BIOS

British and Irish Orthoptic Society

A review of evidence by the British and Irish Orthoptic Society to support the legislative change to allow orthoptists to prescribe glasses in the hospital setting in accordance with the Opticians Act 1989

Delivered as part of NHS England Education Reform Commission 2024

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Introduction

This British and Irish Orthoptic Society (BIOS) report outlines the potential benefits to patients and hospital care pathways of enabling orthoptists to prescribe spectacles within the Hospital Eye Service (HES). Currently, this aspect of care is restricted under the Opticians Act 1989.

As part of the Department of Health and Social Care's (DHSC) legislative reform programme, the General Optical Council (GOC) is reviewing provisions of the Opticians Act that apply solely to the optical sector. This review is intended to ensure that the powers granted to healthcare regulators are appropriate and consistent across the sector, enabling them to effectively carry out their core functions: registration, education, fitness to practise, standards, and governance.

This work has been specifically commissioned by NHS England to support workforce reform in line with its long-term plans and is endorsed by the Chief Allied Health Professions Officer for England, Suzanne Rastrick OBE (Appendix 1).

Executive Summary

Hospital ophthalmology services are coping with the longest waiting times experienced in ophthalmology for a decade. A particular problem is that children are waiting too long for routine refraction (glasses test) appointments, so delaying further treatment. Limited changes to the legislation controlling the prescribing of spectacles to include orthoptists in this setting will be consistent with meeting the NHS workforce aims to offer care in the right place, at right time by "improving productivity by working and training in different ways, building broader teams with flexible skills, changing education and training to deliver more staff in roles and services where they are needed most, and ensuring staff have the right skills".

Recommendations and Key Findings:

BIOS would welcome review of regulations governed by the GOC regarding sight testing, that would allow the profession of orthoptics to be named within the Opticians Act (1989) Part IV thus enabling orthoptists to conduct refractions and prescribe glasses within the hospital / NHS setting in addition to optometrists and medical practitioners.

This is based on the following:

- Graduate orthoptists already have the skills and knowledge to carry out and make decisions on glasses prescriptions and eye health checks, but these can be lost post-graduation if not maintained, due to the inability to sign prescriptions. Additional training would ensure the same competency standard as their ophthalmology colleagues as already evidenced in some HES clinics
- This would be safe and highly beneficial for patients and would align with strategic reforms in workforce development that allow more efficient eye care to be delivered.
- It would enhance patient care by making simpler care pathways with more streamlined clinical decision making.
- It would provide financial and cost savings for patients and hospital eye services.
- BIOS would not be seeking this right outside of the hospital-based services. This amendment would not undermine the law or be a threat to the optometry profession. It is a unique proposal to allow a highly skilled registered eye care profession to provide more efficient care benefiting patients within a specialised area of eye care within the NHS/HES setting.
- Regulation and education are embedded within the profession and the Health and Care Professions Council (HCPC) has mechanisms to ensure that regulators will be competent to assess those on the Orthoptics Register who refract and prescribe glasses.
- The proposal is that in order that an orthoptist could sign prescriptions there would be an annotation to the register after completion of appropriate post registration training. This would be limited to the Hospital Eye Service. There is broad support from within ophthalmology and from the HCPC who are willing to discuss proposals going forward.
- There is currently no legislation that prevents orthoptists carrying out eye health checks, and assessment of eye health forms a large part of undergraduate training and current orthoptic practice, but training to qualify for annotation to the HCPC register would include enhanced eye health training

Historical Background

In past years, the three professions of optometry, ophthalmology and orthoptics were more separate. When the initial legal framework for sight testing was laid down, orthoptists had a much more narrowly defined role, so were not included in the legislation.

Ophthalmologists took full responsibility for patient care, provided medical and surgical treatment and performed refraction and specialist fundus and media examinations for many children.

Optometrists generally worked in primary care, prescribing glasses, contact lenses, delivering routine eye health checks and referring any eye disease and ocular motility defects that needed treatment or further investigation into hospital services. A smaller number of hospital optometrists provided specialist refraction low vision and contact lens services in larger departments, for the ophthalmologists' secondary and tertiary care patients.

Orthoptists concentrated on the assessment and treatment of binocular vision abnormalities and strabismus (squint) in hospital practice. They have highly specialized skills in ocular motility assessment and specific training in the assessment of very young children and adults with disabilities. Their role was mainly to provide specialist support and advice to ophthalmologists, but because much of the treatment of childhood eye problems involves first getting the right glasses and then adapting the prescription to treat strabismus, they have always worked with ophthalmologists and hospital optometrists to help them make appropriate glasses prescription decisions. But although acting as advisors in what to prescribe, they have never been able to sign glasses prescriptions because the 1989 Opticians Act does not mention orthoptists.

This division of labour worked well when hospital services, particularly ophthalmologists, were less pressured.

In modern practice the boundaries between professions are much more blurred, with optometrists and orthoptists (and specialist nurses and technicians) carrying out roles previously only done by ophthalmologists in many sub-specialty fields. With additional training they often use additional skills and highly autonomous levels of decision-making and prescribing.

Report Methodology

BIOS has undertaken a survey of current practice, mapped standards, conducted focus groups, gathered evidence from peer-reviewed literature and engaged with a wide range of stakeholders in preparing the facts that will be presented in this report (Table 1).

Table 1: *Evidence to support the case has been drawn from these sources*

Stakeholders Meetings
• NHS England • Chief Allied Health Professions Officer • General Optical Council • Health and Care Professions Council • The College of Optometrists • Royal College of Ophthalmologists
Focus groups/interviews
Four focus groups from departments around the UK: workforce feedback from department that have orthoptists a) Refracting b) Not refracting
Statements/Documents
• Review of GOC Response to Call for Evidence on The Opticians Act and consultation on associated GOC policies April 2023 ○ https://optical.org/media/nwrp5mqe/goc-response-to-call-for-evidence-on-opticians-act-final.pdf • AOP response to the GOC call for evidence July 2022 ○ www.aop.org.uk/opticiansactresponse • ABDO response to GOC call for evidence
Surveys/case studies
• BIOS Work Force Survey 2024 • BIOS Survey of Refractive Practice in Orthoptics • BIOS Student member survey 2024

- Case studies – vignettes of current and future practice if the law were to change
- Research Projects outcomes focused on Advanced Clinical Practice undertaken as part of the Masters in Paediatric Ophthalmology University of Sheffield

Members of the BIOS working party are:

- Dr Nadia Northway – Refraction Project Lead
- Craig Murray – BIOS Chair
- Julie Dowdney – Chair of Leads of the Orthoptic Profession Group
- Dr Lauren Hepworth – BIOS Research Director
- Professor Helen Davis OBE – BIOS Education and Professional Development Committee Chair
- Professor Anna Horwood – BIOS Former Research Director and Retinoscopy Course Lead
- Helen Haggerty – BIOS Vice Chair
- Michelle Murray – BIOS National Workforce Reform Programme Manager

Current Regulation

The Department of Health and Social Care (DHSC) is currently carrying out a review of all healthcare regulators' legislation to ensure consistency between the powers that all healthcare regulators have to deliver their regulatory functions of registration, education, fitness to practice, standards and the overall governance and operating framework of the regulator.

There is a multidisciplinary team involved in delivering eye care. All these bodies have a role in regulating eye care professionals who work together in the HES, but the professions have different governance and regulation.

Ophthalmologists are regulated by the General Medical Council, ophthalmic nurses by the General Nursing Council, orthoptists by the Health and Care Professions HCPC, and optometrists by the GOC.

The GOC regulates the professions of optometry and dispensing optics. We are aware that the GOC are using the opportunity offered by the DHSC to review whether further changes are required to the aspects of the Opticians Act 1989 that are unique to the GOC or the practice of optometry and dispensing optics. Similarly to the HCPC, the GOC has four primary functions:

- Setting standards for optical education, training, performance and conduct.
- Approving qualifications leading to registration.
- Maintaining a register of those who are qualified and fit to practice, train or carry on business as optometrists and dispensing opticians.
- Investigating and acting where registrants' fitness to practice, train or carry on business is impaired.

Orthoptics is an allied health profession (AHP) which includes professions such as physiotherapy, speech and language therapy, etc., most of which work as autonomous practitioners. Orthoptists are regulated, and their training is approved and monitored, by the HCPC. The HCPC will also be reviewing their legislative functions as part of the DHSC review. "Orthoptist" is a protected title, however there are no protected roles or functions for orthoptists.

Modification of services and who provides the services is constantly undergoing change with many aspects of eye care being shared by optometrists, ophthalmic nurses and orthoptists, supporting medical practitioners in the HES[3]. It is essential that regulators can keep abreast of practice changes and the roles being undertaken by the professions. The way in which allied health professions work is changing and NHS England has launched two strategies in recent years, AHPs into Action (2017- 2021) and more recently AHPs Deliver (2022-2027) [4 5]. To achieve these important strategic goals many elements of governance and care must come together and change in order to provide effective change in health care delivery by multidisciplinary teams. AHP's into Action set out four impact goals, these can be seen in Figure 1.

AHPs key to transforming health, care and wellbeing in England.			
How will you close the health and wellbeing gap?	How will you drive transformation to close the care and quality gap?		How will you close the finance and efficiency gap?
IMPACT 1	**IMPACT 2**	**IMPACT 3**	**IMPACT 4**
AHPs will improve the health and wellbeing of people and populations.	AHPs will support and provide solutions to general practice and urgent and emergency services to address demand.	AHPs will support integration, addressing historical service boundaries to reduce duplication and fragmentation.	AHPs will deliver evidence based/ informed practice to address unexplained variances in service quality and efficiency.

Figure 1: *AHPS into Action Strategy NHS ENGLAND- changing the law on sight testing by orthoptists would provide a platform to influence all 4 pillars of the AHP strategy for the Orthoptic profession.*

The most recent strategy, "AHPs Deliver", is a strategy designed to be a catalyst for change so that patients receive the right care at the right time [5]. It aims to support the AHP community and those they work with to maximise their contribution to the aim of improving health outcomes for all, providing better quality care, and improving sustainability of health and care services. These goals will be central to the arguments put forward in this document to support orthoptics being included as a profession eligible to conduct sight tests and contribute to service delivery in this regard where patient numbers are high and waiting times are long especially in paediatrics

A Multidisciplinary Field

Each profession has evolved to deliver specific elements of eye care, however now more than ever it is widely recognised that there is considerable overlap between the roles undertaken by all the professions. The OCCCF has been developed in the UK into ophthalmic practitioner training (OPT) (see Appendix 3); this in addition to the Multi-professional framework for advanced clinical practice in England published in 2017 are contributing to a change in the way eye care is delivered [3]. The OPT, based on the OCCCF, trains postgraduate orthoptists, optometrists and ophthalmic nurses in secondary care to develop their skills in cataract, glaucoma, medical retina or emergency eye care. These changes have been facilitated by growing autonomy and responsibility for each of the professions covered by the OPT. There are also Advanced Clinical Practice courses available to Orthoptists, including a paediatric ophthalmology

programme which includes refraction and ocular health assessment in the paediatric population.

The Opticians Act (1989)

The GOC was created by the first Opticians Act in 1958 and provides the current governing legislation for opticians / optometrists and dispensing opticians under the Opticians Act (1989) [1]. In addition, the act contains other areas of governance, such as protecting function (i.e. activities such as sight testing) as well as the professional title of optometrist and dispensing optician.

Sight testing (refraction and ocular health examination) is one area of eye care that is a protected function and is defined within the Opticians Act (1989) [1]. The protected role of sight testing is, as such, a unique piece of legislation designed to uphold the standards of eye care and the professions responsible for refractive error management and has fulfilled its primary purpose to protect the public from unregistered professionals. Orthoptists are eye care professionals who are registered by HCPC but are not recognised in the Opticians Act (1989) so as such are seen as unregistered professionals in the current legal framework [1].

The Act gives the GOC the power to make rules and regulations in specific areas of eye care practice, subject to approval by the Privy Council. These include rules concerning the optical industry. The act sets out the rules and laws governing sight testing and refraction. The Act originally gave opticians the right to prescribe glasses and conduct sight tests, something that only medical practitioners had been able to do before the Act was formed in what had been a poorly regulated area of practice. The Act sets out the law regarding spectacle prescribing, refraction, sight testing, sale and supply of glasses, conduct of optical businesses as well as regulation of the professionals registered by the GOC.

