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OPHTHALMOLOGISTS

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# Key findings from the 2019 RCOphth national trainee survey



# Abstract

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## Background & Methods

Since the last national ophthalmology trainee survey was conducted in 2014, the UK government has introduced a new junior doctor contract (JDC), whilst demand for ophthalmology services has risen to unprecedented levels. To assess the impact of these and other factors on Ophthalmic Specialist Training (OST), a follow-up 25-question online survey was conducted.

## Conclusions

Despite a high overall satisfaction in the OST, several factors have led to an erosion of training opportunities. The survey highlights targets for improving OST, particularly with regard to rota design, flexible working arrangements and educational support. The previous national survey of OST trainees concluded that further research is necessary to determine how the recently imposed JDC affects training. In response, our 2019 survey confirms that a combination of the new JDC, increasing service demand and lack of capacity are contributing to an erosion of training opportunities. There remains a strength of feeling among trainees that adequate generalist and special interest training can be achieved within the existing seven-year programme.

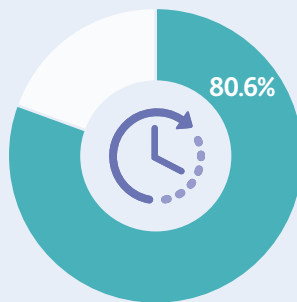
Despite laudable initiatives within the new curriculum to make OST more focussed and provide more flexibility for trainees, it is clear that much more effort will be required to balance the frequent conflicts between service demands and training opportunities. An expansion in the consultant workforce may alleviate some of these pressures, but rotas must also match training needs within the rules of the new JDC in England. It is clear that some training units have adapted to the JDC better than others and sharing examples of best practice in rota design and clinic scheduling will benefit all trainees on the new JDC.

The development of a new training curriculum by The Royal College of Ophthalmologists (RCOphth) provides an opportunity to address some of the issues highlighted in this survey. Given recent data on the impact of simulation training on cataract surgery complication rates in junior trainees, improving local access to simulation resources must also remain a priority for trainers<sup>12</sup>. Whilst the majority of ophthalmology trainees intend on pursuing a surgical career pathway, it is of interest that a small minority would consider taking up a consultant post as a non-operating ophthalmologist. This, along with the ability to work flexibly, should be considered by employers and reflected in consultant job plans that are adapted to the changing needs of the workforce. It remains to be seen how recent contract updates to the JDC, the departure of the UK from the EU and the proposed new curriculum will impact ophthalmology training in the UK.

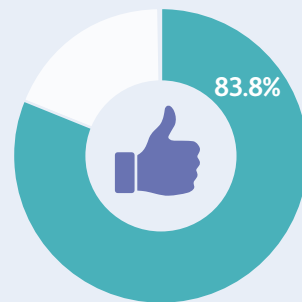
# Key Themes



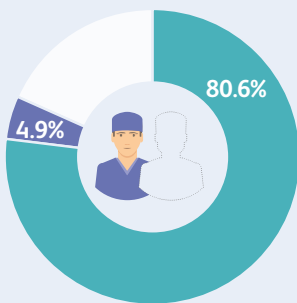
Geographical location was reported as a most important factor affecting choice of career, 99.6% rated as 'very important' or 'important'



The ability to work flexibly eg less than full time, 80.6% rated as 'very important' or 'important'



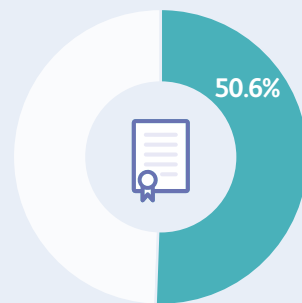
Most respondents (83.8%) 'strongly agreed' or 'agreed' that adequate generalist and special interest (subspecialty) training can be achieved within the existing seven-year programme



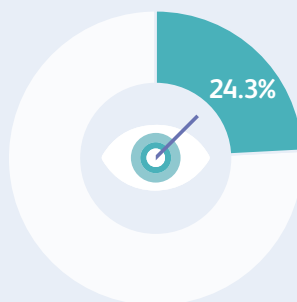
When asked if they would consider taking up a post as a non-operating ophthalmologist, 77.0% responded 'definitely not' whilst 4.9% responded 'definitely'



Only 22.9% felt that mandated rest periods on the new JDC had had a 'very positive' or 'positive' impact on their training



Just over half of the respondents (50.6%) 'strongly agreed' or 'agreed' that they had been given sufficient support locally for the FRCOphth examinations.



