THE COLLEGE OF OPTOMETRISTS

Pre-registration trainee analysis report

June 2014 – August 2016

A statistical report on the demographic and performance data of a single cohort of pre-registration trainees. This information is provided to support the development of trainees and the Scheme for Registration.

1. Introduction

1.1 The Scheme for Registration represents the principal route for entry into the profession. It assesses graduates from all the GOC-approved[1] universities offering optometry at undergraduate level. Graduates must achieve at least a 2.2 in their optometry undergraduate degree to enrol on the Scheme.

1.2 It is assumed that the reader of the report has a basic understanding of the assessment structure of the Scheme for Registration. A fuller summary of the Scheme for Registration can be found in Appendix B.

1.3 The purpose of this report is to analyse the demographic data and performance data of a single cohort of 593 pre-registration trainees completing the Scheme for Registration. This amounted to 93% of the cohort of 641 trainees. Trainees who withdrew from the Scheme for Registration or who had not completed the Scheme for Registration by the time the data was drawn were not included in the analysis. The total number of excluded trainees from the analysis for these reasons was 48 (of which five trainees withdrew from the Scheme for Registration indefinitely). The trainees included in this analysis enrolled on the Scheme for Registration between 1 June 2014 and 31 May 2015, with the final performance data of the cohort being drawn from the system on 6 April 2016. A breakdown of when those included in this analysis were enrolled on the Scheme for Registration can be found below:

Month	Registered	Cumulative no. registered
June 2014	46	46
July 2014	294	340
August 2014	166	506
September 2014	59	565
October 2014	16	581
November 2014	3	584
December 2014	2	586
January 2015	5	591
February 2015	2	593

1.4 As the table in 1.3 demonstrates, the majority of trainees (85%) enrol on the Scheme for Registration between June and August.

1.5 As the Scheme is a continuous and flexible assessment programme, with some trainees from the same cohort enrolling eight months after the initial enrolees, this report aims to offer a snapshot on the 6 April 2016 of the demographic and performance data of those entering the profession in one enrolment year.

[1] During 2014 – 2015, there were nine GOC-approved universities: Plymouth University, City University, Anglia Ruskin University, Cardiff University, Aston University, The University of Manchester, Bradford University, Glasgow Caledonian University, Ulster University. Note that the University of Hertfordshire began offering an undergraduate course from September 2015.

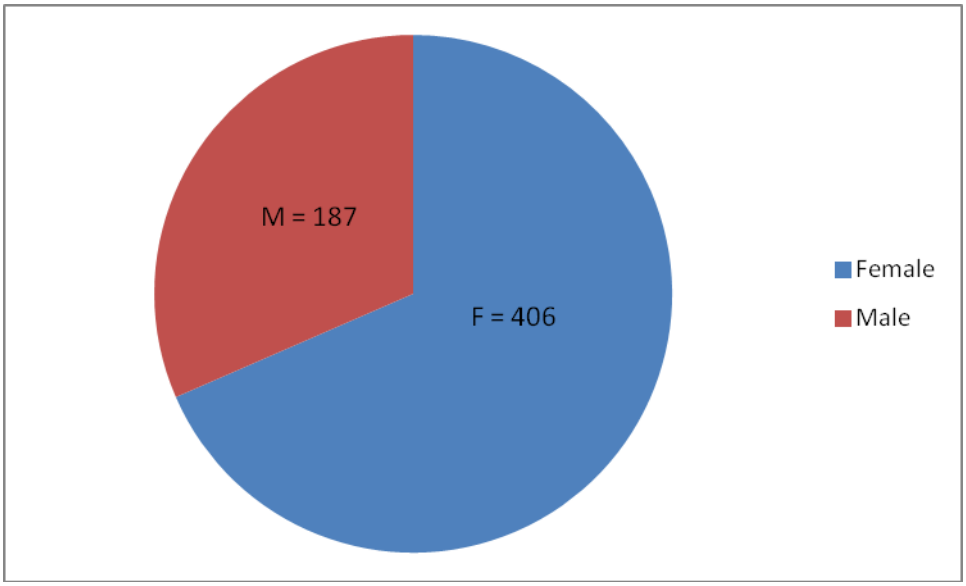
1.6 This is the second report released by the College; the initial report analysed the 2013-2015 cohort (data from the previous report is shown as [-%] for comparison).

2. Demographic information

The sections below will detail the demographic make-up of the 2014-2016 cohort of pre-registration trainees. It is to be noted that this is a single cohort's data and, thus, may not be fully representative of past or future cohorts.

2.1 Gender

Female trainee optometrists in this cohort far outnumber their male counterparts.