Only optometrists and medical practitioners are mentioned within the Act ensuring that only those eligible to prescribe medical devices can do so offering public assurances regarding the skills of those issuing a spectacle or contact lens prescription.

The profession of orthoptics has changed radically in the last 40 years. As autonomous practitioners' orthoptists are increasingly undertaking many roles within eye care, mainly in hospital and multidisciplinary settings. They support

ophthalmic services and provide care for a wide range of eye conditions across the lifespan supported by the goals of the AHP Implementation Framework5. The national schedule of costs for 2022/2023 shows that orthoptists provide over 430,000 consultations a year in England (Appendix 2) [6]. Two thirds of these are orthoptic only clinics (see Appendix 2). Many orthoptic patients are managed solely by an orthoptist who assesses the need for input from other professionals such as an ophthalmologist or optometrist for refraction and ocular health check or a decision regarding ocular surgery as necessary.

Current practice and how refractions are managed

Refraction

Refraction of complex patients is a common reason for outpatient appointments and accounts for a substantial proportion of work within the HES, particularly within paediatric eye care. Most hospital treatment cannot be decided until it is known whether glasses are necessary and correct

In the community, most sight tests for adults and older children are conducted by high street primary care optometrists who often work in partnership with the HES for hospital-based treatment, but carry out testing in the community. General Ophthalmic Services (GOS) eye tests have increased substantially across all four countries, with Scotland seeing an increase year on year since 2006 (50% increase) (Scotland 2023 = 2,418,072 GOS sight tests - figure includes HES tests [7]). England has seen similar trends with 6,741,142 GOS eye tests recorded in 2022/2023 an increase of 40% since 2002. Wales has also seen increased demand for sight tests [8].

Most primary care refraction uses subjective methods where the patient helps the optometrist refine a prescription and is highly accurate. Children's services need to be different because subjective methods are often not possible with young children. There are objective techniques such as retinoscopy, (where the tester interprets a reflex in the pupil), but they are less commonly used in modern adult commercial practice where automated methods such as autorefraction are now often routine. But autorefraction is also not suitable or accurate for very young children. Some primary care optometrists will refer children to hospital services if they are not confident in a subjective response.

(Ironically, this refraction is sometimes already carried out by an orthoptist when they get to hospital).

Retinoscopy is a highly skilled technique, but is becoming less common in high street practice. It is the most common method used in hospital practice because patients are often very young children who will not cooperate for autorefraction or subjective testing, or patients where subjective responses are unreliable. All professionals refracting children in hospital have to become proficient in retinoscopy.

Hospital refractions are integral to orthoptic and ophthalmological management of children's vision. Patients are referred to hospital services because the primary care optometrist recommends a secondary orthoptic opinion. From an orthoptic perspective, beyond primary care and in the HES, spectacle prescriptions need to be issued regularly for the following reasons. (In many cases the orthoptist instigates the need for a new prescription on the basis of their investigations):

- At the outset of care when first referred and then in regular intervals to monitor visual development.
- After referral from optometry and a modification in prescription is advised for binocular vision reasons.
- A modification because the spectacle correction is having an adverse effect on binocular vision.
- An aid to developing binocular control, such as minus lenses in exotropia management, bifocals in convergence excess esotropia and prisms in decompensating and incomitant strabismus.
- Correcting accommodative weakness and convergence insufficiency with near vision lenses and prisms to aid near work.
- Optical penalisation for amblyopia treatment.
- A change of vision indicates a change in prescription in the absence of any pathological changes.
- To alleviate diplopia.
- To correct a head posture or maximise visual acuity in nystagmus by using yoke prisms.

- To compensate for field loss.

Current decision making

From orthoptics focus groups and surveys it is clear that all orthoptists are involved in decision making about prescribing glasses for their patients. This is often in the form of a discussion between the orthoptist and the optometrist or ophthalmologist who carried out the refraction and ocular health check. The orthoptist's understanding of refraction on ocular alignment and visual development is seen as essential to ensure that the best correction is given. Although the orthoptist may not conduct the refraction, they are central to the prescribing decisions in all hospital departments.

Modification of a prescription - often after the initial prescription the orthoptist will monitor the effects of the prescription, use temporary lenses or prisms to decide if a modification is necessary and then arrange these modifications. An orthoptist is able to apply temporary lenses or prisms without input or ratification from others. Any requirement for a change in prescription would be instigated by the orthoptist during regular monitoring. For example, an exophoria decompensating after prescription of full plus may require a request for a reduced prescription to preserve binocular control.

Reissuing a prescription for lost glasses - orthoptists are the key care provider after prescription of glasses to children and assess patients on average every 6-8 weeks during active treatment and usually between 3-4 months if monitoring. During this period the orthoptist will often be required to request a reissue of a prescription because glasses are lost or broken. This is a key responsibility of the orthoptist and a frequent occurrence in the paediatric patient group. However, at the current time this process requires disturbing an ophthalmologist or optometrist to issue the prescription. This results in the patient who needs the prescription having to wait and often can only be achieved by interrupting other patients' consultations in busy clinics.

The BIOS workforce survey indicated that 10% of orthoptic departments have already moved to orthoptists refracting patients (BIOS refraction survey, Appendix 3) within the HES for in response to local factors. This figure is relatively low but likely to reflect the fact that orthoptists cannot issue the prescription even if they do the refraction. This was cited by many in both the focus groups and in the refraction survey. Departments who had orthoptists

undertaking refraction had to set up processes and delegated function pathways to enable prescriptions to be issued from an orthoptist test. Where this had taken place, it was noted that patients were highly satisfied, spent less time in the department and needed fewer visits to the hospital. One department indicated that only orthoptists refract strabismus cases and children.

Such delegation by ophthalmologists is common in hospital practice in many areas with much higher levels of risk. For example, most surgeons rely on measurements made by orthoptists in order to plan surgical dose decisions, for which they are legally responsible, or rely on orthoptists to run glaucoma monitoring clinics or make AMD clinical decisions.

Conducting a refraction is not a prohibited test, although signing a prescription is, and many orthoptists carry out regular objective and subjective techniques such as retinoscopy, Mohindra retinoscopy, dynamic retinoscopy, over-refraction, autorefraction and post-mydriatic testing in their daily practice. These tests may not be recorded as “refraction" because they do not have full legislative rights in this aspect of eye care, but involve the same skills. Most orthoptists do this as part of a multidisciplinary team, but it is more often seen when departments do not have full-time optometrists working in the HES.

British and Irish Orthoptic Society Workforce Review April 2024						
Country	All	BIOS Region		All		
Cohort	153	Returns	129	84.31%	MofE +/-%	5.76%

WAITING TIME FOR REFRACTION	MIN	AVE	MAX
Approx Referral to Refraction waiting time in weeks for Routine Cases	1	13.91	122
Approx Referral to Refraction waiting time in weeks for Urgent Cases	0	4.83	57

REFRACTED BY	Total	Routine Ave Wait	Urgent Ave Wait
In House Optometrist In House Medic	36	13.38	4.04
In House Optometrist Primary Care Optometrist	18	6.76	3.14
In House Optometrist In House Medic In House Orthoptist	5	6.40	2.25
In House Optometrist In House Medic Primary Care Optometrist	11	29.22	11.50
In House Orthoptist	1	1.00	0.00
In House Medic Primary Care Optometrist	1	16.00	7.25
In House Medic	3	20.67	6.67
In House Optometrist In House Medic In House Orthoptist Primary Care Opt	2	26.00	4.00
In House Optometrist In House Orthoptist	4	12.33	4.00
In House Optometrist	48	14.18	4.92

REFRACTIONIST	Departments
In House Optometrist	124
In House Medic	58
In House Orthoptist	12
Primary Care Optometrist	32

OPTOMETRIST MANAGEMENT		
Departments with Optometrists managed by Head / Lead Orthoptist?	Yes	No
	53	76
	41.09%	58.91%

Table 2: *BIOS workforce Survey 2024 as of 30th of June - questions regarding refraction in practice.*

The refraction survey, conducted by BIOS, showed that out of 182 respondents 25% carried out refraction (Figure 2, Appendix 3). In terms of refractive practice 12% carried out retinoscopy, 13.7% cycloplegic retinoscopy, 18% dynamic retinoscopy and 12% subjective refraction. This demonstrates a wide range of techniques and knowledge about spectacle prescribing and an ability to adapt their techniques according to need and patient ability. If a child needs to wait for an appointment, waiting times are longest for in-house optometrists and ophthalmologists largely due to demand, with an average wait time of 13 weeks for a refraction appointment. The BIOS workforce survey consistently shows that where orthoptists refract there are shorter waiting times (Table 2).

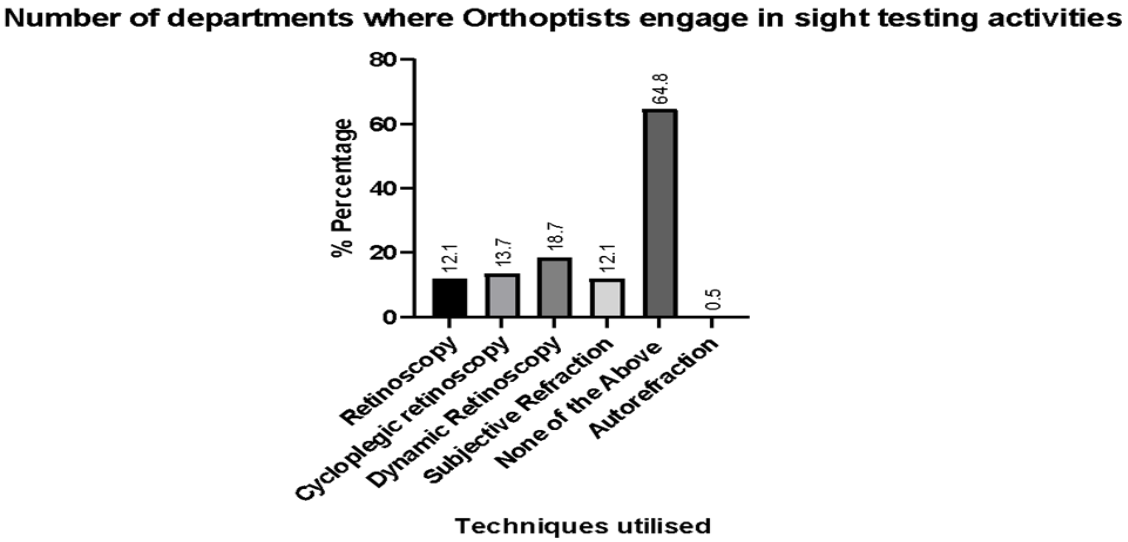


Figure 2: *BIOS Refraction Survey detailing the number of departments engaging in refraction and the techniques being carried out (182 respondents).*

The majority of patients that orthoptists refract are attending because of amblyopia or strabismus because these conditions are rarely managed by primary care optometrists. The UK Screening Committee recommends visual acuity screening at 4-5 years of age and the majority of referrals also come into hospital services. Although the diagnosis is unknown on referral from screening, it is usually simple, refractive error alone, amblyopia related to

refractive error or undetected small angle or intermittent strabismus, all without ocular pathology. After initial refraction and eye health checks, these are usually monitored and managed by an orthoptist up to the point of discharge

All data has highlighted that orthoptists make daily decisions about modifying prescriptions when:

- Visual development is not advancing.
- Binocular control is poor, and the strength of prescription (more or less plus or minus) is adjusted to aid control.
- To enhance near visual function.
- When prisms are needed to avoid diplopia or improve a head posture or field of binocular single vision.

Orthoptists see their refractive role to be primarily patients with amblyopia or strabismus who are attending for review of their binocular vision and visual development in the HES.

Strabismus cases may need to see orthoptists, ophthalmologists and optometrists and there are few other patients who need to see so many individuals for care within ophthalmology. It would be highly beneficial to streamline care for strabismus and amblyopia patients who do require regular refractive examination.

