Baird@health-ni.gov.uk)

## Annex 2

## Postal survey

		Practice Code	<input type="text"/>	
		Personal Code	<input type="text"/>	
<b>2017 Sight Test and Ophthalmic Public Health Survey</b>				
<b>Date of Test (dd mm yyyy)</b>		DD	MM	YYYY
<b>Was test after 5.30pm?</b>		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
<b>Patient Postcode</b>		<input type="text"/>		
<b>1. Is this patient a GOS patient or a Private patient?</b>				
GOS <input type="checkbox"/>		Private <input type="checkbox"/>		
<b>2. When was the patient born?</b>				
Month		Year		
<input type="text"/>		<input type="text"/>		
<b>3. Gender of patient</b>				
Male <input type="checkbox"/>	Female <input type="checkbox"/>	Other <input type="checkbox"/>		
		<input type="text"/>		
<b>4. Ethnicity of patient (select one only)</b>				
White <input type="checkbox"/>		Irish Traveller <input type="checkbox"/>		
White & Black Caribbean <input type="checkbox"/>		White & Black African <input type="checkbox"/>		
White and Asian <input type="checkbox"/>		Indian <input type="checkbox"/>		
Pakistani <input type="checkbox"/>		Bangladeshi <input type="checkbox"/>		
Chinese <input type="checkbox"/>		African <input type="checkbox"/>		
Caribbean <input type="checkbox"/>		Arab <input type="checkbox"/>		
Other <input type="checkbox"/>		<input type="text"/>		
<i>Please specify "other" here as appropriate</i>				
<b>5. Why did the patient attend for a sight test? (select one only)</b>				
Routine/Reminder received <input type="checkbox"/>				
Problem with vision <input type="checkbox"/>				
Other problem with eye <input type="checkbox"/>				
<b>6. Are any of the following conditions present? (select all that apply)</b>				
Diabetes <input type="checkbox"/>		Glaucoma <input type="checkbox"/>		
Ocular Hypertension <input type="checkbox"/>		Family history of glaucoma <input type="checkbox"/>		
<b>If 'Diabetes' was selected in previous question...</b>				
<b>7.... Has the patient attended the Diabetic Eye Screening Programme (DESP) in the past 12-15 months?</b>				
Yes <input type="checkbox"/> <i>Go to Q 8</i>		No <input type="checkbox"/>		
<b>If No, when was the last approximate date of attendance (if known)?</b>				
Less than 1 year ago <input type="checkbox"/>				
Within the last 1-2 years <input type="checkbox"/>				
Within the last 2-3 years <input type="checkbox"/>				
Within the last 3-4 years <input type="checkbox"/>				
Longer than 4 years <input type="checkbox"/>				
<b>8. During the consultation, did you ask if the patient was a smoker?</b>				
Yes <input type="checkbox"/> <i>Go to Q 9</i>		No <input type="checkbox"/> <i>Go to Q 11</i>		
<b>9. If yes, is the patient a smoker?</b>				
Yes <input type="checkbox"/> <i>Go to Q 10</i>		No <input type="checkbox"/> <i>Go to Q 11</i>		
<b>10. If yes, did you offer advice on smoking cessation?</b>				
Yes <input type="checkbox"/>		No <input type="checkbox"/>		
<b>11. In line with the WHO guidance (please see attached), is this patient considered to have a visual impairment?</b>				
Yes <input type="checkbox"/>		No <input type="checkbox"/>		
<b>12. Was patient referred?</b>				
Yes <input type="checkbox"/> <i>(please select relevant referral route)</i>				
eReferral via COG by optometrist <input type="checkbox"/>				
postal referral via GP <input type="checkbox"/>		<i>Go to Q 13</i>		
No <input type="checkbox"/> <i>Go to Q 14</i>				
<b>13. What was the primary reason for referral? (select one only)</b>				
Anterior Eye <input type="checkbox"/>		Cataracts <input type="checkbox"/>		
Contact Lens Clinic <input type="checkbox"/>		Glaucoma <input type="checkbox"/>		
Low Vision <input type="checkbox"/>		Ocular Hypertension <input type="checkbox"/>		
<b>Macular Condition</b>				
Wet AMD <input type="checkbox"/>				
CRVO (Central Retinal Vein Occlusion) <input type="checkbox"/>				
BRVO (Branch Retinal Vein Occlusion) <input type="checkbox"/>				
DMO (Diabetic Macular Oedema) <input type="checkbox"/>				
Dry AMD <input type="checkbox"/>				
Orthoptics <input type="checkbox"/>		Other <input type="checkbox"/>		
		<input type="text"/>		
<b>14. Did test result in spectacles /contact lenses being prescribed?</b>				
Yes <input type="checkbox"/>		No <input type="checkbox"/>		
<b>15. If Yes to Q14, was GOS voucher issued for prescribed items?</b>				
Yes <input type="checkbox"/>		No <input type="checkbox"/>		