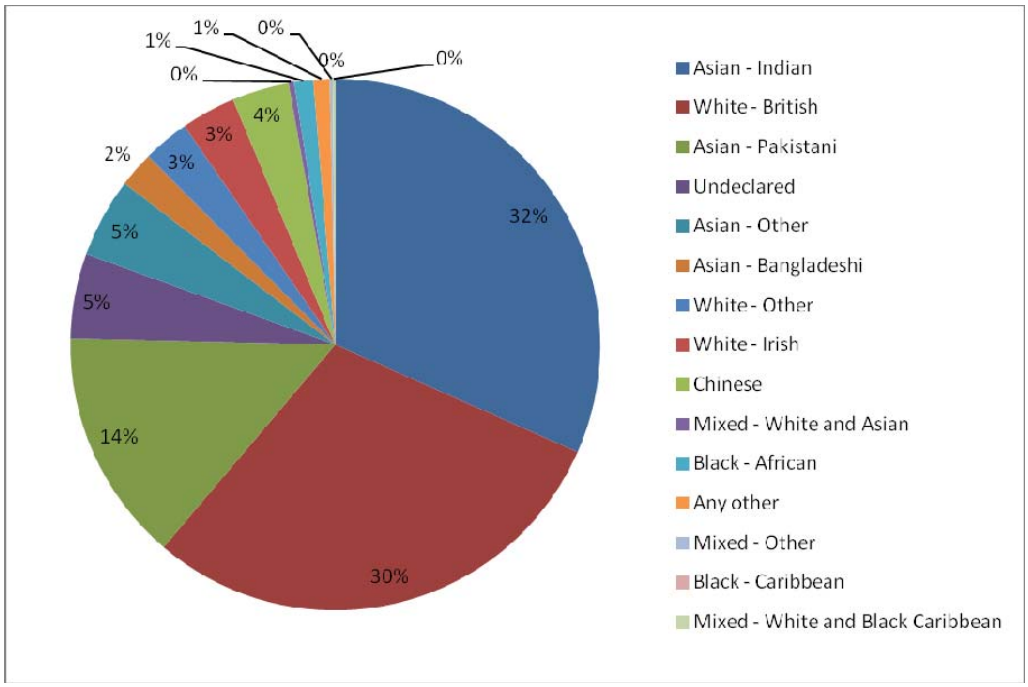


2.2 Ethnicity

The three most common ethnicities of the 2014-2016 pre-registration cohort were: Asian Indian (32%), White British (30%) and Asian Pakistani (14%). A more detailed breakdown of the cohort's ethnicity distribution is detailed below with the previous year's figures provided for comparison:

Ethnicity	2014-2016 (%)	2013-2015 (%)
Asian - Indian	190 (32)	174 (29)
White - British	178 (30)	162 (27)
Asian - Pakistani	85 (14)	101 (17)
Undeclared	31 (5)	38 (6)
Asian - Other	29 (5)	28 (5)
Asian - Bangladeshi	13 (2)	20 (3)
White - Other	17 (3)	14 (2)
White - Irish	20 (3)	25 (4)
Chinese	21 (4)	8 (1)
Mixed - White and Asian	2 (0)	8 (1)

Black - African	7 (1)	5 (1)
Any other	6 (1)	5 (1)
Mixed - Other	1 (0)	2 (0)
Black - Caribbean	0 (0)	1 (0)
Mixed - White and Black Caribbean	1 (0)	1 (0)
Total	593	592



Refining these data further, we can cross-tabulate gender with ethnicity:

Ethnic Origin	F	% representation of F optoms	M	% representation of M optoms	Total	% of F&M optoms
Any other	5	1	1	1	6	1
Asian – Bangladeshi	12	3	5	3	17	3
Asian – Indian	122	30	68	36	190	32
Asian – Other	24	6	5	3	29	5
Asian – Pakistani	54	13	31	17	85	14
Black – African	5	1	2	1	7	1
Black – Caribbean	0	0	0	0	0	0
Chinese	6	1	6	3	12	2
Mixed – Other	1	0	0	0	1	0
Mixed - White and Asian	1	0	1	1	2	0
Mixed - White and Black Caribbean	1	0	0	0	1	0
Undeclared	20	5	12	6	32	5
White – British	128	32	50	27	178	30
White – Irish	12	3	1	1	13	2
White – Other	15	4	5	3	20	3
Total	406		187		593	

The figures highlighted in yellow show where the percentage representation of each ethnicity within the female and male populations differs by 3% or more from the average % representation of that ethnicity in the entire cohort. These show where there is a disproportionate and/or uneven representation of that ethnicity within a given gender. A summary of these findings for this cohort are:

- Trainees from an Asian Indian background (the most common ethnicity in the cohort) are disproportionately represented among male trainees, with 36% of this cohort's male trainees declaring this ethnicity compared to 30% of female trainees. This is the inverse of the previous report, where there was a skew towards female trainees in this ethnicity group.

- Trainees from a White British background are disproportionately represented among females, with 32% of this cohort's female trainees declaring this ethnicity compared to 27% of male trainees. This is again an inverse from the previous report.

2.3 Geographical region

Using the trainees' registered addresses, we were able to document the distribution of the 2014-2015 trainees across the College regions as of 6 April 2016:

Region	2014-2016 (%)	2013-2015 (%)
London	113 (19)	119 (20)
North West	71 (12)	55 (9)
Scotland	63 (11)	76 (13)
West Midlands	62 (10)	58 (10)
East Midlands	49 (8)	45 (8)
Yorkshire & the Humber	47 (8)	38 (6)
South West	47 (8)	37 (6)
South East	41 (7)	59 (10)
East	34 (6)	40 (7)
Wales	30 (5)	37 (6)
Northern Ireland	19 (3)	14 (2)
North East	17 (3)	9 (2)
Overseas	0 (0)	3 (1)

No region recorded	0 (0)	2 (0)

These data still demonstrate the relatively unequal distribution of pre-registration optometrists throughout the United Kingdom. The main differences from the previous year's report include the significant increase in pre-registration placements in the North West and the decrease in the South East.