The Current Problems

Workforce

Hospital Optometry Issues

Primary care optometry accounts for 99% of all eye tests that are conducted in the General Ophthalmic Supply (GOS) contract. There are relatively few hospital optometrists, many of whom work part time and who work in hospitals for personal specialist interest or training. All departments who took part in the focus groups identified that even when a hospital optometrist does work within the NHS, they usually join the service to develop their career in areas of ophthalmic practice such as glaucoma care and disease management where their skills are vital to delivering ophthalmic care. Whilst 90% of HES

optometrists' work is entirely refraction-based, a notable downward trend in this regard has been noted with more optometrists using independent prescribing qualifications to help manage eye disease, reducing waiting times in other eye services within the HES. Focus group members noted that "optometrists undertake only one or two refraction sessions in the hospital". Optometrists in the HES are vital to other services such as complex contact lens management, low vision, support to ophthalmic services for pre and post operative cataract evaluation, glaucoma, uveitis, emergency eye care triaging and corneal disease monitoring where there are very high patient numbers, too few ophthalmologists and long waiting lists after the impact of Covid-19 on services.

Recruitment and retention of NHS optometrists is difficult and those who do choose to work in the NHS often wish to develop their skills and support services for glaucoma, low vision, specialist contact lens medical retina (optometrists contribute to glaucoma care in 80% of departments where they are employed). Because retinoscopy is not so commonly used in high street practice, experienced retinoscopists are particularly difficult to recruit and retain. Our workforce survey showed that the recruitment of optometrists was a major concern for eye units in England and Wales, with Northern Ireland citing some difficulty and Scotland reporting little difficulty. In the BIOS focus groups, departments cited that it had taken over 6 months to recruit a new optometrist after one left.

Refraction accounts for many paediatric ophthalmology outpatient appointments. The BIOS workforce survey has shown that 10% of departments who have orthoptists conducting refraction formally was largely in response to a primary shortage of paediatric ophthalmologists and hospital optometrists which led to long waiting lists in departments for refraction. The workforce survey demonstrated that in departments where orthoptists are performing refraction as well as optometrists, waiting lists are halved when compared to departments where ophthalmologists and optometrists conduct all sight tests. The survey has shown that in particular, departments without optometrists who have orthoptists contributing to refraction in the HES have waiting times that are shorter, and appointment costs are on average 40% less.

Ophthalmology Workforce Issues

Paediatric ophthalmologists are even rarer than hospital optometrists and their valuable time needs to be reserved for surgery, ocular pathology and complex cases that others cannot manage. A common theme in interviews and within the surveys was the lack of ophthalmologists able to, or wishing to, undertake refraction. There are increasing backlogs in patient care (RCO Workforce Survey 2022) with 25% of consultant ophthalmologists stating they plan to leave the NHS in the next 5 years 9. Some children's hospitals are not able to appoint paediatric ophthalmologists. This has meant that paediatric ophthalmologists are delegating as many tasks as possible to orthoptic support services. Allowing orthoptists to take on some of this responsibility would have a number of positive impacts including allowing Ophthalmic Medical Practitioners (OMPs) to undertake other vital roles they have sole responsibility for, and for hospital optometrists to work in more highly skilled areas.

At present in paediatrics 85% of consultations by orthoptists are consultant led (the child is managed jointly by both an orthoptist and ophthalmologist)5 but this may be only due to the need for appropriate glasses prescription and basic ocular health checks in healthy eyes, while managing common binocular vision and visual development issues. If orthoptists were able to conduct both refraction and ocular health check to check for any ocular pathology (see section on Ocular health - pre registration education for further discussion) for their patients, it is likely that there would be a shift from the 85% of consultant led paediatric appointments to non-consultant led appointments resulting in considerable efficiencies in time and money for patients and services because a consultant would not be involved.

A student survey was conducted as the workforce of the future. As they undertake clinical placements across the UK they have vast experience of different models of care. Eighty six percent thought Orthoptists being able to prescribe glasses in the hospital setting would improve patient care see appendix 4

These waiting times, recruitment and retention issues would be helped if hospitals could adapt to local staff availability and orthoptists were able to prescribe glasses as well as their optometrist colleagues

Primary Care Optometry Issues

A possible solution could be to outsource HES refractions to local primary care providers. Primary care optometry is essential to eye care and often refers patients for orthoptic consultation or takes over care when the condition is stable. However, some difficulties have been noted by orthoptists in England and Wales.

In the interviews with departments undertaking refraction and in all four focus group discussions, orthoptists reported that some optometrists in the community refuse to refract young children and some are resistant to doing cycloplegic refraction, with some preferring to attempt subjective refraction with less accurate results. One focus group member stated that the local optometrists did not feel they received enough remuneration to undertake cycloplegic refraction, whilst another stated that several community eye care practitioners did not feel confident refracting children and doing objective refraction. Retinoscopy is increasingly being replaced by autorefractors, and so when it is needed in an uncooperative child, skills can have become rusty.

Even if the optometrist detects a significant refractive error or amblyopia, they may lack confidence in what prescription to give a child (full or partial). This is clearly a concern and one where further education training of optometrists would be welcome. It is not unknown for significant delays in giving a child glasses to occur when the child was referred for more accurate testing, which then cannot be done for months. Treatment of developing children's vision is time-critical, and delays lead to worse outcomes. During the acute management phase of children's eye care and before the child is 5 years of age orthoptists could provide a valuable addition to patient services by taking responsibility for refraction and the ocular health check.

Children with disabilities are a particular issue. One focus group member stated that in their area they did not have an optometry practice that felt confident refracting those with learning disabilities and the service had struggled to provide refraction services for this group since their hospital optometrist left. They stated that the orthoptists on the other hand were more than happy to provide refraction for these patients as they are already assessing these patients on a regular basis because they were under the orthoptists remit and would not be under primary care optometrists until their hospital treatment was finished. Continuity of care with a familiar professional is extremely

important for some of these children. This further supports the benefit of orthoptists having the right to prescribe under the HES system.

Adult Services

Refraction of most adult patients is performed in community optometry, but orthoptists spend 50% of their time managing adult patients. A few of these eventually need permanent prisms incorporated into their glasses. Continuity of care can be affected when the patient has difficult binocular issues and needs to be seen in community optometry where communication between practitioners and record sharing are more challenging. It would be advantageous for an orthoptist to be able to order a prescription to incorporate prisms whilst the patient was under the care of the HES, but it would be expected that these adult patients were discharged to community optometrists at the conclusion of active treatment.

Patient Care

Efficiency

One of the primary drivers for change in the NHS is to enhance patient care. There are many aspects of day-to-day care in the orthoptic department that would be enhanced if orthoptists were able to write the spectacle prescription that they have often advised on. The patient would be the major benefactor if this was allowed since this would reduce the number of appointments and personnel required to carry out a relatively straightforward area of eye care practice. One person taking responsibility would mean less time spent in the clinic. It is not uncommon for orthoptic patients waiting to see three different professionals often taking up to three hours to complete (the orthoptist, then the optometrist, then the ophthalmologist).

A more seamless clinical experience would mean patient confidence in their management plan would be greater. Patient centred care with the patient at the centre of decision making is hard to achieve when so many professionals are involved, and this can be complicated further if the patient is required to visit an optometrist outside the hospital service due to lack of in-house provision. This results in professionals having to discuss options when the patient is not present and the patient getting different information from different people, often on different days. High levels of verbal and written

communication are needed to synchronise the outcomes for the patient and feed this back to the patient effectively.

> *"I spend large amounts of time running around the department looking for someone to sign the prescription forms so that the patient can take the prescription and get new glasses. If there isn't an ophthalmologist on site which is common in remote and rural clinics, this is delayed and subsequently the prescriptions need to be sent out by mail. When these are lost in the post the process starts all over again! It is very time consuming, frustrating and patients often ask me why I can't just give them the prescription since I know what they need."*
>
> Focus group 2 participant - does not refract but still has need to issue prescriptions on a regular basis

> *"Whilst there has certainly been a shift in recent years to using hospital optometrists for refractions, a significant proportion of this workload does still fall to paediatric ophthalmologists (depending on trust). I think given the difficulty in some areas in recruiting paediatric ophthalmologists, the length of waiting lists, and cost of using doctors to perform these assessments (vs orthoptists/optoms) calls for a new approach to look at orthoptists also being able to do refractions. In my case currently, even being able to issue a voucher there and then for various reasons (issuing full prescription, issuing prescription when previously decided to watch and wait, or even a replacement when vouchers have been lost etc.), would make things run smoother and allow for more efficient and timelier, patient care".*
>
> Focus group 3 participant who does not refract currently

"Refractions are often done because the next decision can't be made until we know whether the glasses need changing – follow up soon or in 6 months / occlude or not / glasses won't change things so they will need to discuss surgery. These are orthoptist decisions, but I can't make them until after the refraction, so either the optometrist has to go and find an orthoptist to discuss on

the day (which they rarely can do), or more likely, the decision waits for a 6/8-week orthoptic follow up. As an orthoptist doing refractions, I can make these decisions on the day and communicate and discuss it with the patient, so saving time and getting straight on with the next stage of treatment."

Senior Orthoptist who refracts regularly

Costs

In smaller departments without a hospital optometrist, it is common that patients are refracted by an ophthalmologist and reviewed by an orthoptist, (see Appendix 2). Consultant led consultations cost on average 40% more than an orthoptist visit, so an orthoptist refracting autonomously would potentially save up to 40% of the costs to the NHS. The high percentage of consultant-led appointments in paediatrics (85%) is partly due to the need for an ophthalmologist to conduct a refraction and ocular health check, even though the orthoptist then manages all aspects of the case independently. Allowing orthoptists to handle these cases autonomously would free up ophthalmologists for other tasks.

"Allowing orthoptists to refract and prescribe in the context of a hospital paediatric ophthalmology service brings the following benefits to the child/family:

- *Eye care delivered by a single practitioner*
- *Eye care delivered at a single appointment*
- *Eye care delivered in a single clinic room"*

Professor Rachel Pilling Consultant Paediatric Ophthalmologist

Cost could be saved for NHS services (and parents in terms of time off work, childcare and transport costs) in the following ways:

1. Avoiding being seen by two or three different professionals, with separate appointments, often on different days.

2. Avoiding a follow up appointment to make the next orthoptic management decision.
3. One slightly longer appointment including refraction with an orthoptist saves duplicating checking in, waiting times, paperwork/admin costs, the introduction and "making friends" time (which is so important with children) involved in two separate appointments. Discussions about all aspects of the case can be carried out throughout the interaction, not separately by two different professionals who might explain things in slightly different ways, and risk confusing some patients
4. In smaller departments, where there is not a hospital optometrist and the refraction and eye health check are currently performed by a consultant ophthalmologist (not even a junior doctor), an orthoptist appointment cost is much less.
5. Space is often at a premium in eye units, and only one consulting space would be needed instead of two.

Why Orthoptists Refracting Would Help

Uncorrected refractive error is found in around 18% of preschool children however within the binocular vision patient group uncorrected refractive error is prevalent in 30-40% of strabismus cases (100% of children with accommodative esotropia who account for a large proportion of the strabismus cases seen) and as high as approximately 60% of children with other general developmental conditions and delays[10], the mainstay of core orthoptic activities. The BIOS workforce survey reported the waiting times for refraction (Table 3). The average time for routine cases was 6 weeks but this was much longer in some departments that reported waiting times of up to 122 weeks. One focus group member stated that they had over 1,200 children waiting for refraction in the HES due to lack of staff and lack of primary care services in the area for children. These patients are already being monitored by orthoptists so it would make sense for the patient to have this element of their care also overseen by an orthoptist. Long waiting lists for other professionals to conduct sight tests could be reduced if orthoptists were to adopt this area of management within their normal routine practice for these patients.

Even within urgent cases, an average of 13 weeks with a maximum of 66 weeks wait for refraction was reported, which is very concerning. The workforce survey did however demonstrate that in departments where Orthoptist have been trained to refract the waiting times for refraction are much lower.

Table 3: *Approximate referral to refraction waiting time reported in the BIOS workforce survey*

Waiting time for refraction (weeks)	Minimum	Average	Maximum
Urgent cases	**0**	**13**	**66**
Routine cases	**1**	**6**	**122**

Patient Pathways

The patient pathway flow charts (Figures 3 and 4) highlight how the patient pathway would be changed if the law were to change and allow orthoptist to issue a spectacle prescription in the HES by comparing common present practice with future practice for a typical paediatric ophthalmology case. These illustrate a more flexible workforce more able to meet demands of services.