Just under a quarter (24.3%) of respondents reported 'difficult' or 'very difficult' access to simulation resources locally

# Introduction

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Ophthalmology remains a competitive specialty career choice in the UK, with a mean of 3.74 applications per training (or residency) post in 2018 <sup>1</sup>.

The last UK-wide survey of ophthalmic specialist trainees was conducted in 2014 <sup>2</sup>. Since then, the training landscape has altered considerably, most notably with the UK government introducing a new JDC across England in 2016. The new JDC has mandated changes to several aspects of OST, including pay, locum work, working hour limits and on-call rostering. Mandated rest even after non-resident on calls (NROC) have had consequent effects on the weekly timetable of OST trainees, including the allocation of time for research-study-teaching-audit (RSTA) activities. Of note, specialist trainees in the devolved nations of Wales, Northern Ireland and Scotland however remain unaffected by the JDC.

Working hour limitations still conform to the European Working Time Directive (EWTD), restricted to a mean of 48 hours for all specialist trainees. At the time of writing, the departure of the UK from the European Union (EU) has been delayed until 2020. It is still unclear when exactly this will occur and how it will affect workers' rights.

In the UK, the RCOphth is committed to implementing a new curriculum for OST by 2022 as part of the reform agenda of the General Medical Council (GMC). Currently, OST is seven years, the longest in the world. However, proposed changes in the new curriculum include special interest (previously known as subspecialty) training in the last 18 months of OST and a degree of flexibility in the length of training. This could allow certification of the completion of training (CCT) within six years with shorter special interest training for trainees who have achieved their general competences sooner, though this is yet to be ratified.

In light of these changes and the paucity of data on OST experience since the last national survey in 2014, a follow-up survey was commissioned by the Ophthalmologists-in-Training Group (OTG), a committee of specialist trainees representing all regions of the UK at the RCOphth.

## Methods

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A 25-question online survey was designed by a panel of trainees, trainers and education staff from the RCOphth. Questions were intended to follow-up themes identified in the 2014 survey whilst also exploring a range of new topical issues. Questions were grouped by theme and subjected to an iterative process of refinement. Wherever possible, responses were offered using established Likert scales.

A web-based SurveyMonkey platform was used for the survey (San Mateo, CA, USA) <sup>3</sup>. A weblink was sent electronically to all specialist trainees within the UK in March 2019 and the webpage kept live for five weeks. Electronic and text message reminders were sent via regional OTG representatives. Responses were collated and thematically grouped for qualitative analysis.

The minimum sample size was calculated as 247 from a total population of 690 trainees, with a 95% confidence level and 5% margin of error. This figure was calculated using the online SurveyMonkey sample calculator algorithm <sup>4</sup>.

# Results

## Demographics

A total of 276 trainees responded (40.0% response rate) with 91.7% respondents being full-time trainees. There was a skew in the grade of OST trainees who responded, with the highest proportion of responses from ST1 (20.9%) and the lowest from ST7 (7.2%). In terms of geographical distribution, the highest proportion of responses were from the North West & Mersey and West Midlands deaneries (13.7% and 10.5% respectively).