Sight Test and Ophthalmic Public Health Survey – Email: [sightsurvey@health-ni.gov.uk](mailto:sightsurvey@health-ni.gov.uk) – Telephone: 028 905 22160  
 Submit responses to Sight Survey, Room 2, Annex 2, Castle Buildings, Stormont Estate, Belfast, BT4 3SQ

## 2017 Sight Test and Ophthalmic Public Health Survey

## Cover Sheet and Guidance

i. Practice Code ii. Personal Code 

iii. Specialist Ophthalmic Equipment Available on Premises:	
OCT <input type="checkbox"/>	OP - Anterior <input type="checkbox"/>
OP - Fundus <input type="checkbox"/>	

**General Guidance**

- Please 'tick' (✓) your selected answer
- If an error is made, mark an 'X' and tick correct answer
- All questions are mandatory except Question 7, Question 9, Question 10, Question 13 and Question 15– only answer these if answers to previous questions make them applicable to that patient  
*For example, only answer Question 10 where you have ticked yes to Question 9 (Smoking)*
- Please include practice and personal code with each sheet, and attach this cover sheet to responses
- Each pack and cover sheet should be completed by ONE practitioner. If your premises has been asked for responses from multiple practitioners, you should have received a pack and cover sheet for each to complete independently
- Question 11: Eligibility for CVI Registration is determined by the World Health Organisation definition of Low Vision as detailed in the following table. Please use this definition when answering Question 11 of the Sight Test and Ophthalmic Public Health Survey.

Category of Visual Impairment	Visual Acuity with best possible correction	
	Maximum less than	Minimum equal to or better than
Low Vision		
1	6/18 (20/60) LogMAR 0.5	6/60 (20/200) LogMAR 1.0
2	6/60 (20/200) LogMAR 1.0	3/60 (20/400) LogMAR 1.3 CF at 3m
3	3/60 (20/400) LogMAR 1.3 CF at 3m	1/60 (20/1200) LogMAR 1.8 CF at 1m
Blindness		
4	1/60 (20/1200) LogMAR 1.8 CF at 1m	Light Perception (PL)
5	No Perception of Light (NPL)	
6	Undetermined or unspecified	

**Returns**

- We request that you return your results by post within a week of completion to:  
**Sight Survey, Room 2, Annex 2, Castle Buildings, Stormont Estate, Belfast, BT4 3SQ**

**Help / Contact**

*Sight Test and Ophthalmic Public Health Survey Team*

- Email: [sightsurvey@health-ni.gov.uk](mailto:sightsurvey@health-ni.gov.uk)
- Telephone: 028 905 22160

Sight Test and Ophthalmic Public Health Survey – Email: [sightsurvey@health-ni.gov.uk](mailto:sightsurvey@health-ni.gov.uk) – Telephone: 028 905 22160  
Submit responses to Sight Survey, Room 2, Annex 2, Castle Buildings, Stormont Estate, Belfast, BT4 3SQ

Manage: [Consultations](#) [Users](#)

## Print Survey

When this page is printed, items such as navigation links will be hidden, and a simple layout suitable for printing will be used.