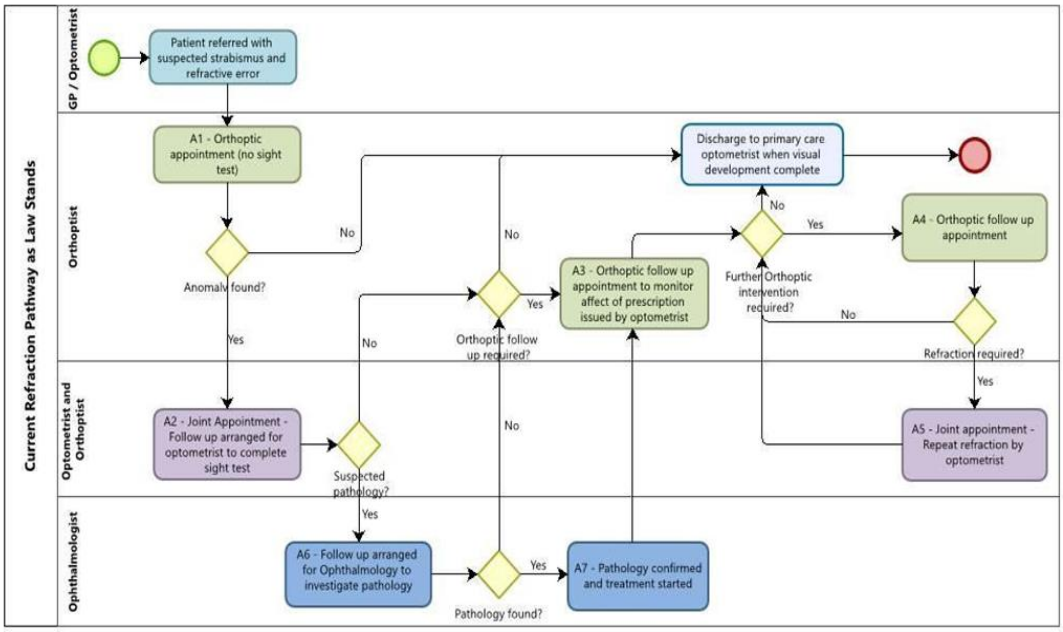


Figure 3: *A typical example of current referral to paediatric ophthalmology and subsequent pathways of care that demonstrates complicated multiple step process for many patients attending the hospital eye service attending an Orthoptist. This flowchart highlights 3 streams of activity within the Hospital Eye Service (HES)*

On average patients attend 4-5 times in their first year under orthoptic care. A simpler pathway offering more continuity in care can be seen in Figure 4, if orthoptists could take responsibility for the refractive care of their patients.

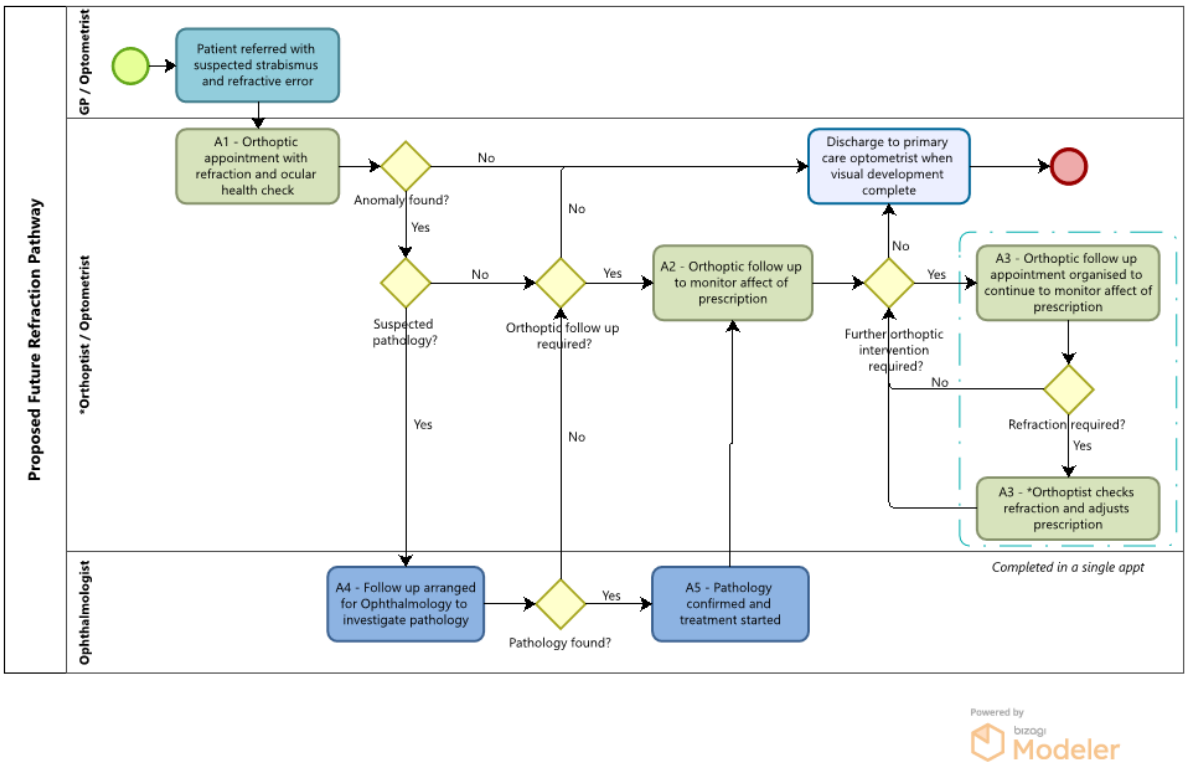


Figure 4: *Example showing a proposed paediatric ophthalmology case pathway when the Orthoptist can refract and prescribe in a less complicated pathway with fewer appointments to implement care. This example demonstrates only 2 streams of care required in the HES when orthoptists can conduct sight tests.*

As can be seen in figure 4, the proposed model would provide a much more streamlined approach. One of the best benefits for patients is time and cost savings. Fewer trips mean less travel costs and less time away from work and school. One appointment with one professional could address all their needs, and less time spent in the outpatient department.

A recent study assessed the involvement of Orthoptists in refraction and issuing prescriptions in the hospital service [11]. This report outlined the potential benefit but also suggested ways of mitigating concerns.

As a final issue, orthoptists could also provide essential refractive care to inpatients as part of their orthoptic care, which currently few hospital optometrists offer (see Appendix 5 – stroke case scenario)

BIOS has received letters of support from key Ophthalmologists. These letters identify the issues and outline the advantages to eye services if this change is enabled (Appendix 6)

Current and Proposed Orthoptist Training, Education and Quality

A primary concern for everyone is that the quality of service currently delivered by optometrists and ophthalmologists is not only assured, but within a hospital setting is improved and streamlined. We are confident that this will be the case.

Current pre-registration training

There are currently four providers of Orthoptic education in the UK. They provide five programmes of study.

1. University of Sheffield – 3-year BMedSci (Hons) Orthoptics
2. University of Liverpool – 3-year BSc (Hons) Orthoptics; – 2-Year Pre-registration Masters Orthoptics
3. Glasgow Caledonian University (GCU) – 4-year BSc (Hons) Orthoptics
4. University College London (UCL) – 2-Year Pre-registration Masters Orthoptics

All programmes are approved and regulated by the HCPC and comply with the Standards of Proficiency set out by the HCPC [12]. All programmes comply and meet the standards set out by the European Diploma in Orthoptics.

Orthoptic education and practice has advanced greatly in recent years. Competencies for a number of extended role areas guide practice and more recently Advanced Clinical Practice (ACP) have become a key area for career development and service development within the NHS. There are around 1,543 registered orthoptists with the HCPC [13]. Most orthoptists (over 90%) work in the NHS, with some working in private practice and a handful working in high street optical practices (if they hold dual orthoptics and optometry registrations).

Refraction – pre-registration education

Refractive error and refraction have been part of the curriculum for orthoptic training for over 40 years because they are essential to the understanding of

good orthoptic practice. Most forms of strabismus are managed by refractive correction alone and modification of spectacle prescriptions to enhance binocular vision for both children and adults are essential tools in binocular vision management. High levels of theory underpin the clinical knowledge however opportunities to develop practical skills in refraction are only possible by seeing large numbers of patients, so remain limited in undergraduate training. All students have theoretical and practical training in refraction delivered by qualified optometrist lecturers, with GCU providing training to optometry and orthoptic students together. The teaching is greater than that needed for the ophthalmology refraction certificate (see Appendix 7 and 8).

It is clear that whilst orthoptists have good knowledge and apply their knowledge of refractive error in everyday practice within the HES, the fact that they are unable to use this skill to the full is largely due not being able to sign prescriptions.

Ocular health - pre and post registration education

The ability to assess the health of the eye is essential as part of most refraction visits. Orthoptic education is comprehensive in this regard and clinical ophthalmology has always been a key part of orthoptic education. The inclusion of non-medical drug supply and administration rights and education about the many extended roles orthoptist now undertake from early in their careers has increased the amount of time and education spent on the assessment of ocular health in orthoptic preregistration level, ensuring that high levels of proficiency are present from the point of graduation.

Assessment of techniques to evaluate posterior and anterior eye are central to all programmes and taught by ophthalmologists, optometrists and orthoptists. Methods include slit lamp and ophthalmoscopy as well as use and interpretation of modern imaging techniques. Investigative techniques are practiced and examined in university as well as on clinical placements. More orthoptists are conducting and interpreting ocular health examinations in everyday practice, but also in extended and advanced practice roles such as A&E triaging, retinal screening, AMD management, paediatric ophthalmology and glaucoma care. Ocular therapeutics used by orthoptists include anti-infectives and atropine with the profession actively seeking to increase non-medical prescribing rights going forward in terms of therapeutics. There are already Advanced Clinical Practice (ACP) programmes which teach advanced

ocular health check skills to Orthoptists. These are in paediatrics at The University of Sheffield and neurology at the University of Liverpool.

There are also programmes following the OPT programme at UCL which orthoptists can access (see appendix 9). Graduates from these programmes are already undertaking regular ocular health checks in a variety of clinics.

Current orthoptic post-registration refraction skills and quality

Currently, refraction by an orthoptist is a delegated function (as shown from the surveys and focus group comments conducted by BIOS) and as such puts the onus on the delegator to ensure the orthoptist is trained.

This report has revealed a number of mechanisms used to enable orthoptists to be able to conduct refractions in the HES, ensure quality and managing issuing of prescriptions:

- Many conduct refraction under the supervision of the ophthalmologist, until the ophthalmologist is satisfied that the orthoptist is refracting accurately. One orthoptist advised that her consultant oversaw "100 refractions by me and then she trusted me to do it and signed the prescription form after I conducted the test".
- Many are supported by hospital optometrists who supervise their refractions and mentor them by checking their work initially before they are trusted to do the refraction on their own. The optometrist will then sign the prescription form on request by the orthoptist.
- Further training courses have been accessed, the BIOS non-prescribing retinoscopy upskilling course delivered by Professor Anna Horwood were cited by many who refract as their main source of learning practical retinoscopy skills coupled with departmental mentoring, audit and other professional courses. This course also trained orthoptists to carry out dynamic and Mohindra retinoscopy which are very useful skills for paediatrics and those with learning difficulties as diagnostic tests. These skills are becoming less commonly carried out by optometrists.
- In hospital practice, even the most skilled examiner may have to accept the best results possible on the day, whereas in high street practice many optometrists and their clients can be highly accurate. All hospital testers are used to decision making based on sub-optimal information.

Therefore, all three hospital professions are trained to deal with a much higher level of uncertainty and pragmatism than is common in primary optometry practice and are confident in managing it. This is largely because many patients are referred into hospital services when they cannot be adequately tested by primary care optometrists or results are equivocal. They could be very young, uncooperative, have disabilities such as autism, or have complex retinal reflexes or images which make it difficult to be confident about accuracy. Orthoptists are acknowledged experts in getting the best out of difficult-to-test patients, and risk-assessing when suboptimal responses are high risk (for example needing examination under anaesthetic) or low risk, when an approximate assessment is the best that can be done today and try again in a few months.

"The issues we have had to come across is that of signing HESP vouchers, and came to an agreement with our paediatric ophthalmologist that these could be signed for by a doctor post refraction at the end of clinic, I don't cross over days with our optometrist. It may be an issue actually finding the specific doctor and him being available at the end of clinic to sign, meaning accumulating notes. We did consider pre-signing, but thought in the initial stage he would look over the notes prior to signing, but it may be in future they are pre-signed."