## Career preferences

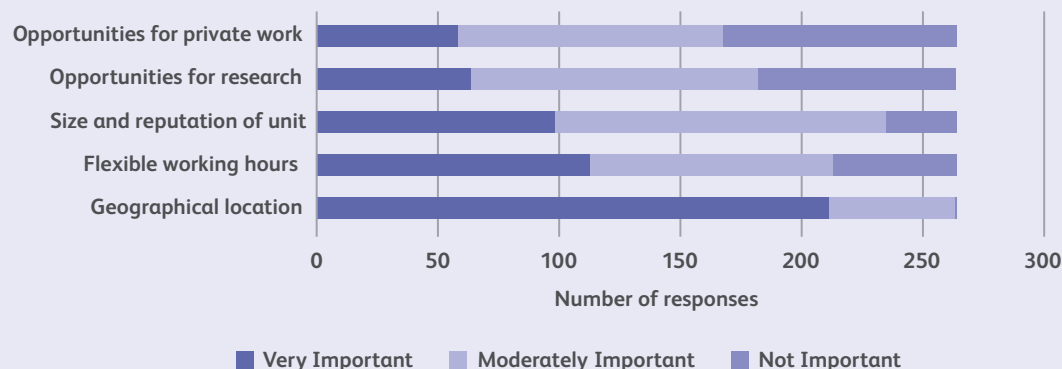
The 2014 survey identified clinical interest, surgical interest and enjoyment as the most commonly stated reasons for career choice. In this survey, trainees were asked to select 'all that apply', making the total response count of n=748. Table 1 (see Appendix) shows the most popular choices continue to be the predominantly surgical fields: cataract and anterior segment (17.4%), cornea, external eye disease and refractive surgery (13.8%), oculoplastics and orbit (13%), and vitreoretinal surgery (10.4%). Primary care and emergency ophthalmology, a more recent special interest, remains relatively popular (7.1%) while interest in paediatrics and strabismus ophthalmology has dropped further from 14.9% to 6.3%. 'Other' career preferences identified by free-text responses included ophthalmic genetics, general ophthalmology in a rural hospital and education (both surgical and university teaching).

## CCT and consultant posts

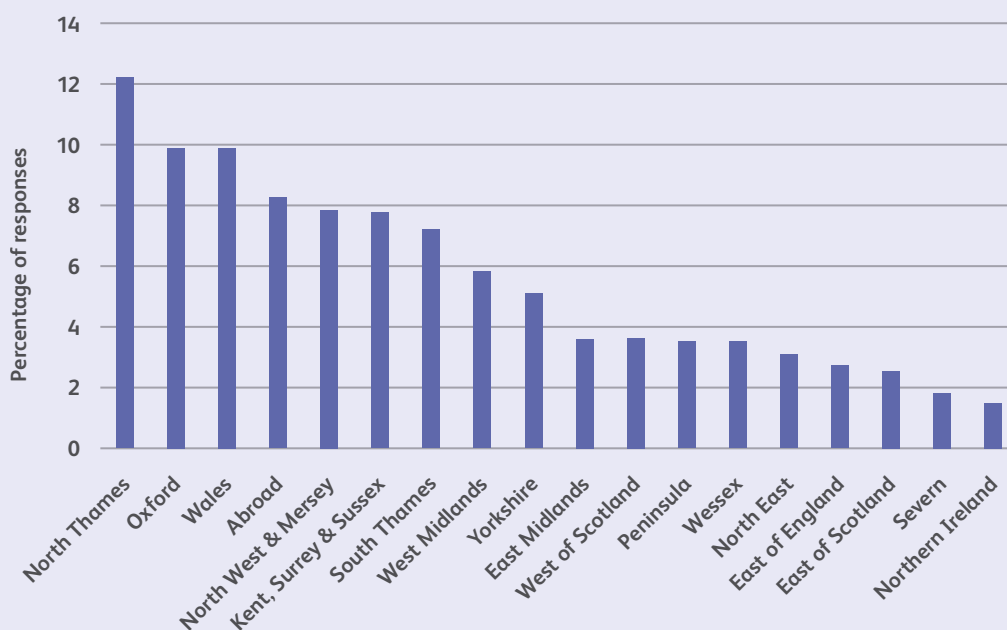
Two-thirds of trainees (66.4%) plan to do fellowships within or outside the UK on completion of their training (Figure 1). Factors influencing the choice of consultant post are detailed in Figure 2, with location being considered the most important and opportunities for private work the least important. Common themes when choosing consultant posts included fellow consultant colleagues, team dynamics, working relationships and departmental politics. When asked which three regions trainees would consider applying for a consultant post, the most popular regions were North Thames (n=98), Oxford (n=79) and Wales (n=79) as shown in Figure 3. This does not mirror the regions where most of the respondents are based. When asked whether they would be willing to take up a consultant post as a non-operating ophthalmologist, 77.0% trainees answered 'definitely not', whilst 4.9% answered 'definitely'.