Cross-tabulating these regional data against the university each trainee attended creates the following distribution, with the region with highest number of trainees from that university highlighted in yellow:

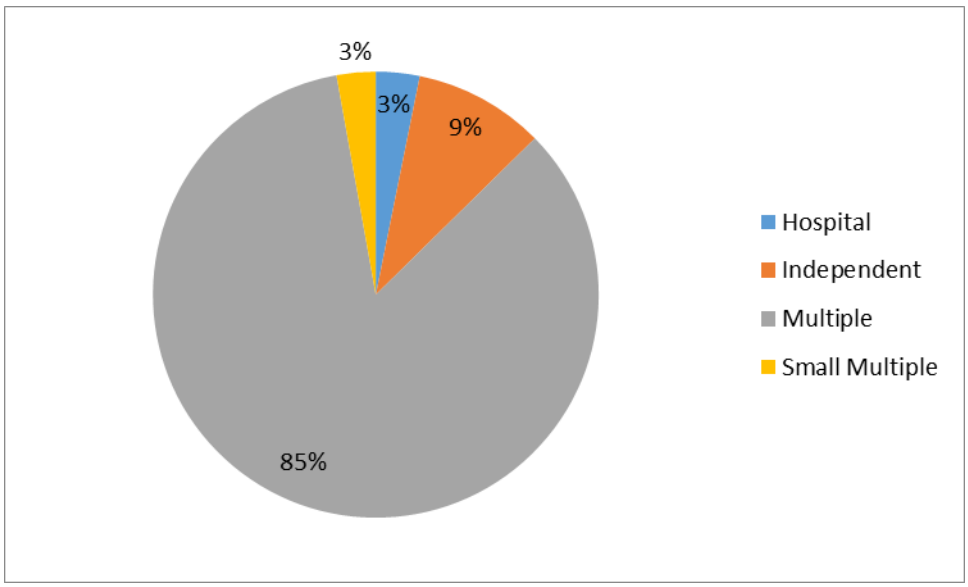
University	E Mids	E	Lond	NE	N W	NI	Sc ot	SE	S W	Wa les	W Mids	Yorks / Humb er	Total
Anglia Ruskin	2	8	21	1	1	0	0	4	0	3	5	0	45
Aston	24	7	13	1	7	0	1	6	9	1	37	7	113
Bradford	10	4	6	6	32	1	4	7	7	2	6	28	113
Cardiff	3	1	5	0	4	4	2	5	16	22	6	3	71
City	6	11	63	1	0	0	0	10	1	0	2	1	95
Glasgow Caledonian	0	0	1	0	0	0	54	2	1	0	0	2	60
Manchester	4	2	1	4	22	2	0	3	2	1	3	5	49
Plymouth	0	1	3	2	4	0	0	3	7	1	3	1	25
Ulster	0	0	0	2	1	12	2	1	4	0	0	0	22
Total	**49**	**34**	**113**	**17**	**71**	**19**	**63**	**41**	**47**	**30**	**62**	**47**	**593**

Broadly, these data indicate that, as in the previous report, students continue to undertake their pre-registration training in the same region as their chosen university. This suggests that each university feeds its own region's pre-registration optometric workforce. It is highly likely, for example, that if you see a pre-registration optometrist in Scotland that they attended Glasgow Caledonian University.

2.4 Workplace

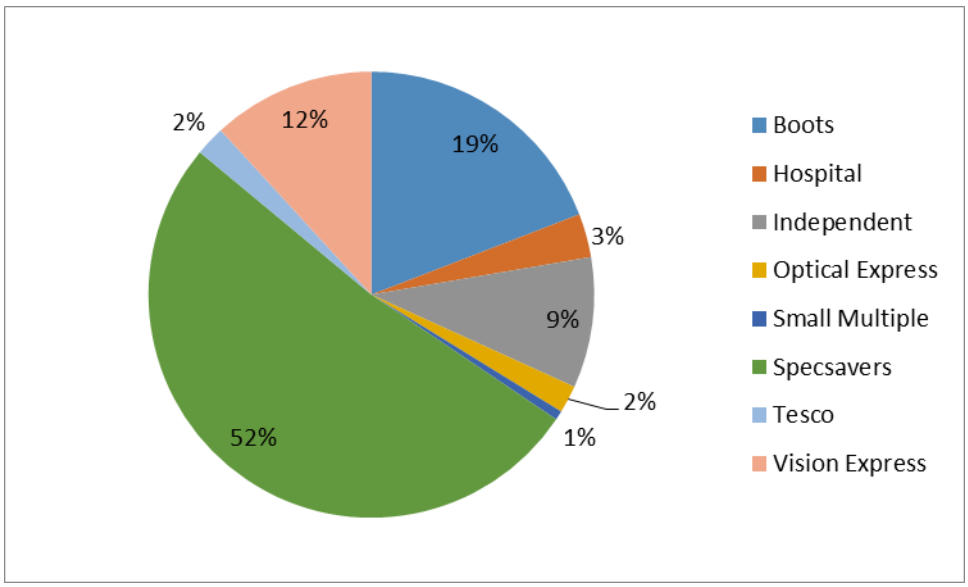
Pre-registration placements were divided into the following categories:

Multiples (Specsavers, Boots, Vision Express and Optical Express), smaller multiples (Scrivens, Tesco Opticians, Black & Lizars and David Clulow), independent practices and hospitals. The distribution of trainees within each of these sectors is shown below:



As shown, larger multiple practices continue to provide the vast majority (85% [+5%]) of pre-registration training placements for this cohort, with independent practices offering the second highest number of placements (9% [-3%]).