Focus group 2 participant where refraction is not conducted by Orthoptists

"This would be an exciting development for orthoptists. In my current role it would help us run our service a little smoother, i.e. no chasing down optoms for signatures/waiting for HES vouchers to be posted!"

BIOS refraction survey respondent 2024

"To have the option to prescribe glasses would be beneficial even if you do not refract as orthoptists manage strabismus patient with lens manipulation in the form of negative lens therapy and bifocals. Additionally, we assess for lens penalisation for amblyopia treatment. The orthoptist will do the hard work of working out the prescription required to best manage the patient but must seek others to sign the prescription form."

BIOS refraction survey respondent 2024

"The introduction of orthoptists legally being able to prescribe glasses in an HES setting is essential when looking at a blended workforce to address the workforce challenges faced in paediatric ophthalmology and long waiting lists. It seems ridiculous that ACPs are going to be highly skilled colleagues but still unable to prescribe glasses which is a core skill in particularly in paediatrics."

BIOS refraction survey respondent 2024

Everyday Orthoptic practice and how it impacts refraction

Some orthoptists use refraction to inform care only, but the department does not issue a prescription from this examination. Presumably further appointments are needed if a change in prescription is indicated. These additional appointments increase the costs and time spent visiting the eye department, when a modified prescription could have been issued on the day.

When orthoptists have assumed responsibility for carrying out the clinical examination to facilitate spectacle prescribing the prescription requires a signature from an eligible professional recognised within the Opticians Act in order to be processed. Signing a prescription on behalf of another colleague shows that there are high levels of trust in teams and this an essential element of delegation, however, the responsibility lies with the delegator. Delegation is common practice in many areas of the HES however delegation is not advised by The College of Optometrists or the Association of Optometrists.

Information gathered from the BIOS Refraction Survey and the focus groups highlighted a number of practices that enable a patient to receive a prescription from a refraction carried out by an orthoptist or when an orthoptist suggests changing a prescription to improve binocular vision. These arrangements were developed by departments to facilitate care for the patients and represent a

number of different local arrangements working in partnership with ophthalmologists, HES optometrists and primary care optometry.

One respondent favoured the change in legislation in order for the service to be developed in their Trust

> *"Our trust is not keen to support developments where there is no statutory process to support the development. We have seen the benefit of changes PGDs and modifications in the Human Medicines Act 2012 has had on the delivery of services provided by allied health professions. For orthoptists the authority to prescribe glasses is difficult to develop because there is no statutory process, we can apply to the orthoptist being granted permission to do this and we currently rely on staff making ad hoc delegated arrangements for what is a common need in the care of orthoptic patients. If the Opticians Act 1989 were amended we can see multiple benefits for our ophthalmic patients and multidisciplinary team including more efficient patient care, continuity of care, cost savings and reducing bottle necks for basic care. I believe funding for training and mentoring of staff would be more easily accessed if the law were amended to allow orthoptists to prescribe glasses in the HES since the potential cost savings to the department would justify this development along with the enhanced clinical care for patients."*
>
> Focus group participant - Trust Care Group General Manager

> *"Refraction review lists are very behind, data confirming this has been shared already. Orthoptic issuing of HES(P)s would open the doorway to allow orthoptists to refract and help tackle the overdue review lists. As part of my ACP training being able to learn refraction is brilliant but as such there is no plan for orthoptists to join the optometrists in refracting in our Trust. Changing legislation would aid forward thinking within departments to utilise the staff we have to upskill them in the areas we are short staffed in paediatric ophthalmology and refraction, being two huge areas in our Trust, as with many others."*
>
> BIOS Refraction Survey Respondent 2024

Patient scenarios (see Appendix 5) - examples of how the changes in the Act could affect different patient groups

The BIOS Clinical Advisory Groups, which represent specialists within the profession, have prepared these cases for this report. See Appendix 5 for examples from Visual Processing Difficulties, Low Vision, Paediatric Ophthalmology and Stroke and Neuro Rehabilitation. Some real-life examples have been documented to highlight how patient care is currently affected by the restrictions on sight testing by the law with scenarios describing how patient care and pathways could be modified if the orthoptist was permitted to refract and issue a prescription for their patient.

The profession is supporting Ophthalmic services with specialisms in monitoring IIH, glaucoma, AMD monitoring and injections, delivering botulinum toxin for blepharospasm, and advanced paediatric ophthalmology to name but a few. These examples highlight how the wider role of orthoptists in eye health is now becoming common practice. These areas of practice involve sight threatening disease and critical wider health evaluation. This involves the use of all techniques and skills and more than those used in primary care optometry practice. The absence of the ability to provide a spectacle prescription is now considered a major omission in allowing the orthoptist to provide independent holistic eye care, preventing them from taking full responsibility for patient management. It also limits their ability to contribute to an essential, pivotal and relatively simple aspect of eye care delivery within the HES. Giving orthoptists the right to prescribe would enable the profession to support ophthalmic workforce delivery going forward and reduce pressures on ophthalmology time, in particular the overstretched consultant ophthalmologists.

Proposals

Being able to prescribe refractive correction is sought by the profession so that ultimately better care at the right time can be provided.

Training

The Universities delivering orthoptic education have stated that post-graduate training would be the preferred method to upskill and increase competence of orthoptists in refraction and or ocular health checks. Recent changes in curricula to cover non-medical prescribing responsibilities has meant that there

is little room in already crowded pre-registration programmes at the current time to include an enhanced refraction content without a major overhaul of programmes and all have been recently reapproved.

Moreover, extended opportunities to learn practical skills on a challenging hospital caseload makes specialist post-graduate training the preferred option for rolling out this important function to the orthoptic profession. Using a portfolio of cases to demonstrate proficiency in both refraction and eye health assessment would be more achievable in post registration training. Embedding this area of practice in pre-registration education may be eventually considered in the future, but not at this time, and would be regulated by HCPC as part of their regulation of educational programmes. Although the need for a postgraduate course has been determined the exact nature of these will be further discussed with BIOS and relevant stakeholders.

Regulation

Registration of competence/certification of the right to conduct refraction and prescribe spectacles could be.

- Orthoptists are regulated by the HCPC, which has mechanisms to ensure that their processes to oversee training and registration are robust across many different professions. This would be the preference of BIOS and initial discussions have already taken place

Scope and Boundaries of the Proposal

BIOS is not seeking to change any legislation that might impinge on wider optometry or dispensing optics in the general community. We seek approval to sign HES prescriptions only, and there is no threat to commercial aspects of optometry or dispensing optics because they will still be responsible for the sale and dispensing of the glasses and will receive HES vouchers for dispensing as they already do.

Conclusion

We propose a modest change to the Opticians Act to allow additionally qualified orthoptists to sign HES prescriptions for patients for whom they already make many prescribing decisions. Giving orthoptists the right to prescribe would allow orthoptists to work at the top of their skill set. It would improve quality

and efficiency for both the patient / wider ophthalmic care team and allow flexibility in relation to recruitment and retention for all professions involved in hospital eye services.

Where Orthoptists are already undertaking refraction, it was noted that patients were highly satisfied, spent less time in the department and needed fewer visits to the hospital.

If a change in legislation were approved further discussion with stakeholders would determine the nature of the postgraduate education required.

Appendices

Appendix 1: Letters of Support

Letter 1: Statement of Support from the Chief AHP Officer for England

Dated 12th Sept 2024: I am pleased to extend my support for the proposal led by the British and Irish Orthoptic Society (BIOS) to amend the Optician's Act to include orthoptists in the scope of practice for issuing hospital eye service prescriptions. This proposed change is a crucial step towards optimising the skills and capabilities of our highly trained orthoptists, ensuring that patients under hospital care receive timely and appropriate eye care.

By enabling orthoptists to issue hospital eye service prescriptions, we can enhance the efficiency of our eye care services and improve patient outcomes. This legislative change is supported by the advanced training and competencies of orthoptists, who are trained in this skill as part of their pre-registration education.

I commend the British and Irish Orthoptic Society (BIOS) for their thorough and data-driven approach in developing the case for this legislative change. The inclusion of orthoptists in the Optician's Act will not only benefit patients but also support the broader goals of the NHS England workforce reform.

I look forward to the continued collaboration and the positive impact this change will bring to our health and care system.

Professor Suzanne Rastrick OBE

Chief Allied Health Professions Officer (England)

Supporting NHS England and the Department of Health & Social Care

PA / diary enquiries - Julie Neethling: Julie.neethling@nhs.net or 07900715112

Letter 2: BIOS Medicines Lead

Dated 12th July 2024: I am writing on behalf of the Medicines Clinical Advisory Group (CAG) in regard to extending independent prescribing and refractive prescribing responsibilities to registered orthoptists in the UK. Extending these prescribing rights to orthoptists presents a tremendous opportunity to improve patient care, vision outcomes and reduce waiting times. Providing a more responsive service helps patients and their parents and carers return to work more quickly, thus improving economic outcomes, and vision and health-related quality of life.

Ophthalmology is the busiest outpatient specialty - it represents 10% of the NHS waiting list and the acute shortage of Ophthalmologists in the UK is growing against the increasing demand for appointments. The Royal College of Ophthalmologists' survey revealed that 75% of NHS ophthalmology departments are unable to meet patient needs and 70% are concerned about their patient backlogs. Shockingly, nearly 200 patients every year in the UK, experience significant vision loss due to delayed medical treatment and many feel stressed and anxious that they are not being seen within an appropriate timescale (BOSU, 2017, Hingorani, 2019).

Orthoptists are ideally positioned to provide a more distributed workforce of practitioners who can prescribe glasses and medicines to patients - providing the right care at the right time, and so reducing the number of people affected by preventable blindness due to delays in appointment provision.

The vision and strategy for orthoptists within paediatric ophthalmology is to relieve workload burden on Ophthalmologists, yet Orthoptist are unable to do this due to lack of prescribing rights for medicines and glasses, leaving them

discriminated against in these roles. However, orthoptists are described as having the best knowledge and skills to take on this clinical work, especially in specialist areas such as neurology and paediatrics.

On behalf of the Medicines CAG, we respectfully urge that now is the time to act as the demand for ophthalmology and eye-care appointments increases year on year due to an ageing population and the rise of health-related crises, such as the diabetes epidemic. Consequently, the demand and capacity gap continue to widen, and orthoptists provide a timely solution to meet the workforce needs.

Mr. Karzan Hughes BMedSci MMedSci FHEA | he / him

University Teacher in Orthoptics Programme Lead, MMedSci (Vision & Strabismus)

Disability Liaison Officer (DLO) in Orthoptics, BIOS Medicines Clinical Advisory Group Professional Lead

Appendix 2: National schedule of costs 2022/2023 5

National Schedule of NHS Costs Year: 2022/23 -
All NHS trusts and NHS foundation trusts -
Outpatient Attendances Data

Note: This summary sheet only includes Outpatient HRG costs; non-HRG for Outpatient is reported on 'Total Other Currencies'

71,912,974	**£171**	**£12,275,367,784**	**50,218,877**	**£190**	**£9,547,620,996**	**21,694,097**	**£126**	**£2,727,746,788**

	Total			Consultant Led			Non-Consultant Led		
Service Code - Description	**Activity**	**Unit Cost**	**Total Cost**	**Activity**	**Unit Cost**	**Total Cost**	**Activity**	**Unit Cost**	**Total Cost**
130 - Ophthalmology Service	3,900,546	£136	£532,303,172	3,335,891	£141	£469,963,900	564,655	£110	£62,339,273
216 - Paediatric Ophthalmology Service	347,126	£141	£48,995,996	295,495	£152	£44,826,650	51,631	£81	£4,169,345
655 - Orthoptics Service	434,858	£111	£48,131,026	114,125	£117	£13,351,748	320,733	£108	£34,779,278

Costs for appointments in ophthalmology. Only face to face appointments included in analysis. Paediatrics joint appointment would be £152. Non consultant Led is £81 – cost saving is 46% if non consultant uni-professional appointment conducted by orthoptists

