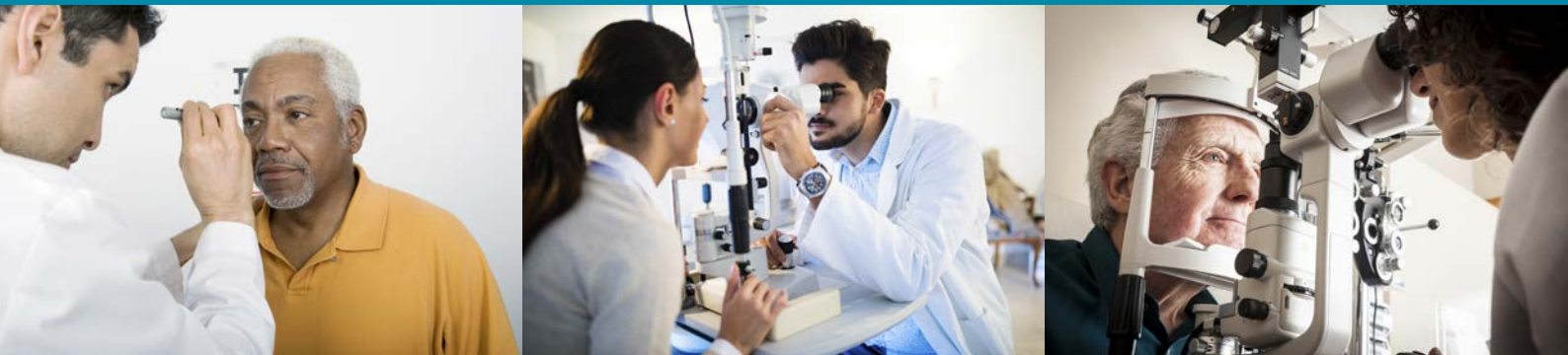


NHS Wales Eye Health Care

Future Approach for Optometry Services



Mae'r ddogfen yma hefyd ar gael yn Gymraeg.
This document is also available in Welsh.

Foreword

We no longer live in the world that the NHS was originally designed for. People are living longer, medicine can do much more, technology is transforming the way we live, lifestyles and expectations have changed. Services from different providers should now be seamlessly co-ordinated and go beyond original service delivery to make a difference to the social and economic factors that influence individuals health, well-being and life chances. The Covid-19 pandemic has reinforced the need for reform.

Our ambition from 2020 is to bring health and social care services together, designed and delivered around the needs and preferences of individuals, with a much greater emphasis on keeping people healthy and well.

Individuals' self-management of their own health and well-being is an important part of our ambition to fully encompass the objectives of the Well Being for Future Generations Act, to "think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach. This will help us to create a Wales that we all want to live in, now and in the future".

Optometry has a key role in delivering the aims of "A Healthier Wales" through the provision of eye care. The role has developed considerably since the introduction of the Wales Eye Care Service, enabling optometry to be the first port of call in primary care for patients with eye problems. In Wales, we are fortunate that there is good access to optometry services, where optometrists help to detect, treat and manage eye diseases early to stop unnecessary referrals and reduce waiting lists. Optometrists are an integral part of the transformation of eye care services and the on-going development of care closer to home. Whilst there are challenges to ensure patients' timely access to all eye care services, each member of the clinical team providing services along the patient pathway is collaborating to work at the top of their respective clinical license.

The challenges, which the Welsh Government and NHS Wales are addressing together, will be further enriched through broader and deeper relationships built up and strengthened by the clinical team. Across all eye care pathways, clinical teams must work together seamlessly utilising their full skillset and working in new and innovative ways. Change happens over time and does not come to fruition quickly or easily, however, there is a strong sense of shared values and ownership across the clinical team. As such this document has been produced in collaboration with all key stakeholders for eye care in Wales including; the Welsh

Government, NHS Wales, Health Education and Improvement Wales, the Welsh Optometric Committee, Optometry Wales, the College of Optometrists and the Royal College of Ophthalmologists in Wales.

The eye care family acknowledges the level of challenge and the requirements to meet the ambitions of this transformation paper to ensure all citizens across Wales are front and center of our all considerations as we move forwards.



Vaughan Gething

Executive Summary

In January 2018, the '*Parliamentary Review of Health and Social Care in Wales*' was published. The Welsh Government response: '*A Healthier Wales: our Plan for Health and Social Care*' called for bold new models of seamless health and social care at the local and regional level.

Since autumn 2019, the Welsh Government, working with all stakeholders have scoped what the future of eye care services should look like from a patients perspective across the whole of the primary and secondary eye care pathway in Wales.

This transformation paper sets out our expectations for delivery of eye care services over the next decade. To inform our approach, we have considered and learnt from what we have done, past and present and looked at current population access, demand, treatments, technologies and outcomes.

1. Building upon the eye health focus of Wales Eye Care Services (WECS), further embedding prevention, well-being and quality improvement tools across optometry services, will facilitate improved patient outcomes and reduced demand for hospital eye care services, which will be further underpinned through systematic and ongoing review.
2. Over the past 5 years, increasing numbers of optometrists have gained additional higher qualifications in medical retina, glaucoma and independent prescribing. This is a significant move towards an eye health related optometry service in Wales. Upskilling clinicians to work at the top of their license, means that optometry is in an ideal position to further transform eye care pathways and fulfil the principles of 'A Healthier Wales'.
3. An increasingly elderly cohort and increased prevalence of eye disease, requires a workforce to manage eye disease for the population, with all members of the eye care family working at the top of their license in Wales.
4. An increasing workforce in primary care optometry with 875 practitioners delivering sight tests paid for by the NHS at 31 December 2018, 34 more than in the previous year and a 19.2% increase since December 2008.
5. The priority is to continue to embed the aims of "A Healthier Wales" and the "Together for Health: Eye Care Delivery Plan 2013-20"; to provide eye health care close to a patient's home; to prevent unnecessary referrals to GPs and hospitals; to ensure timely access for specialist treatment of blinding eye disease that only an ophthalmologist can manage.