The printable layout is suitable for preview and review of surveys.

You may find that surveys do not print perfectly; this is because web browsers don't provide precise control over printing.

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## 2017 Sight Test and Ophthalmic Public Health Survey

### Overview

The 2017 Northern Ireland Sight Test and Ophthalmic Public Health Survey has been commissioned to gather important information on the provision of eyecare services by primary care optometrists and aspects of ophthalmic public health in Northern Ireland. The 2017 Survey will build on the information and evidence provided in the previous Survey, conducted in 2014.

### Why we are consulting

#### DEVELOPING EYECARE PARTNERSHIPS

Improving the Commissioning and Provision of  
Eyecare Services in Northern Ireland



The 2017 Northern Ireland Sight Test and Ophthalmic Public Health Survey will provide information to enable the planning, commissioning and delivery of eyecare services to support the work of the Health and Social Care Board and Public Health Agency in implementing the Developing Eyecare Partnerships strategy. Data on the number and demographic profile of persons accessing eyecare from optometrists in the community and analysis of the outcomes of sight tests and aspects of ophthalmic public health will provide valuable information to assist in the planning of services and care pathways for patients who require eyecare services.

## Introduction

**1** What is your Practice Code?

*(Required)*

**2** What is your Personal Code?

*(Required)*

**3** Patient Postcode

*(Required)*

**4** Is there any specialist ophthalmic equipment available on the premises?

*(Required)*

*Please select all that apply*

- OCT (Please specify make and model below)
- Visual Fields (Please specify make and model below)
- Digital Imaging - Fundus
- Digital Imaging - Anterior
- Topography
- None of the above
- Other (please specify)

**4** Is there any specialist ophthalmic equipment available on the premises?

*(Required)*

*Please select all that apply*

- OCT (Please specify make and model below)
- Visual Fields (Please specify make and model below)
- Digital Imaging - Fundus
- Digital Imaging - Anterior
- Topography
- None of the above
- Other (please specify)

Other

OCT Make and Model

Visual Fields Model

**5** Date of test (dd/mm/yyyy)

*(Required)*

**6** Was the test after 5:30 pm?

*(Required)*

Please select only one item

Yes

No

2017 Sight Test and Ophthalmic Public Health Survey - page 3

**7** Is the patient a GOS patient or a Private patient?

*(Required)*

Please select only one item

GOS patient

Private patient

**8** When was the patient born? (Month, Year) Please answer in the following format e.g. January 1980 should be input as 01, 1980

*(Required)*



**9 Gender of patient**

*(Required)*

Please select only one item

- Male
- Female
- Other

**10 Ethnicity of patient (select one only)**

*(Required)*

Please select only one item

- White
- Irish Traveller
- White & Black Caribbean
- White & Black African
- White & Asian
- Indian
- Pakistani
- Bangladeshi
- Chinese
- African
- Caribbean
- Arab
- Other (please specify below)

Other

**11** Why did the patient attend for a sight test? (select one only)

*(Required)*

Please select only one item

- Routine/Reminder received
- Problem with vision
- Other problem with eye

**12** Are any of the following conditions present? (select all that apply)

*(Required)*

Please select all that apply

- Diabetes
- Ocular Hypertension
- Glaucoma
- Family history of glaucoma
- None of the above

2017 Sight Test and Ophthalmic Public Health Survey - page 5

**13** If Diabetes was selected in the previous question, has the patient attended the Diabetic Eye Screening Programme (DESP) in the last 12-15 months?