A more detailed breakdown of pre-registration placements by workplace is found below:



Within the multiple sector, Specsavers provided the largest number of placements, offering 61% [+5%] of placements which equates to 52% [+7%] of the total number of pre-registration placements for this cohort.

3 Undergraduate performance

Below is the proportion of degree classifications awarded to those trainees in this cohort sample. As those trainees who did not achieve the requisite 2:2 classification were not eligible to enrol on the Scheme for Registration, they are therefore not included in these data:

Degree	Total	%
First	125	21
2:1	279	47
2:2	150	25
MOptom	22	4
CPS	12	2
OPS	5	1
Total	593	

The distribution of degree classifications has remained static year-on-year. As expected, the main proportion of trainees (47%) entering the Scheme for Registration achieve a 2:1 classification, followed by those achieving a 2:2 (25%) and then those achieving a first class degree (21%). A small proportion of trainees (7%) enter the Scheme for Registration via a number of alternative routes, such as: completing an MOptom degree alongside their pre-registration training, completing a conversion course of their dispensing degree (CPS) or completing additional study to upgrade a third class optometry undergraduate degree (OPS).

3.1 Undergraduate performance and gender

Cross-tabulating undergraduate degree performance against gender yields the following results:

Degree	% representation of female optoms	% representation of male optoms	% of optoms
First	22	17	21
2.1	49	43	47
2.2	24	30	25
MOptom	3	5	4
CPS	1	4	2
OPS	1	1	1

As was the case for the previous cohort, these data suggest that, for this cohort, female students performed better than male students at undergraduate level, with 71% of females achieving either a first/2:1 degree class compared to 60% of males.

4 Performance in the Scheme for Registration

To judge performance through the Scheme for Registration, progress gradings were created for the Stage 1, Stage 2 and OSCE stages against which trainees could be categorised. Standard and Struggling were used to define performance at Stage 1, whilst Best, Standard and Struggling were used to grade performance at Stage 2 and the OSCE. It was felt inappropriate to distinguish between needing three and four visits at Stage 1 as it was not felt this indicated any stronger a performance from the trainee and could be linked to a number of other variables. **Performance data from the previous report has been recalculated to make it comparable with this year's data by applying the conditions applied to this year's data.** The gradings are defined in the table below:

	Best	Standard	Struggling
Stage 1	3 or 4 visits to sign off 75 elements of competence		5+ visits to sign off 75 elements of competence
Stage 2	1 attempt to pass	2 attempts to pass	3+ attempts to pass
OSCE	1 attempt to pass	2 attempts to pass	3+ attempts to pass

The table below lists the number and percentage of trainees who fall into each of these categories at each stage:

	Best	Standard	Struggling
Stage 1: 2014-2015	498 (84%)		95 (16%)
Stage 1: 2013-2014	510 (86%)		82 (14%)
Stage 2: 2014 - 2015	299 (50%)	191 (32%)	103 (17%)
Stage 2: 2013-2014	313 (53%)	191 (32%)	88 (15%)
OSCE: 2014-2015	461 (78%)	99 (17%)	33 (6%)
OSCE: 2013-2014	493 (83%)	73 (12%)	26 (4%)

Key conclusions from this data are:

- If a trainee in this cohort struggled, this tended to occur in the work-based assessment which appeared to prepare candidates well for the final OSCE examinations.

- 82% of trainees in this cohort passed Stage 2 by their second attempt (with half of trainees passing first time). Stage 2, however, when compared with the OSCE, did require a higher number of second attempts (32%). The number of trainees needing further additional resits slightly increased (17%) from last year. Stage 2 is therefore an area where trainees are beginning to struggle more.

- The first-time pass rate for the OSCE amongst this cohort continues to be strong (78%) but is lower than the previous year. This is unsurprising as the OSCE is designed to resample candidates' competence in content upon which they have already been assessed and acts as a final check that competence across the elements has been maintained. However, the introduction of new stations sampling more widely across the assessment framework may account for the slight decrease in the first time pass rate. The number of struggling trainees at the OSCE stage remains low (4%), with 96% of trainees passing the OSCE in this cohort by their second attempt.

4.1 Analysing candidate performance from one stage to another

To interrogate this data further, candidate performance from one stage to another in the assessment framework was analysed to investigate whether candidate performance at each stage correlated.