**Figure 2: How important are the following factors in influencing your choice of consultant post?**



**Figure 3: What are the top three regions you would consider applying for a consultant post?**

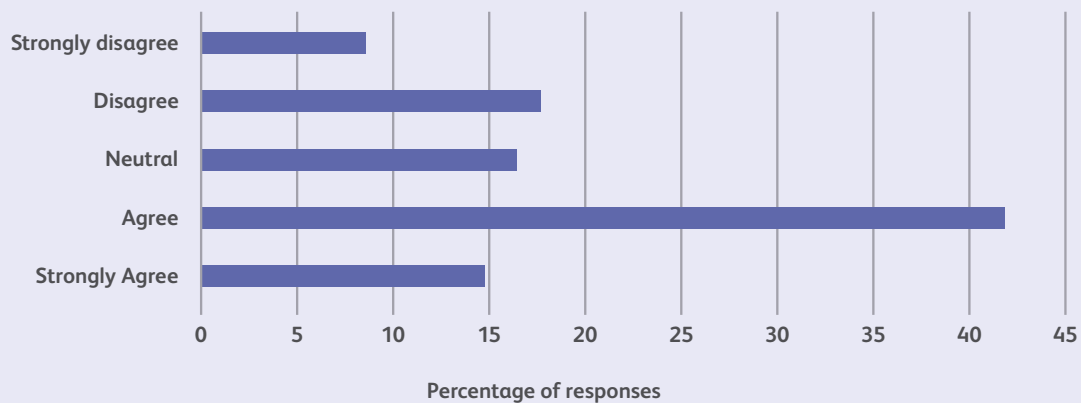


### Clinical training

In the 2014 survey, 34.4% trainees thought that OST should be shortened from seven years, and 44.8% believed the programme could be shortened and still produce competent consultants. In the 2019 survey, 79.6% trainees strongly agreed or agreed that ‘adequate generalist and special interest training to consultant level can be achieved in seven years’. The majority of trainees (83.8%) believe there should be a dedicated period of special interest training within the seven-year programme, which is in line with the pattern of most trainees completing post-CCT fellowships before taking up consultant posts.

Regarding RSTA activities, 92.7% trainees (n=245) have one or two RSTA sessions per week. Eight respondents (3.3%) reported having fewer than one RSTA session per week. Figure 4 illustrates that almost a quarter of respondents (26.5%) felt they do not have enough time for RSTA activities. RSTA sessions being reduced and cancelled to cover clinic or rota gaps at short notice was a regular concern, regardless of seniority of grade.

Figure 4: Do you feel you have sufficient time for RSTA activities on your current rota?



### Educational support

Figure 5 depicts the regional teaching available to the respondents, with regional study days being the most common (86.5%). The responses highlighted a high variability in the quality of regional teaching and a recurring theme that much of the teaching was not exam-focussed. When asked whether trainees had been provided with enough support locally in exam preparation, only 50.6% feel they had, while 22.4% felt they had not. The remaining 27% neither agreed nor disagreed.

Figure 5: What regional teaching is provided by your deanery (in addition to any weekly teaching at your unit)?