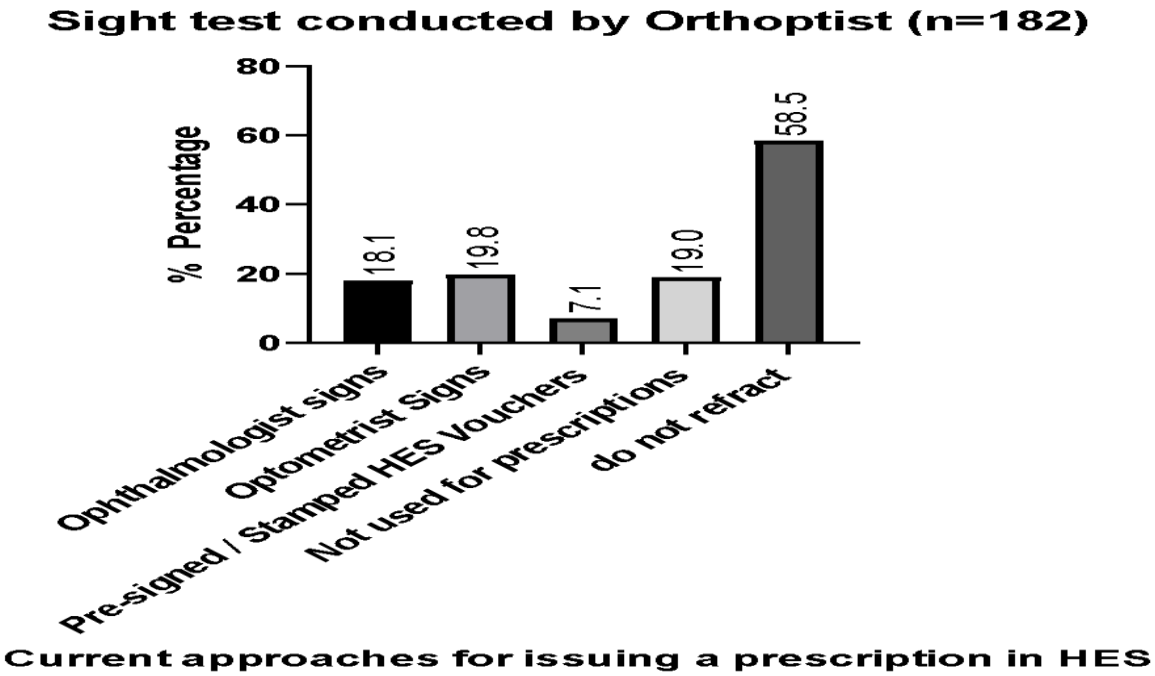
Activity shows that orthoptists are seeing 2/3rd of their patients in non-consultant led appointments. Once can assume that those that are consultant led include a large number of patients requiring refraction rather than ophthalmic disease management.

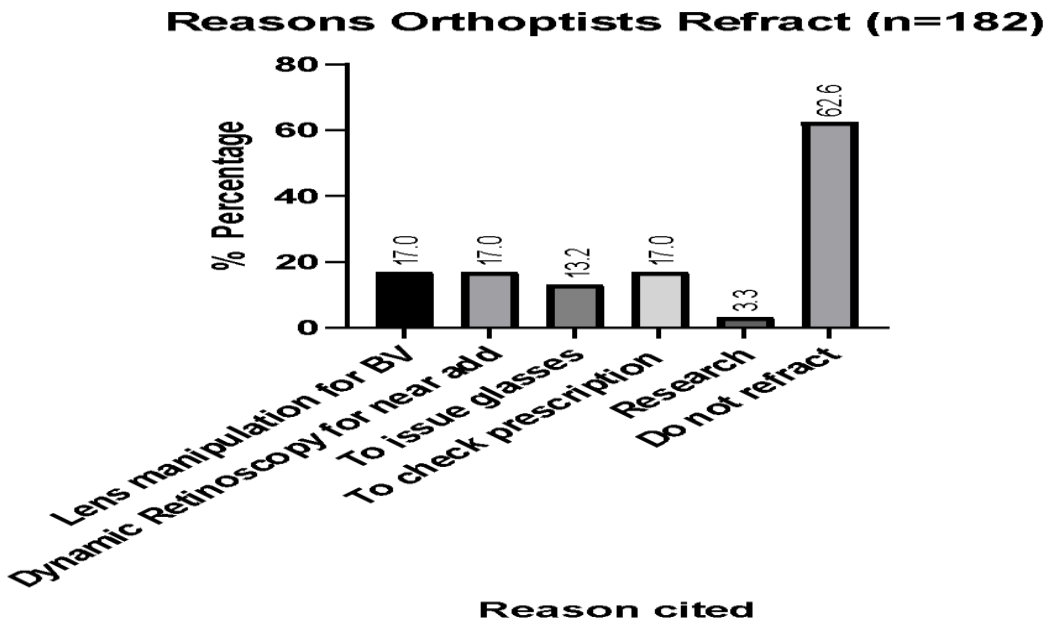
85% of activity is consultant led in paediatric ophthalmology and only 15% is non consultant led- this is likely due to the requirement that an OMP conducts

the sight test although it is difficult to determine from the data tables why fewer appointments are not non-consultant led in paediatrics.

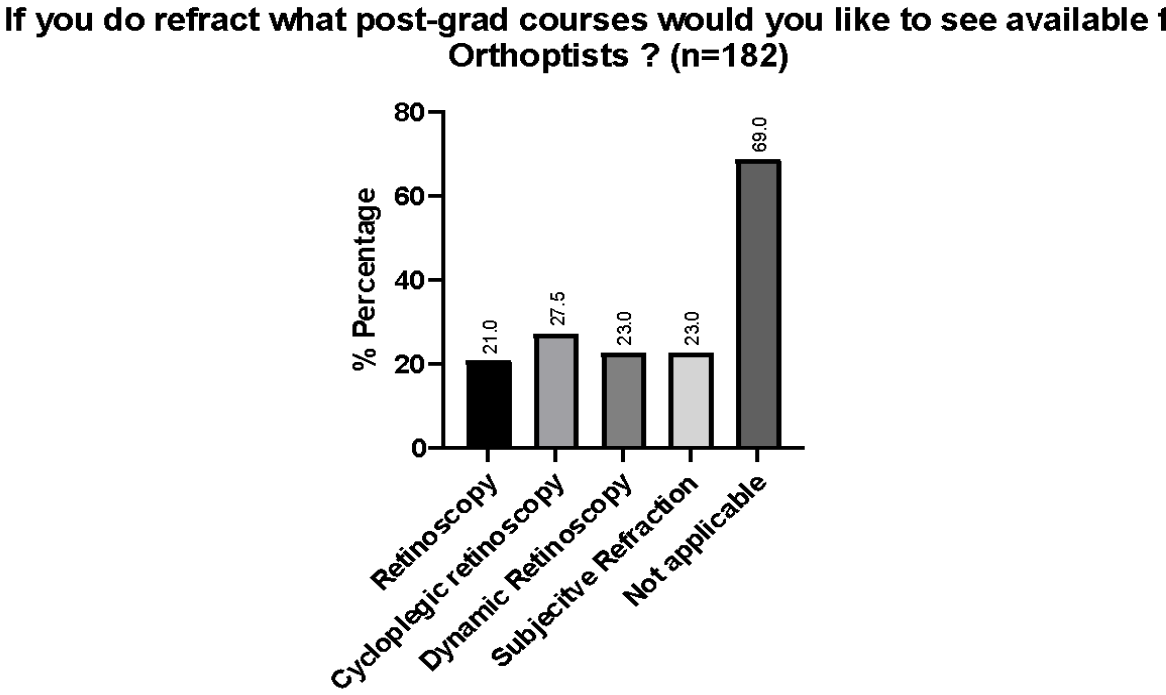
Appendix 3: BIOS Refraction Survey 2024

This survey was conducted by the Chair of Education and Professional Development committee Professor Helen Davis OBE on behalf of BIOS and sent to all BIOS members.



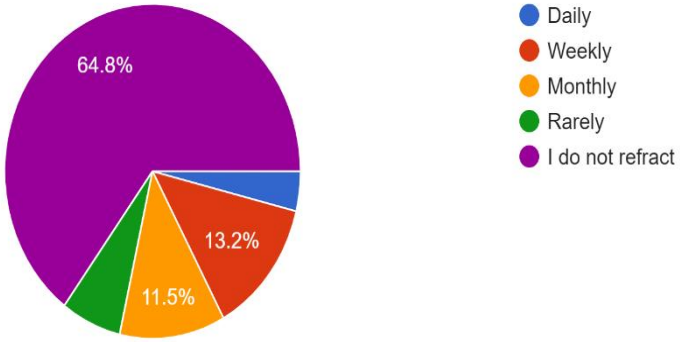

Reasons Orthoptists Refract (n=182)
% Percentage
80
60
40
20
0
17.0
17.0
13.2
17.0
3.3
62.6
Lens manipulation for BV
Dynamic Retinoscopy for near add
To issue glasses
To check prescription
Research
Do not refract
Reason cited

17


If you do refract what post-grad courses would you like to see available for Orthoptists ? (n=182)
% Percentage
80
60
40
20
0
21.0
27.5
23.0
23.0
69.0
Retinoscopy
Cycloplegic retinoscopy
Dynamic Retinoscopy
Subjecitve Refraction
Not applicable

How often do you refract?

182 responses



Have you had post grad training in refraction?

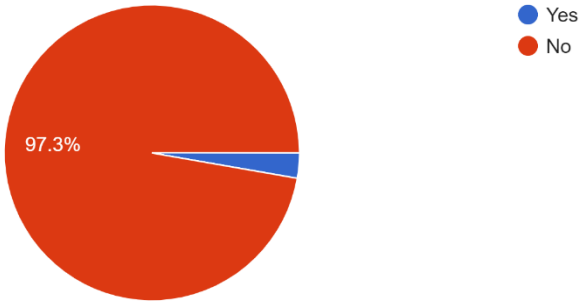
182 responses

Do you teach refraction?

182 responses

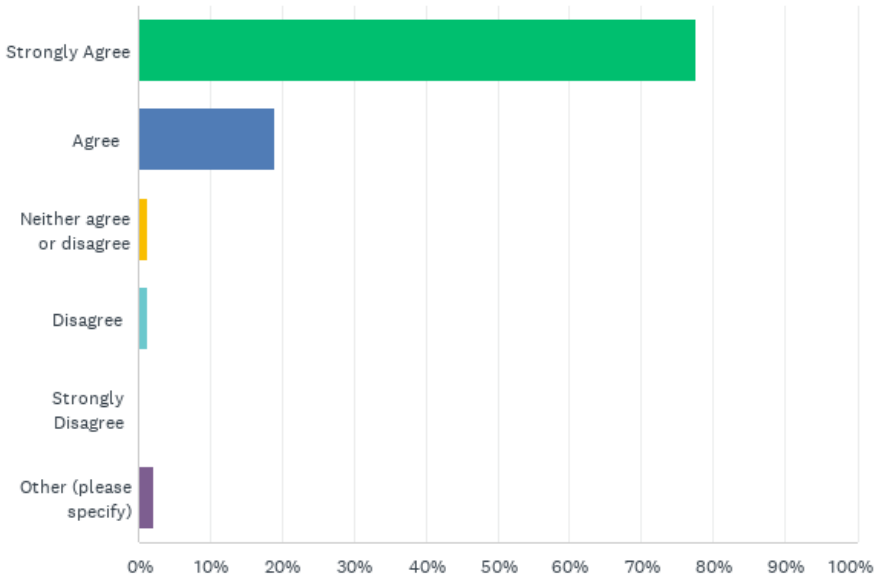
Have you done any audit or service evaluation in this area

182 responses

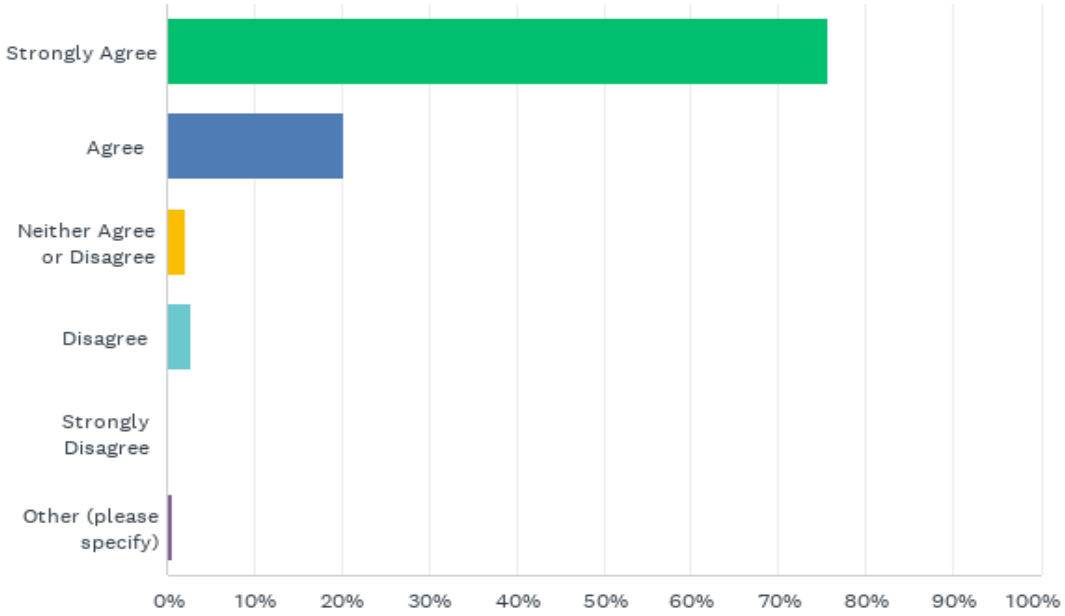


Appendix 4: Questions and responses in BIOS student survey 2024

Q1: From your own clinical experience do you think patient care would benefit if an orthoptist can prescribe glasses?