Given the two gradings at Stage 1 (Standard and Best) and three gradings at Stage 2 and OSCE (Best, Standard, Struggling), there are 18 possible combinations of grading, or candidate profiles, over the three assessments. These are listed below, together with the actual number of candidates falling into each category. All profiles are represented by at least one candidate:

Profile	Stage 1	Stage 2	OSCE	No of cands (% of candidates) 2014-2016	No of cands (% of candidates) 2013-2015
A	Standard	Best	Best	221 (37%) [-5%]	250 (42%)
B	Standard	Best	Standard	39 (7%) [+3%]	21 (4%)
C	Standard	Best	Struggling	8 (1%) [-%]	7 (1%)
D	Standard	Standard	Best	120 (20%) [-3%]	134 (23%)
E	Standard	Standard	Standard	28 (5%) [+1%]	26 (4%)
F	Standard	Standard	Struggling	6 (1%) [-%]	6 (1%)
G	Standard	Struggling	Best	57 (10%) [+2%]	49 (8%)
H	Standard	Struggling	Standard	12 (2%) [-%]	10 (2%)

I	Standard	Struggling	Struggling	7 (1%) [-%]	7 (1%)
J	Struggling	Best	Best	22 (4%) [-%]	25 (4%)
K	Struggling	Best	Standard	5 (1%) [-%]	8 (1%)
L	Struggling	Best	Struggling	4 (1%) [+1%]	2 (0%)
M	Struggling	Standard	Best	30 (5%) [+2%]	20 (3%)
N	Struggling	Standard	Standard	4 (1%) [-%]	4 (1%)
O	Struggling	Standard	Struggling	3 (1%) [+1%]	1 (0%)
P	Struggling	Struggling	Best	11 (2%) [-1%]	15 (3%)
Q	Struggling	Struggling	Standard	11 (2%) [+1%]	4 (1%)
R	Struggling	Struggling	Struggling	5 (1%) [-%]	3 (1%)

Performance of trainees across the two cohorts, once the data of the previous year has been updated to make it comparable, is very consistent. As a number of these profiles are negligible in terms of candidate representation, the top five profiles for this cohort's performance are listed below:

Profile	Stage 1	Stage 2	OSCE	No of cands (% of cands)
A	Standard	Best	Best	221 (37%) [-5%]
D	Standard	Standard	Best	120 (20%) [-3%]
G	Standard	Struggling	Best	57 (10%) [+2%]
B	Standard	Best	Standard	39 (7%) [+3%]
M	Struggling	Standard	Best	30 (5%) [+2%]

Conclusions that can be drawn from this data are:

- Profile A, the most represented profile, shows that 37% of trainees required no resits or additional visits at any stage of the pre-registration training. This shows a decrease of 5% from the previous cohort.
- Profile D, the second most represented profile, shows that 20% of candidates needed a single resit at Stage 2 and no additional visits or resits at any other stage of the Scheme. This adds to the argument that Stage 2 is the stage at which trainees struggle most.

- Combining profiles A and D shows that 57% of trainees in this cohort only needed a maximum of one resit at Stage 2 to complete the Scheme successfully.

- It should be noted that, relatively, the other three profiles are smaller than profiles A and D which make up over half of this cohort.

- Profile G, the third most represented profile, shows that 10% of trainees needed more than one resit attempt at Stage 2 but no additional visits or resits at Stage 1 or the OSCE. This suggests that Stage 2, for a tenth of this cohort, was an assessment sticking point for them and their performance at Stage 2 did not correlate with their performance in Stage 1 and the OSCE. In addition, this category showed a 2% increase from the previous report's data.

- Profile M represents a small (4%), but important, tranche of candidates who struggled during Stage 1 of the Scheme. As is shown, however, following Stage 1, these candidates either required no further resits or only required a single resit at Stage 2 before completing the Scheme for Registration. This could suggest that the piecemeal, targeted, formative assessment that takes place in Stage 1 identifies and addresses gaps in knowledge and competence at an early stage, meaning candidates are then not held back in future assessments. Stage 1, in this way, appears to act as a levelling for students from different backgrounds and experiences and prepares them well for Stage 2 and the OSCE.

4.2 Performance against demographic data

To be able to effectively cross-analyse performance against other variables, determining each candidate's performance had to be simplified from the 18 possible profiles listed above. In this vein, each candidate in the cohort was given a single grading and was judged overall on their worst performance at any stage of the assessment process. This meant candidates were judged overall as either 'Best', 'Standard' or 'Struggling' as defined below:

Grading	Description	Corresponding profiles	No of cands (% of candidates) 2014-2016	No of cands (% of candidates) 2013-2015
Best	Candidate required 3/4 visits at Stage 1 and passed Stage 2 and the OSCE first time with no resits.	A	221 (37%)	250 (42%)
Standard	Candidate required 3/4 visits at Stage 1, a single resit at Stage 2, and/or a single resit at the OSCE.	B, D, E	187 (32%)	181 (31%)

Struggling	Candidate required 5+ visits at Stage 1 and/or 2+ resits at Stage 2 and/or 2+ resits at the OSCE.	C, F, G, H, I, J, K, L, M, N, O, P, Q, R	185 (31%)	161 (27%)

4.2.1 Performance against gender

The table below shows the number of female and male trainees who fall into the performance categories as defined above.

2014-2016

	Gender					
Overall cat	**F**	**% F optoms**	**M**	**% M optoms**	**Total**	**% F&M optoms**
Best	162	40	59	32	221	37
Standard	131	32	56	30	187	32
Struggling	113	28	72	39	185	31
Total	**406**		**187**		**593**	

2013-2015

	Gender					
Overall cat	**F**	**% F optoms**	**M**	**% M optoms**	**Total**	**% F&M optoms**
Best	185	45	65	35	250	42
Standard	118	29	63	34	181	31
Struggling	101	25	60	32	161	27
Total	**404**		**188**		**592**	

Conclusions that could be drawn from these data are:

- As at undergraduate level and in the previous cohort, female trainees outperformed male trainees, with 11% more males than females defined as Struggling. This compares to a 7% difference in the previous cohort data suggesting the attainment gap is widening between the genders, particularly at the lower end.
- The relative percentage of female trainees classified as ‘Best’ (i.e. requiring no additional visits or resits) is 8% higher than that of male trainees although this has decreased from 10% in the previous cohort.
- More trainees, across both genders, are classed as Struggling and fewer are classed as Best in this cohort compared with the previous, indicating an overall increase in resits.