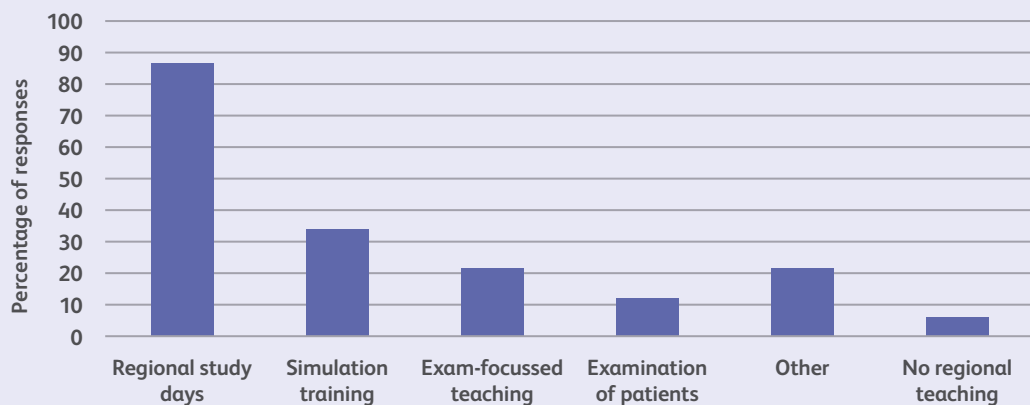
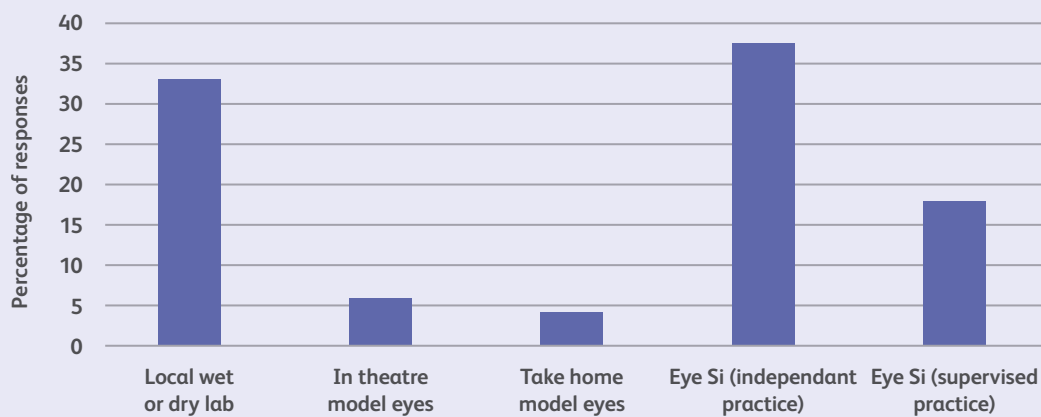


Figure 6 shows the breakdown of simulation resources available locally. EyeSi® (VRmagic Holding AG, Mannheim, Germany) is the most widely available, followed by locally-available wet or dry labs. Use of home microscope kits, cadaveric and capsular rupture simulation kits were also reported. However, when asked about access to these simulation resources, almost a quarter (24.3%) of respondents reported 'difficult' or 'very difficult' access.