Q4: Select your response to the following statement – Being able to prescribe glasses would benefit my future career.



Question 5: Select the type of clinical scenarios where patients would benefit most if their Orthoptist could issue them with a spectacle prescription during a hospital visit in your opinion?

ANSWER CHOICES	RESPONSES	
Determining if a change of prescription is required in amblyopia management patients	93.96%	140
Issuing a hypermetropic correction and modifying it in accommodative forms of strabismus	91.95%	137
Myopic patients under 8 years	56.38%	84
Myopic patients over 8 years	46.31%	69
As part of general Glaucoma Monitoring	27.52%	41
Prescribing prisms to patients with diplopia	75.17%	112
Adjusting prescriptions for patients attending with Neuro-ophthalmic problems	48.32%	72
Issuing near add or prisms to patients with poor convergence and accommodation	68.46%	102
Issuing minus lenses for exo deviations	78.52%	117
Prescribing bifocals for patients who decompensate at near	78.52%	117
Post operative cataract refractive changes	37.58%	56
Diabetic refractive changes	33.56%	50
Total Respondents: 149		

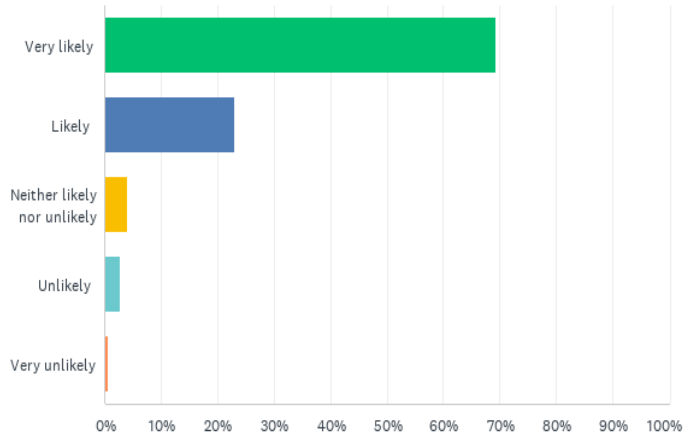
Question 6: Select the potential benefits for patients if an Orthoptist could prescribe glasses in the hospital, you may select as many answers as you feel are appropriate

ANSWER CHOICES	RESPONSES	
Improved care for the patient	85.91%	128
Time savings for patients	94.63%	141
Time savings for departments	84.56%	126
Reduction in waiting times for refraction in the hospital	87.92%	131
Cost savings for patients in terms of number of appointments and travel to the hospital	87.92%	131
Potentially fewer times the patient may need to be dilated due to multiple visits	78.52%	117
More timely patient care and fewer delays in care decision if one person is responsible	81.88%	122
Less time waiting in the out patient department to see multiple people	81.21%	121
Total Respondents: 149		

Question 7: Which of the following do you think would apply to the Orthoptist/ Department if they could prescribe glasses? You may select multiple answers

ANSWER CHOICES	RESPONSES	
Possibly greater career opportunities within the hospital eye care service	91.28%	136
Satisfaction of being able to provide more care for the patient	87.25%	130
More autonomy in the management of patients	84.56%	126
More responsibility for the Orthoptist	80.54%	120
More job satisfaction	73.83%	110
Saving time	67.79%	101
More efficient practice	81.88%	122
Compliments the right to use exemptions so that more holistic care can be given by the Orthoptist	77.18%	115
Cost savings	63.09%	94
Continuity of care	77.85%	116
Total Respondents: 149		

Question 8: How likely is that you would undergo further training to be able to prescribe glasses after you qualify as an Orthoptist?



Appendix 5: Clinical Advisory Group (CAG) case scenarios

VPD/ headaches and reading difficulties scenario

Background typical scenario: Patient A is a 16-year-old who attended the Orthoptist after a long history of asthenopia when reading. They had exams in the next four weeks. There was a question about whether they may be dyslexic and had been referred to the VPD clinic. They had had several eye tests that had concluded they had good sight and healthy eyes. They had received an RX of R +0.5 and left +0.75. They did not find the glasses helpful. Dynamic retinoscopy revealed a large lag of accommodation, very poor convergence alongside a moderate exophoria at near that was poorly controlled. Subjective assessment found the patient could read faster and more comfortably with 8 dioptre prism base in and +1.50 add. The Orthoptist could start some exercises but knew glasses would be required in the short term but there was no way to get a prescription issued that day with no optometrist in the department. The Orthoptist needed to contact the patient's optometrist to sort out another Rx.

Problem: The Orthoptist had to use a lot of time to contact the patient's Optometrist to discuss the management, this was delayed because the Optometrist had to phone the patient to check they had consent to discuss with the Orthoptist by a further 2 days. They said another eye test would be needed by them to confirm the new prescription (RX). This is adding to time and delay in instigating the treatment for the patient. This is also a duplication of testing for the patient, something they find confusing, meaning more time required for them to get a solution that would work with their upcoming exams pressure.

Difference if the Orthoptist could issue an RX: If the Orthoptist could prescribe, an RX could be issued at the first appointment meaning a quicker solution for the patient. Although exercises could be issued, they are unlikely to offer an

immediate solution. This also avoids further testing by the Optometrist who needs to conduct another eye test before they can prescribe meaning more cost to the NHS. Immediate treatment is likely to help the patient with their exams but also support future treatment to help the patient become less dependent on the glasses once the exams are over. The Orthoptist has taken charge of the patient's binocular vision anomaly by using spectacles and orthoptic exercises and this is likely to contribute to longer term compliance and confidence in the care by the patient. Delay in treatment and involving multiple practitioners may have a detrimental impact on the patient's future attitude to exercises and orthoptists advice. This has also saved the patient time and the NHS consultation costs.

Emergency referral Scenario

Background typical scenario: Patient B is a five year with sudden onset esotropia., headaches and double vision. They have been referred by their GP via accident and emergency to the Orthoptist. The Orthoptist examined the child who was then dilated for a fundus examination conducted by a junior medical member of staff. There was no optometrist working that day.

Problem: The initial visit has ruled out a sinister cause for the strabismus, but the family were advised they would need to return after the weekend for further assessment to determine if the child needed glasses. This meant more administration time to set up the appointment, more dilating drops required and another visit disrupting the ability to go to work for the parents and school attendance of the child. Without the refractive information there is no definitive conclusion about the cause of the strabismus. Even if the Orthoptist conducts retinoscopy and finds refractive error, a prescription cannot be issued and treatment start is delayed.

Difference if the Orthoptist could issue an Rx: The parents fears could have been alleviated at the first visit. The child could have had one visit to the eye clinic and one installation of cycloplegics. A prescription could have been issued at the first appointment meaning a prompt start to treatment and prompt alleviation of symptoms for the child. The parents and the child would save time and travel costs by having one visit alleviate the situation. The department would save money by not requiring a further appointment. This would also be a less worrying process for the parents with no time delays to solutions.

Special Educational Needs (SEND) Scenario

Case 1 Scenario: A six-year-old patient with autism has come into the SEND-specific clinic for his appointment. He becomes extremely distressed in hospital due to previous experiences and it has taken several visits to build up trust between us. Uniocular visual acuities are reduced, and school have reported he seems to be struggling with seeing the board. A quick, dry Retinoscopy shows myopia.

Problem: Because this child has autism, he has previously suffered significant meltdowns when trying to follow an orthoptic assessment with a refraction with a different member of staff - the optometrist. Optometry are currently short staffed and do not have the ability to do multiple acclimatising appointments. Also, multiple appointments mean lots of missed schoolwork, lots of disruption to the normal routine for a child who really depends on regular plans as well as missed work for parents. Additionally, if the child is extremely distressed the refraction is more challenging and less likely to be accurate.

Solution if orthoptists could provide Rx.

If I was able to perform refractions myself, it would reduce the number of staff this child must meet and interact with. As a familiar face, and someone who is already familiar with what he likes / dislikes, having myself perform a refraction and prescribe glasses could be a more relaxed experience, without disproportionately taking the child out of school a huge number of times.

SEND Case 2 Scenario

Eight-year-old girl with Down's syndrome. She was given glasses to correct moderate hypermetropia, which she wears full time. Parents and teachers reported she holds things very close to her face and dynamic retinoscopy reveals a large accommodative lag.

Problem: Even though I am able to accurately determine the correct strength for bifocals I am unable to issue a prescription. For this child to get new glasses with bifocals I must book an additional appointment with a hospital optometrist to repeat the exam which I have already performed. Again, not only does this take this child out of school again, when they also have appointments in audiology and with the paediatrician regularly to organise but also needlessly takes an appointment from the optometrist. Also, to be booked with the optometrist who specialises in dynamic retinoscopy there can be a three month wait, causing a delay in this child getting a medical device (bifocal glasses) which they would greatly benefit from.

Paediatric Ophthalmology Advanced Clinical Practitioner Scenario

Background typical scenario: NHS Foundation Trust XXX has ~1000 children's refraction appointments overdue, with the next available appointment being in two months' time.

The Trust are finding Optometrist posts very difficult to recruit too because of the attraction of community payments offered to Optometrists in the community. The Trust has two trainee ACP students in paediatric ophthalmology (Orthoptists) who have evidenced their refraction accuracy and capabilities and who could fruitfully see children and begin to tackle the list but are unable to sign the refraction.

Problem: Skilled and advanced practitioners who have evidence of their accuracy in providing refractions for children, are prohibited from contributing to the overstrained service, because of the restriction within Orthoptics.
Difference if the Orthoptist could issue an RX: Children could receive their refraction appointments in the recommended timeframe, instead of being overdue, with suboptimal outcomes. Dangerous backlogs could be tackled and this work distributed to practitioners in role, who are able and keen to undertake this work.

Stroke Patient Scenario

Background scenario: Patient A is a 76-year-old who has been admitted to hospital as an inpatient, this could be for a variety of reasons e.g. hip fracture etc. During their admission or whilst being transferred to the ward their glasses have gone missing.

They do not have a spare pair which a relative can bring into hospital. The last time they had an eye test was around three years ago. Currently there is no way to get a prescription issued whilst the individual is an inpatient with no optometrist in the eye clinic.

Problem: The ward staff have had to use a lot of time to contact the patient's family and optometrist to discuss obtaining a spare or new pair of glasses. They require another eye test to provide the new RX.
This is not possible as they are currently an inpatient in hospital. This is potentially preventing safe rehabilitation and possibly resulting in a longer inpatient stay for the patient.

Difference if the Orthoptist could issue an RX: If the Orthoptist could prescribe, an RX could be issued whilst the person is still an inpatient. This has allowed safe rehabilitation to be provide, as well as allowing optimisation of that rehabilitation, potentially saving NHS costs with reduced length of stay.

Appendix 6: Letters from Consultant Ophthalmologists

Bradford Teaching Hospitals NHS Trust

Duckworth Lane

Bradford

BD9 6RJ

12 March 2025

Dear Craig

I am writing to provide an ophthalmologist's perspective on the proposal to enable suitably qualified orthoptists to refract and prescribe glasses to children within the context of a hospital eye service.