*(Required)*

Please select only one item

- Yes
- No
- Diabetes was not selected

**14** If no, when was the last approximate date of attendance (if known)?

*Please select only one item*

- Less than 1 year ago
- Within the last 1-2 years
- Within the last 2-3 years
- Within the last 3-4 years
- Longer than 4 years

2017 Sight Test and Ophthalmic Public Health Survey - page 7

**15** During the consultation, did you ask if the patient was a smoker?

*(Required)*

*Please select only one item*

- Yes
- No

2017 Sight Test and Ophthalmic Public Health Survey - page 8

**16** If yes, is the patient a smoker?

*(Required)*

*Please select only one item*

- Yes
- No

2017 Sight Test and Ophthalmic Public Health Survey - page 9

**17** Did you offer advice on smoking cessation?

*(Required)*

*Please select only one item*

- Yes
- No

2017 Sight Test and Ophthalmic Public Health Survey - page 10

**18** In line with the WHO guidance (please see Related links section on opening page), is this patient considered to have a visual impairment?

*(Required)*

*Please select only one item*

- Yes
- No

**19** Was patient referred?

*(Required)*

*Please select only one item*

- Yes - eReferral via CCG by optometrist
- Yes - postal referral via GP
- No

2017 Sight Test and Ophthalmic Public Health Survey - page 11

**20** What was the primary reason for referral? (select one only)

*(Required)*

*Please select only one item*

- Anterior eye
- Cataracts
- Contact Lens Clinic
- Glaucoma
- Low Vision
- Ocular Hypertension
- Macular Condition - Wet AMD
- Macular Condition - CRVO (Central Retinal Vein Occlusion)
- Macular Condition - BRVO (Branch Retinal Vein Occlusion)
- Macular Condition - DMO (Diabetic Macular Oedema)
- Macular Condition - Dry AMD
- Orthoptics
- Other (please specify below)

Other

2017 Sight Test and Ophthalmic Public Health Survey - page 12

**21** Did the test result in spectacles/contact lenses being prescribed?

*(Required)*

*Please select only one item*

- Yes
- No

## Annex 5

## Reclassification of referrals

Original Survey Classification	Reclassified into 16 categories	Reclassification into 6 categories (for Figure 4.5.7)
Anterior Eye	Anterior Eye	Anterior Eye & Adnexa
Cataracts	Cataract	Cataract
Glaucoma	Glaucoma	Glaucoma
Low Vision	Low Vision	Other
Macular Condition – DMO (Diabetic Macular Oedema)	Macular Condition – DMO (Diabetic Macular Oedema)	Posterior Eye
Macular Condition - Dry AMD	Macular Condition - Dry AMD	Posterior Eye
Macular Condition - Wet AMD	Macular Condition - Wet AMD	Posterior Eye
	Macular Condition – other	Posterior Eye
Ocular Hypertension	Ocular Hypertension	Glaucoma
Orthoptics	Orthoptics	Orthoptics
<b>"Others" – comments from respondent</b>		
Sudden floaters seen at eye casualty	Eye Casualty	Other
Neavus	Retinal	Posterior Eye
diab retinopathy	Retinal	Posterior Eye
lesion at optic nerve	Neuro-Ophthalmic	Posterior Eye
vascular problems	Retinal	Posterior Eye
diabetic screening	Retinal	Posterior Eye
disc haemorrhages	Retinal	Posterior Eye
flashes and floaters query tear	Eye Casualty	Other
headaches	GP/Medical	Other
Toxoplasmosis scarring?	Retinal	Posterior Eye
gp managment	GP/Medical	Other
amaurosis fugax	Visual Loss/Visual Field Loss	Other
posterior capsule thickening	YAG Laser	Cataract
light headedness requiring further investigation	GP/Medical	Other
urgent to royal ms	Eye Casualty	Other