4.2.2 Performance against degree

The table below cross-tabulates the number of trainees with each undergraduate degree class/route into the Scheme against the different performance categories, as defined above:

NB the corresponding percentages represent the proportion of each degree class/route in each performance profile e.g. 55% of those trainees with a first class degree fall into the 'Best' grading:

2014-2016

	Overall category					
Degree	**Best**	**% representation of degree category**	**Standard**	**% representation of degree category**	**Struggling**	**% representation of degree category**
First	69	55	38	30	18	14
2:1	113	41	86	31	80	29
2:2	27	18	46	31	77	51
MOptom	6	27	11	50	5	23
CPS	6	50	4	33	2	17
OPS	0	0	2	40	3	60
Total	**221**	**37**	**187**	**32**	**185**	**31**

2013-2015

	Overall category					
Degree	**Best**	**% representation of degree category**	**Standard**	**% representation of degree category**	**Struggling**	**% representation of degree category**
First	86	70	26	21	10	8
2:1	109	38	100	34	81	28
2:2	36	27	42	31	57	42
MOptom	15	50	9	30	6	20
CPS	4	44	3	33	2	22
OPS	0	0	1	17	5	83
Total	**250**	**42**	**181**	**31**	**161**	**27**

Comparatively across cohorts, the most evident change is the performance of trainees achieving a first class degree. In the 2014-2016 group, the percentage of trainees awarded a first class degree and being categorised as Best fell by 15% with the percentage of Struggling trainees with this degree increasing by 6%.

The following tables break performance down by assessment stage:

4.2.2.1 Stage 1

2014-2016

Degree	Best/Standard	Best/Standard %	Struggling	Struggling %	Total
First	116	93	9	7	125
2:1	237	85	42	15	279
2:2	110	73	40	27	150
MOptom	19	86	3	14	22
CPS	12	100	0	0	12
OPS	4	80	1	20	5
Total	**498**	**93**	**95**	**16**	**593**

2013-2015

Degree	Best/Standard	Best/Standard %	Struggling	Struggling %	Total
First	116	95	6	5	122
2:1	253	87	37	13	290
2:2	104	77	31	23	135
MOptom	27	90	3	10	30
CPS	7	78	2	22	9
OPS	3	50	3	50	6
Total	**510**	**86**	**82**	**14**	**592**

4.2.2.2 Stage 2

2014-2016

Degree	Best	Best %	Standard	Standard %	Struggling	Struggling %	Total
First	76	61	40	32	9	7	125
2:1	153	55	82	29	44	16	279
2:2	50	33	55	37	45	30	150
MOptom	10	45	10	45	2	9	22
CPS	8	67	3	31	1	8	12
OPS	2	40	1	20	2	40	5
Total	**299**	**50**	**191**	**32**	**103**	**17**	**593**

2013-2015

Degree	Best	Best %	Standard	Standard %	Struggling	Struggling %	Total
First	91	75	26	21	5	4	122
2:1	140	48	103	36	47	16	290
2:2	56	41	48	36	31	26	135
MOptom	19	63	9	30	2	7	30
CPS	5	56	3	33	1	11	9
OPS	2	33	2	33	2	33	6
Total	**313**	**53**	**191**	**32**	**88**	**15**	**592**

4.2.2.3 OSCE

2014-2016

Degree	Best	Best %	Standard	Standard %	Struggling	Struggling %	Total
First	117	94	7	6	1	1	125
2:1	219	78	51	18	9	3	279
2:2	99	66	34	23	17	11	150
MOptom	16	73	4	18	2	9	22
CPS	10	83	1	8	1	8	12
OPS	0	0	2	40	3	60	5
Total	**461**	**78**	**99**	**17**	**33**	**6**	**593**

2013-2015

Degree	Best	Best %	Standard	Standard %	Struggling	Struggling %	Total
First	115	94	7	6	0	0	122
2:1	245	84	34	12	11	4	290
2:2	96	71	27	20	12	9	135
MOptom	26	87	3	10	1	3	30
CPS	9	100	0	0	0	0	9
OPS	2	33	2	33	2	33	6
Total	**493**	**83**	**73**	**12**	**26**	**4**	**592**

From the 2014-2016 data, the following conclusions could be drawn:

- There continues to be a correlation between undergraduate performance and performance on the Scheme. In brief, the higher your degree classification, the less likely you are to require additional visits or resits at any stage of the Scheme. For example, 55% of those trainees with a first class degree required no additional visits or resits in contrast to 18% of trainees with a 2:2. Conversely, only 14% of trainees with a first class degree were classed as 'Struggling' at any point in the Scheme, compared to 50% of trainees with a 2:2. However, the correlation for this cohort is less marked than the previous, with trainees with first class degrees requiring more resits than their 2013-2015 counterparts. Performance across this year's and last year's cohort remains relatively static, particularly with respect to Stage 1 and the OSCE.
- Trainees from this cohort performed less well at Stage 2 than the previous cohort, with fewer first class trainees being classed as Best, and with trainees holding a 2:2 generally performing less well at this stage of the assessment process.
- Trainees who completed the Optometry Progression Scheme (OPS), upgrading their third/ordinary degree to a 2:2 continue to perform less well on the Scheme than the average, with 60% of such trainees being classed as Struggling (the Scheme average being 31%). Numbers for this group, though, are low and conclusions should be dealt with caution.