I have been in practice for over twenty years and over this time have been lucky enough to witness the advance in practice portfolios for many eye health professionals in order to deliver safe, effective and efficient eye care to the populations we serve.

Successful refraction of a child relies on two key skills: the ability to engage with a young child, and the ability to refract. Orthoptists spend their whole career honing their skills in the former and whilst there are aspects of optical care which lie exclusively within the remit of a qualified optical practitioner, cycloplegic refraction and prescribing is a skill which can be taught to any health care practitioner, as has been the case for ophthalmology medical trainees for decades.

A particular shift we have noticed is the reluctance of some high street optometrists to assess children, with some imposing a lower age limit of five, six, or seven years. Locally optometrists have begun to refer young children into the hospital eye service for a 'second opinion refraction' further demonstrating their uncertainty in this key area of community eye care provision. This is in part due to lack of exposure and/or experience of supporting children in optometry training.

Allowing orthoptists to exercise this skill within the hospital eye setting would enhance rather than erode our ability to provide basic eye care for young children.

Paediatric Ophthalmology services in the UK are in crisis. Most departments have long delays in offering new appointments to non-urgent cases and there

are backlogs of follow up appointments. One in four consultant posts unfilled and as many as 30% of the consultant workforce planning to retire within the next 5 years.

To mitigate this risk, we need to explore every avenue of diversification of practice to enable hospital eye clinics to deliver the most efficient care possible.

Allowing orthoptists to refract and prescribe in the context of a hospital paediatric ophthalmology service brings the following benefits to the child/family

- Eye care delivered by a single practitioner
- Eye care delivered at a single appointment
- Eye care delivered in a single clinic room

There is clear evidence from the University of Sheffield Advanced Clinical Practitioner course that orthoptists can provide this service safely and effectively.

It is difficult to conceive how any perceived theoretical risk from individual clinical error could outweigh the actual reality we are witnessing of preventable visual loss and/or correction of strabismus which is happening in some department across the UK due to delays in accessing optometric care (community or hospital based).

Yours sincerely

Professor Rachel Pilling

Consultant Paediatric Ophthalmologist

Member RCOphth Paediatric Subcommittee.

To whoever it may concern

NHS England

Reference BIOS initiative into Orthoptic Glasses Prescribing

26/2/25

Dear NHS England

I understand you are looking at the current law about who can prescribe optical glasses. The initiative is aimed at allowing orthoptists to do so, if practising under the governance of a NHS Hospital eye service, which would in turn be in association with a consultant Ophthalmologist

This is long overdue. Delay into glasses is a common problem, partly as high street optometrists are often unable to complete an examination of small children (for example less than 5 years of age), or if they do, fail to prescribe glasses and opt to refer them to the hospital eye service, incurring delay into glasses prescription.

This delay may mean the child has uncorrected refractive error (i.e. looking in a blur) for an extended period while waiting to be assessed, or loses their binocular vision as the squint that was initially seen intermittently becomes permanent – sometimes lifelong.

Anything that shorten waiting times to have children into glasses quicker will benefit children.

Yours sincerely

Robert H Taylor

President British Isles Paediatric Ophthalmology and Strabismus association and

Consultant Ophthalmologist, York

To whom it may concern,

I have been a consultant ophthalmologist and paediatric Ophthalmology lead for 10 years and am in support of orthoptics being able to prescribe within the hospital setting. At my trust, orthoptists have many extended roles and one of these includes refraction. When I started as a consultant, there was already a child refraction clinic wherein the repeat annual cycloplegic refractions were being competently performed by our orthoptists.

Being a lone paediatric ophthalmology consultant, with a large catchment area, I wanted new pathways to streamline the paediatric ophthalmology clinic to patients that only needed to see the doctor. An initial iteration of that involved an optometrist to see the more routine fundus and refractions but unfortunately, we were unable to retain optometrists in this role as most wanted the more "interesting" roles in glaucoma, macular clinics etc.

Thus, we set about looking at alternative pathways, using our orthoptists, of whom 3 are now trained to refract, with me having ultimate responsibility for their prescriptions. We have 2 additional clinics to the Child refraction clinic for new patients. One is for those who fail vision screening. The orthoptist performs a cycloplegic refraction and then a wide-field fundus photograph is taken which is then reviewed virtually. The other is for strabismic patients, or those unsuitable for photography, who are first refracted by an orthoptist (2 are working in parallel) and then I see all of them for a fundus on the same day (meaning I see 18 in an afternoon clinic). These clinics have worked really well for us to streamline services and in a department where we have no in-house optometrist/refractive support has really helped keep the whole service going. I also have every confidence in the refractions performed by our trained orthoptists and have had no problems at all with their final prescriptions, and indeed trust them far more than a doctor rotating in, or indeed a consultant colleague who does not regularly perform paediatric refractions.

I would thus fully support orthoptists trained in refraction to have hospital prescribing rights.
Kind regards,
Miss Dania Al-Nuaimi
Consultant Ophthalmologist
TPD for KSS Ophthalmology

Frimley Park Hospital
Frimley Health NHS Foundation Trust

Appendix 7: HCPC Standards of Proficiency and BIOS Curriculum Framework for Pre-registration Education and Training

https://www.hcpc-uk.org/standards/standards-of-proficiency/orthoptists/

Specific standards include 12.8, 12.26, 13.21, 13.22, 13.23, 13.28

https://www.orthoptics.org.uk/wp-content/uploads/2023/09/BIOS-Pre-reg-Curriculum-Framework-FINAL_22082023.pdf

Specifically sections Refractive and clinical optics, Ophthalmological investigation, Treatment methods

Appendix 8: Outline of Royal College of Ophthalmologists (RCO) refraction learning outcomes needed to complete the RCO refraction certificate 20

Guidance for Ophthalmology Training

Training and competences for ophthalmologists

- Know the presenting complaints of patients with refractive errors.
- It is important to be aware of when it is advisable to correct a refraction error and when it should be left uncorrected.
- Know the different forms of spectacle lenses (e.g. monofocal, bifocal, varifocal) and understand the advantages and disadvantages of each type of lens.
- Understand the different forms of prism correction available and when their use should be advised.
- Know the associations of refractive error with other ophthalmic or systemic disease e.g. cataract, diabetes and keratoconus.
- Understand how a refractive error will influence the management of eye disease, particularly with reference to cataract surgery.

TITLE	RETINOSCOPY AND SUBJECTIVE REFRACTION
Code	PS2
Learning Outcome	• Assess a patient's refractive error. • Assess a patient's spectacle lenses using neutralisation techniques and focimetry. • Perform retinoscopy and an accurate subjective refraction, and provide an appropriate prescription. • Assess a patient's binocular co-operation and advise on whether this should be corrected optically. • Perform an accurate cycloplegic refraction (especially on a child) and provide an appropriate prescription.
Assessment	CRSret Refraction certificate Portfolio Part 2 FRCOphth
Assessor	Consultant ophthalmologist, Senior OST (Year 4, 5, 6, 7), Optometrist
Target Year of Achievement	Year 3
Related Learning Outcomes	PM14 PM15 PM16 BCS6
Overview	• Recognise the difference between refracting children and adults. • Be familiar with optical prescription documentation. • Consider going on a Refraction Course.

Appendix 9: Minimum competencies in preregistration training aligned with the ophthalmic practitioner training (OPT) (previously the Ophthalmic Common Clinical Competency Framework (OCCCF)) for optometry and orthoptics pre-registration training

Competencies for prior accreditation for graduate orthoptists and optometrists					
Practitioners accredited with prior competence as a result of possessing other qualifications are exempt from completing Workplace Based Assessments (WBAs) for a particular area and level. These have been agreed between the British and Irish Orthoptic Society, the College of Optometrists, and the Royal College of Ophthalmologists.					
OCCCF code	Method of assessment	Curriculum	Optometrist prior accreditation for undergraduate training	Orthoptist prior accreditation for undergraduate training	OCCCF code
CA 2	Assess vision	CRS	Core	Levels 1, 2, 3	Levels 1, 2, 3
CA 3	Fields by confrontation	CRS	Acute & Emergency		Level 1, 2 Acute & Emergency
CA 4	Amsler	CRS	Emergency and Medical Retina	Level 1 Medical Retina Level 3 Acute & Emergency	
CA 5	External Examination	CRS	Core	Levels 1	Level 1
CA 6	Pupils	CRS	Core	Level 1	Level 1
CA 7	Motility	CRS	Acute & Emergency	Level 1	Level 1, 2, 3 Acute & Emergency

CA 8	IOP	CRS	Core and Glaucoma	Level 1 and 2 Core Level 1 Glaucoma	Level 1
CA 9	Slit lamp	CRS	Core and Cataract	Level 1 Level 1 Cataract	Level 1
CA 10	Fundus Examination	CRS	Core	Level 1, 2	Level 1
CA 17	Angles	CRS	Glaucoma and Acute & Emergency	Level 2	
PI 13	Fields	DOPS	Glaucoma	Level 1	Level 1
PI 17	Corneal shape	DOPS	Cataract	Level 1	
PI 18	Focimetry and autorefraction	DOPS	Core	Level 1, 2	Level 1
PS 14	Bandage Contact Lens	DOPS	Acute & Emergency	Level 1, 2, 3	
PS 18	Lid hygiene	DOPS	Core	Level 1	Level 1

The curriculum recognises that practitioners come to the programme with proven competencies and gives accreditation for these for particular areas and levels. This means that the Workplace Based Assessment (WBA) for that competence does not have to be performed by candidates with the necessary evidence.
The criteria used for awarding Accreditation of Prior Competence are:
Undergraduate
• Confidence that any graduate with a particular degree (Bachelors in Orthoptics or Optometry) would be completely competent at performing the competency at the required standard.
Postgraduate
• Nationally available qualifications (not those provided by individual Higher Education Institutions - HEIs).
• Covering the full scope of competency as applicable to ophthalmology practice.
• Assessed in a similar manner (i.e.: assessed in all candidates in a clinical setting, and not by sampling as in an exam).

Current situation agreed with the professional bodies.

- Orthoptists - only undergraduate qualifications meet prior accreditation requirements.
- Optometrists - only undergraduate qualifications meet prior accreditation requirements.
- Nurses - neither undergraduate or postgraduate qualifications meet prior accreditation requirements

References

1. Opticians Act (1989) https://www.legislation.gov.uk/ukpga/1989/44/contents
2. BIOS Strategy https://www.orthoptics.org.uk/wp-content/uploads/2023/06/BIOS -Strategy-2023-2028_FINAL.pdf
3. NHS England. The Ophthalmic Common Clinical Competency Framework https://www.hee.nhs.uk/our-work/advanced-clinical-practice/ophthalmology-common-clinical-competency-framework-curriculum
4. AHPS Deliver (2022) https://www.england.nhs.uk/publication/the-allied-health-professions-ahps-strategy-for-england/
5. AHP into Action Policy (2017) https://www.england.nhs.uk/publication/ahps-into-action/
6. NHS England. National Cost Schedule 22/23 https://www.england.nhs.uk/costing-in-the-nhs/national-cost-collection/
7. Ophthalmic workload statistics March 2024, Public Health Scotland; https://publichealthscotland.scot/publications/ophthalmic-workload-statistics/ophthalmic-workload-statistics-statistics-as-at-year-ending-31-march-2024/
8. Llywodraeth Cymru (2021) NHS Wales Eye Health Care: Future approach to optometry services
9. Royal College of Ophthalmology (2023) Facing workforce shortages and backlogs in the aftermath of COVID-19: The 2022 census of the ophthalmology consultant, trainee and SAS workforce. https://www.rcophth.ac.uk/news-views/rcophth-census-2022-report/
10. Salt, A., Sargent, J. (2014) Common visual problems in children with disability Archives of Disease in Childhood. 99. 1163-1168.
11. Conway ML, Shah R, Chapman E, Evans BJW (2025) The Role of Orthoptists in Refraction British and Irish Orthoptic Journal. 21. 17-35
12. Health and Care Professions Council registrant snapshot -10 May 2024. https://www.hcpc-uk.org/resources/data/2024/registrant-snapshot-may-2024/
13. Health and Care Professions Council standards of for Orthoptics. https://www.hcpc-uk.org/standards/standards-of-proficiency/orthoptists