cardiovascular workup - BRVO peripherally	Retinal	Posterior Eye
headache and night sweats	GP/Medical	Other
DIPLOPIA	Neuro-Ophthalmic	Posterior Eye
FLOATERS AND FLASHES, RETINAL HAEMORRHAGE-EYE CASUALTY TO SEE PX	Eye Casualty	Other
Headaches with previous ocular concerns that required HES assessment	Neuro-Ophthalmic	Posterior Eye
Posterior Capsular Thickening	YAG Laser	Cataract
NEAVUS	Retinal	Posterior Eye
Central Naevus not noted before	Retinal	Posterior Eye
suspicious optic disc	Neuro-Ophthalmic	Posterior Eye
Visual field defect	Visual Loss/Visual Field Loss	Other
Undiagnosed visual; symptoms referral erg with gp advise	Visual Loss/Visual Field Loss	Other
swollen optic discs	Neuro-Ophthalmic	Posterior Eye
Ophthalmological opinion on macular pigment	Retinal	Posterior Eye
Blood sugars	GP/Medical	Other
peripheral BRVO	Retinal	Posterior Eye
bitemporal hemianopia	Visual Loss/Visual Field Loss	Other
floaters sudden onset	Eye Casualty	Other
QUERY TIA	Neuro-Ophthalmic	Posterior Eye
Macular condition- side effect of TB medication	Retinal	Posterior Eye
Lens Implant Thickening	YAG Laser	Cataract
Posterior Lens Implant Capsular Opacification	YAG Laser	Cataract
flashes	Eye Casualty	Other
suspect embolic episodes	Visual Loss/Visual Field Loss	Other
proliferative diabetic retinopathy	Retinal	Posterior Eye
Macular hole	Retinal	Posterior Eye
LE Disc appearance post stroke	Neuro-Ophthalmic	Posterior Eye

No apparent abnormalities but patient experiencing a persistent black spot in vision and extreme photophobia ever since an incident when he purposely stared at an LED light	Visual Loss/Visual Field Loss	Other
unexplained reduction in VA	Visual Loss/Visual Field Loss	Other
H/A'S AND VISUAL FIELD DEFECT	Neuro-Ophthalmic	Posterior Eye
RETINAL DETACHMENT - REFERRAL STRAIGHT TO EYE CASUALTY (PHONE CALL)	Eye Casualty	Other
suspicious right disc ?optic neuritis	Neuro-Ophthalmic	Posterior Eye
visual disturbance- referred by gp for sight test.	Visual Loss/Visual Field Loss	Other
Retinal tear, referred to RVH	Eye Casualty	Other
Headaches	GP/Medical	Other
PCO	YAG Laser	Cataract
An angle closure episode	Eye Casualty	Other
No reason given for referral	Unclassifiable	Unclassifiable
No reason given for referral	Unclassifiable	Unclassifiable
No reason given for referral	Unclassifiable	Unclassifiable



## Annex 6

### World Health Organisation (WHO) Visual Impairment

Category of Visual Impairment	Visual Acuity with best possible correction	
	Maximum less than	Minimum equal to or better than
Low Vision		
1	6/18 (20/60) LogMAR 0.5	6/60 (20/200) LogMAR 1.0
2	6/60 (20/200) LogMAR 1.0	3/60 (20/400) LogMAR 1.3 CF at 3m
3	3/60 (20/400) LogMAR 1.3 CF at 3m	1/60 (20/1200) LogMAR 1.8 CF at 1m
Blindness		
4	1/60 (20/1200) LogMAR 1.8 CF at 1m	Light Perception (PL)
5	No Perception of Light (NPL)	
6	Undetermined or unspecified	

## Annex 7

### Information on other terminology

In addition to the World Health Organisation categories of visual impairment in the United Kingdom the terms “sight impaired” and “severely sight impaired” are used.

In order to be certified as **severely sight impaired (blind)**, sight has to fall into one of the following categories, while wearing any required glasses or contact lenses:

- I. visual acuity of less than 3/60 with a full visual field
- II. visual acuity between 3/60 and 6 /60 with a severe reduction of field of vision, such as tunnel vision
- III. 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.

In order to be certified as **sight impaired (partially sighted)**, sight has to fall into one of the following categories, while wearing any required glasses or contact lenses:

- I. visual acuity of 3/60 to 6/60 with a full field of vision
- II. 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
- III. 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.

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