5. Conclusion

As with last year's report, the data continues to reveal a complex picture of multiple, interacting variables determining performance. More in-depth statistical analysis is required to understand how these inter-related threads interact.

However, when comparing the data between the 2013-2015 and 2014-2016 reports, the following differences may be noted:

- The gender distribution across the two cohorts is stable but continues to be heavily skewed towards female trainees.
- Ethnicity distribution is equally consistent across reports but, interestingly, the gender balance within the two largest ethnicity groups, Asian Indian and White British, has switched in this report compared to last year's report.
- The number of pre-registration placements in multiples continues to grow.
- Generally, performance among trainees remains consistent, although there is evidence in the data of trainees requiring more resits in the most recent cohort. Female trainees still outperform their male counterparts, and data from this cohort suggests the gap is widening slightly.
- In the 2014-2016 cohort, trainees have the most difficulty with Stage 2 (routine eye examination and contact lens fitting). If a trainee is going to need a resit or additional visit, it is highly likely to be in this synoptic, practical assessment.

APPENDIX A

1. Common areas of failure in the Scheme

The following tables describe the most commonly failed elements of competence/areas of practice for this cohort at each of the assessment stages. These are supported by a commentary by the Lead Assessor (for the work-based assessment stages) and a senior examiner (for the OSCE examination) explaining, from their experience, where trainees make mistakes with respect to these areas.

Areas highlighted in yellow are new for the 2014-2016 cohort.

5.1 Stage 1

Comp	Descriptor	Lead assessor remarks
2.2.4	Creates and keeps full, clear, accurate and contemporaneous records.	• Records are incoherent because of poor handwriting. • Trainees produce records that miss important clinical findings • Trainees produce records that are not logical or that contain contradictory information.
3.1.3	Examines the fundi using both direct and indirect techniques	• Poor technique: - Direct = not scanning out and in adequately or being too far away to gain an adequate view. - In Volk = poor use of illumination.
3.1.6	Uses both a non-contact and contact tonometer to measure intraocular pressure and analyses and interprets the results.	• Lack of experience and practice. • Measured the simulated patients pressures before as they think that only the result is important, but set-up, technique and interpretation are also key.
3.1.7	Assesses the tear film.	• Just assess the tears with NaFl and blue light and don't consider what information can be gained from assessing with white light first. • No comment on tear volume.

4.1.2	Measures and verifies optical appliances taking into account relevant standards where applicable.	• Basic errors down to unfamiliarity with the practice focimeter.
5.1.3	Chooses, fits and orders rigid lenses.	• Lack of understanding and experience. • Too used to contacting CL manufacturers for advice. • Don't consider why a particular set of parameters has been recommended for a patient. • Don't know what to expect when the lens is in the eye or what to do with it if it doesn't appear to be an alignment fit.
5.2.1	Manages the aftercare of patients wearing soft lenses.	• Poor technique. • Illogical routine e.g. assessing tear film after everting lids. • Inadequate knowledge of and exposure to basic aftercare complications (dry eye) as well as more complex complications.
6.1.11	Understands the treatment of a range of common ocular conditions.	• Poor underpinning knowledge e.g. with cataract surgery not knowing about risks of surgery or measure taken to minimise risk e.g. antibiotic drops following surgery etc.
8.1.1	Assesses binocular status using objective and subjective means.	• No assessment of OMB in the patient's habitual state. • Inadequate record keeping e.g. no record of direction, size and recovery for the deviation and/or don't understand the significance of this information in relation to further tests.
7.1.1	Refracts a range of patients with various optometric problems by appropriate objective and subjective means.	• Poor technique: particularly retinoscopy (outside tolerance, or poor technique) or illogical subjective technique i.e. relying too much on duochrome, not using checking tests or if done ignoring the results +1.00DS blur gives 6/9 RE and 6/18+ in left but no additional plus added to RE.

5.2 Stage 2

Comp % failed	Descriptor	Lead assessor remarks
Routine 32.65%	N/A	• Closed questions. • Poor retinoscopy technique (result out of tolerance). • Poor subjective refraction technique. • Inadequate ophthalmoscopy leading to missed findings.
Contact Lenses 19.78%		• Poor observation i.e. missing staining, poor fit assessment. In aftercare no discussion about care regime and poor knowledge or understanding about alternative lens options to improve management of concerns e.g. SiH is not a high water content soft lens.
3.1	The ability to use techniques in ocular examination and to understand the implications of the findings in terms of subsequent examination techniques.	• Poor interpretation of fields plots provided by the assessor.
4.1	The ability to interpret and dispense a prescription using appropriate lenses and facial and frame measurements.	• Inadequate dispense records where measurements are missing. • Poor understanding of the lens designs or appliances they have recommended e.g. safety specs or vocational lenses or how MAR coatings work.
6.1	The ability to manage patients presenting with eye disease including sight-threatening eye disease.	• Patient records do not show that the patient has been managed appropriately. • Candidates cannot interpret the images provided by the assessor.
8.1	The ability to assess and make appropriate prescribing and management decisions based on the ocular motor status of the patient.	• Confused or inadequate management in the records provided. • Unable to provide suitable diagnosis or management in the case scenario provided by the assessor.