**Figure 6: What types of simulation are available locally or within your region?**



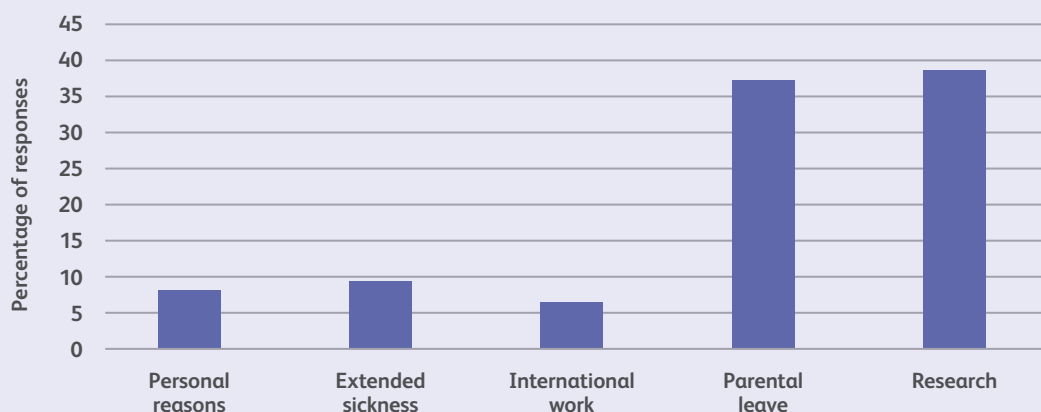
### Impact of the JDC

In the 2014 survey, 33.5% trainees reported that their contract did not reflect the number of hours they worked. In this survey, when asked if they exception report and claim for additional hours, 86.4% reported that they rarely or never do. A major concern raised was the impact of mandated rest periods on scheduled regular training activities. Only 40/175 (22.9%) reported that these rest periods had had a positive impact on their training. Of particular concern was a trend for scheduling rest periods during dedicated training sessions, such as theatre, regional teaching or RSTA sessions. Thematic analysis also revealed many trainees reporting split-weekend on-call rostering, in an attempt by some rota planners to implement JDC rules whilst minimising weekday rest days. Whilst preserving scheduled weekday service provision, in many cases this approach had doubled the frequency of weekend out-of-hours work, with a very negative impact reported by trainees on their work-life balance.

### Out-of-programme time and research

Almost a quarter of trainees (22.5%, n=62) reported taking out-of-programme (OOP) time, most commonly for parental leave and research (Figure 7). Only seven respondents described difficulties in negotiating OOP time, namely with the amount of notice and paperwork required. A few respondents reported that their deaneries actively discourage taking OOP time for research. On returning to training, 27.8% trainees reported insufficient or no support; this was mainly due to problems in timetabling, particularly for those requiring less-than-full-time (LTFT) hours.

**Figure 7: Reasons for taking time out of training.**





Of those OOP, 55% are undertaking research in the form of a PhD, MD, MRes or other master's degrees. However, 'increasing service provision' and 'lack of pay progression' were reported as reasons discouraging many from taking time out for research and further training.

### Positive and negative training experiences

Trainees were invited to report the most positive and negative training experiences in their deaneries. Positive feedback mainly centred on praise for consultant trainers. Many comments described friendly, supportive and approachable consultants and training leads. In theatre, trainees applauded patient and considerate surgical trainers. Trainees also commended consultant tutorials for exam preparation, regional teaching and an ST1 induction week involving cataract simulation and surgical skills.

When asked about the most negative training experiences, the overarching theme was the negative impact of increasing service provision on training opportunities. New restrictions on study budgets and leave, a reduction in RSTAs in some regions and chronic understaffing with persistent rota gaps were all reported as reasons for low trainee morale. Some trainees reported poor supervision when consultants were on planned leave, particularly in eye casualty (emergency) clinics. Many trainees reported poor surgical exposure in special interest rotations. Some trainees also reported difficulty in obtaining adequate cataract surgery numbers due to the routine cases being outsourced to private companies taking on NHS contracts, leaving a higher proportion of complex cases on NHS hospital training lists. Being informed of future training placements at short notice, particularly in deaneries covering large geographical areas, was also a commonly reported concern.

## Discussion

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Ophthalmology services in the UK are currently facing a crisis. Despite being the busiest outpatient specialty in the NHS, managing over nine million appointments every year, disease and population projections suggest an increase in demand over the next decade of 25% for cataract services, 30% for medical retina and 22% for glaucoma<sup>5</sup>. Responses to a recent workforce census suggest that an increase of over 230 consultant posts (22% of the current consultant workforce) is required by 2020 to meet these rising service demands<sup>6</sup>. Hence the importance of training and retaining the specialist trainee workforce after CCT should not be underrated.