5.3 OSCE (based on examiner feedback)

Comps	Station area	Senior examiner remarks
1.2.1	Communicating bad news to patients	• Lack of practice/experience in this area • Lack of empathy • Avoidance of dealing with the subject at hand and becoming vague and unclear with the patient • Resorting to jargon in explanations
4.1.2 4.1.3	Dispensing (measuring/verifying spectacles) and communication around dispensing.	• Lack of practice. • Do not maintain or continue developing competence. • Get used to automated devices or computer based systems. • Trainees favour refraction and forget to continue dispensing up to the end of their pre reg.
5.1.3 5.1.4 5.2.2	Rigid Gas Permeable Lenses.	• Unable to identify a good fit. • Unable to describe a poor fitting lens. • Reticence to advise RGPs as an option to patients. • Such limited, authentic experience, candidates are unable to advise fully and positively. E.g. fit friends who don't really want the lenses and so they never have to problem solve to get the lens fitting properly.
7.1.1, 8.1.1, 3.1.4 3.1.1 3.1.2	Non-automated practical skills e.g. retinoscopy, keratometry, focimetry, measuring/verifying spectacles, colour vision testing, binocular vision tests.	• Over-reliance on automated equipment in practice. • Over-reliance on colleagues performing some of these functions in practice e.g. dispensing opticians. • Non-maintenance of core practical skills following Stage 1 of the assessment process.
	Writing referrals	• Limited experience of writing referrals.

		• Not used to pulling out key clinical features and giving a provisional diagnosis. • Too used to 'tick' box referrals that do not require much thinking. • Practise writing referrals for a wide range of conditions. • Every time your supervisor writes a referral, write one too as a duplicate

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Appendix B

1.1 The Scheme for Registration is run and administered by The College of Optometrists (the College) and is accredited by the General Optical Council. The College is the professional, scientific and examining body for optometry in the UK, working for the public benefit.

1.2 The Scheme for Registration was first piloted in 2004, with full roll out for all pre-registration trainees from 2005. It replaced the College's Professional Qualifying Examination (PQE Part 2) and is a post-graduate programme assessing competence against the General Optical Council's (GOC) Stage 2 elements of core competence for optometrists. (Stage 1 core competencies are assessed during an undergraduate programme delivered in GOC approved courses in universities.)

1.3 The Scheme for Registration represents the principal route for entry into the profession. It assesses graduates from all the GOC-approved[2] universities offering optometry at undergraduate level. Graduates must achieve at least a 2:2 in their optometry undergraduate degree to enrol on the Scheme.

1.4 Following graduation, trainee optometrists must find a pre-registration training placement in a practice or hospital in which to complete the Scheme for Registration.

1.5 Pre-registration trainees can only practise under supervision and must arrange adequate supervision arrangements in their placements. Principal supervisors are responsible for the trainee during their training and must have been qualified for more than three years with the GOC.[3]

1.6 The Scheme for Registration comprises two stages of work-based assessment (Stage 1 and Stage 2) and a final Objective Structured Clinical Examination (OSCE) examination which is carried out in an examination centre. Successful completion of the Scheme allows optometrists to register with the GOC and practise without supervision.

1.7 Stage 1 of the work-based assessment is usually comprised of four quarterly visits carried out by the same College-appointed assessor. An assessment plan for each visit is provided by the College which details the elements of competence to be assessed at each visit. Each visit is a structured

[2] During 2014 – 2015, there were nine GOC-approved universities: Plymouth University, City University, Anglia Ruskin University, Cardiff University, Aston University, The University of Manchester, Bradford University, Glasgow Caledonian University, Ulster University. Note that the University of Hertfordshire will be offering an undergraduate course from September 2015.

[3] More details regarding supervision arrangements can be found in the relevant section of the Supervisor Handbook.

assessment comprising of direct observation of techniques on real patients and a discussion of the trainee's own clinical records. Stage 1 is designed to be formative, with trainees receiving constructive feedback on unachieved elements of competence from the assessor and an action plan to address deficiencies in competence. It is also designed to be flexible to the needs, experience and ability of the trainee; assessors tailor assessment plans and the number of visits required at Stage 1 for each trainee.

1.8 Stage 2 of the work-based assessment is comprised of a single assessment visit carried out by a different College-appointed examiner. Trainees are observed carrying out a routine eye examination and contact lens fitting and aftercare on mystery patients provided by the College. A representative sample of the records used in Stage 1 as evidence are then resampled at Stage 2 to form the basis of an extended case discussion.

1.9 The OSCE examination is made up of 16 five-minute clinical tasks and a rest station. Each station assesses the candidates' skills, including history taking, communication, data interpretation, clinical examination and practical skills. During the OSCE, candidates may be tested on any of the GOC Stage 2 elements of competence assessed in Stages 1 and 2 of the work-based assessment. The OSCE acts as a final check that competence across the framework has been achieved and maintained. The College hosts four OSCE examinations per year (January, March, July and September).

1.10 Trainees have 27 months or four attempts at the Final Assessment OSCE to complete the Scheme for Registration, whichever comes first.