This is the first UK-wide survey of ophthalmic specialist trainees to record the impact of the new JDC and rising service demands on trainee satisfaction. The high response rate (40%) exceeds similar surveys performed and provides a robust data set for qualitative analysis<sup>2,7,8</sup>.

### Career choices

Career preferences remain broadly similar to the 2014 survey; however, whilst trainees continue to favour the more surgical fields, it is of interest to note that up to a quarter of trainees (23%) would consider taking up a consultant post as a non-operating ophthalmologist, whilst still performing other interventional procedures. This, along with the ability to work more flexibly, should be important considerations for both OST and future consultant job plans. Paediatrics and strabismus as a special interest continues to decline in popularity and recruitment initiatives must now be prioritised with some urgency.

### Experience of training

The responses from this survey support the previously recorded high overall satisfaction rating (86.5%) with UK ophthalmology training<sup>9</sup>. However, it is clear that service demand pressures and a lack of capacity in most eye units to meet these demands are eroding training opportunities. Recent data from the GMC

confirms that 70% of ophthalmology trainees regularly work beyond their contracted hours and only 63% agree that training opportunities are rarely lost due to rota gaps <sup>9</sup>.

There is a strength of feeling among trainees that the OST could be more focussed, providing sufficient special interest (or subspecialty) training to negate the need for post-CCT fellowships after the seven years. Another recurring theme was the excessive administrative burden of the electronic portfolio system. Both issues are being addressed by RCOphth as part of a new curriculum and portfolio proposal submitted to the GMC. This would allow capable trainees up to 18 months of special interest training within the existing seven-year programme window.

### **New junior doctor contract**

Whilst many aspects of the new contract are to be commended, such as protected rest between consecutive shifts and a responsibility for employers to provide suitable rest facilities during non-resident on-calls, the overall impact on OST has been mixed <sup>10</sup>. Poor rostering practice has led to split weekend on-calls and difficulties swapping shifts for many trainees, whilst others have been asked to take rest periods in lieu of scheduled RSTA sessions. Some trainees miss out on Monday theatre sessions after a weekend on-call, whilst others are expected to attend regular clinics by their consultants, despite on-call commitments. The majority of trainees do not report additional hours worked; several respondents reported a local culture against exception-reporting for fear of being looked at unfavourably by their consultant trainers. Many of these issues can be resolved by better rota design, with the OTG now leading on providing 'best practice' rota guidance.

### **Educational support and out-of-programme time**

Surgical simulation will be formally integrated into the new OST curriculum, supported by a simulation lead at RCOphth. However, access to simulation resources, particularly in regions outside large cities, needs to be improved considerably to meet this requirement. Whilst the majority of trainees are satisfied with the regional teaching they receive, there is room for improving exam-focussed support, which should be prioritised locally.

Many trainees choose not to take time out-of-programme, but it is clear from the responses received in this survey that some are actively discouraged from doing so within their region. Many are left balancing research, parental leave and childcare alongside clinical duties and exams. Despite national initiatives to support trainees returning to training, such as the SuppoRTT programme, several trainees struggle to negotiate LTFT work schedules <sup>11</sup>. Employers and regional training leads must actively support flexible training, geographical preferences and phased return-to-work schedules for all trainees.

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# Appendix

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**Table 1: What are your top three career preferences at present?**

Sub-Speciality	Response Count	Response Percentage
Cataract & Anterior Segment	130	17.4
Cornea, External Eye & Refractive Surgery	103	13.8
Oculoplastics & Orbit	97	13.0
Vitreoretinal Surgery	78	10.4
Medical Retina	66	8.8
Glaucoma	61	8.2
Primary Care & Emergency Ophthalmology	53	7.1
Medical Ophthalmology & Uveitis	50	6.7
Neuro-Ophthalmology	46	6.1
Paediatrics & Strabismus	45	6.0
Ocular Oncology	14	1.9
Other	5	0.7
<b>Total</b>	<b>748</b>	<b>100</b>

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## Authorship

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## Conflict of interest

The authors declare no conflict of interest.

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