6. Supported self-management approach to eye care for citizens in Wales as they have a key role in protecting their own health, choosing appropriate treatments and managing long-term conditions. Self-management is a term used to include all the actions taken by individuals to recognise, treat and manage their own health. They may do this independently or in partnership with the healthcare system.
7. Prevention of eye disease to encourage the population to take preventative action to avoid permanent sight loss that would have an impact on their quality of life and local economies if not picked up at an early stage.
8. The aim of all eye care pathways is to reduce the number of referrals into hospital eye departments by 1/3, and to increase capacity in hospital eye departments by freeing up 35,000 follow up appointments through monitoring, management and treatment in primary care.
9. As part of transformational change, contract reform will fully realise the vision for NHS Wales eye health care services, moving to a clinically appropriate service model based on the principles of “A Healthier Wales” and the seven well-being goals of the Future Generations (Wales) Act.
10. A new continuous profession development programme, led by Health Education and Improvement Wales (HEIW), with reflective practice, mentoring and access to high quality education and skills improvement.
11. Placement opportunities in a variety of settings fully integrating optometrists and ophthalmologists to develop skills and experience for those undertaking additional clinical responsibilities, for example, independent prescribing.
12. Developing leaders in optometry to promote and progress the profession with access to leadership programmes in conjunction with HEIW.
13. Primary care cluster structures reviewed to enable full integration of optometry services with an emphasis on patient needs and outcomes at a local population level.
14. Legislative changes to General Ophthalmic Services, Eye Health Examination Wales and Low Vision Service Wales will enable diagnosis, treatment and management of a wider range of eye conditions in primary care and underpin the necessary coverage of optometry services within each cluster to enable all aspects of contract reform.

NHS Wales Eye Health Care: Future Approach for Optometry Services

Situation:

1. Primary care, eye health care in Wales has developed significantly over the past 20 years since the introduction of the Wales Eye Care Services (WECS). With the WECS and associated improvements in patient care, optometrists are able to safely treat and manage more patients in primary care. There has been substantial investment in both primary and secondary care by the Welsh Government, NHS Wales and from Health Education and Improvement Wales (HEIW), to improve professional development, integrated working methods and to develop new service model.
2. Building upon the eye health focus of WECS and further embedding prevention, well-being and quality improvement tools across all optometry services, will facilitate improved patient outcomes and reduced demand for General Practice (GP) services in primary care as well as specialist hospital eye care services.
3. The number of optometrists gaining additional higher qualifications in medical retina, glaucoma and independent prescribing has increased year on year. The significant move towards an eye health related optometry service by an upskilled workforce enables the clinical team to work at the top of their license. Optometry is in an ideal position to transform eye care pathways further and fulfil the prudent principles underpinning the aims of '*A Healthier Wales*'.
4. The "*Sensory health statistics (eye care and hearing care)*" published biannually, (Appendix 1) shows an increasing workforce in primary care optometry, 875 practitioners delivering sight tests paid for by the NHS at 31 December 2018, 34 more than in the previous year and a 19.2% increase since December 2008.
5. Demographic data for Wales (Appendix 2) describes the current and future population in Wales. Figures from the Royal College of Ophthalmologists and the Royal National Institute for the Blind, predict a substantial increase in eye disease over the next 30-50 years, linked to an increasingly elderly patient cohort and increased population.
6. Appendix 1 also describes the current position for patients accessing eye care services across primary and secondary care. To summarise, the statistics show an increasing gap between demand for, and capacity to provide specialist hospital eye care services.
7. An increasingly elderly population and increased prevalence of eye disease, requires a workforce to manage eye disease as a clinical team, with all members of the eye care family working at the top of their license and seeing patients that only they should see.

Aim: (Appendix 4)

8. For the ambitions of this paper to be met, the priority is to continue to embed the aims of “*A Healthier Wales*” and the “*Together for Health: Eye Care Delivery Plan 2013-20*”. To provide eye health care close to a patient’s home, to prevent unnecessary referrals to GPs and hospitals, ensuring timely access for specialist treatment of blinding eye disease that only an ophthalmologist can manage.
9. To progress work at pace, and to facilitate our national approach for eye health care services across Wales, a fully integrated workforce, and eye care pathways without boundaries are paramount. The underlying principle is to ensure ‘eye health’ is the focus of good eye care and health professionals are working together across all eye care pathways to provide appropriate care and for patients to receive the best possible outcomes.
10. To enable this shift towards a wholly clinical approach to eye health care, building upon the current service delivery models in optometry and removing barriers to change are vital.

Patient	Optometry Profession	Hospital Eye Service
Access to eye care services close to home.	Changes to the GOS terms of service and WECS legislative directions, to enable management, treatment and diagnosis of a wide range of eye conditions in primary care.	Closer working relationship with optometrists and eye care multidisciplinary teams (MDT), enhanced through integrated training places and a constant flow of the MDT supporting hospital eye departments.
Timely access to all eye care services.	Continuous professional development aligned to scope of practice with peer support and mentoring.	Joint clinical governance arrangements embedded in all eye care pathways.
Supported self-care approach to eye care. Citizens in Wales have a key role in protecting their own health, choosing appropriate treatment and managing long-term conditions. Self-care is a term used to include all the actions taken by individuals to recognise, treat and manage their own health, independently or in partnership with the healthcare system.	Leadership and placement opportunities to further develop learning and skills.	Appropriate health board structures at local, regional and national levels to enable robust clinical leadership of eye care pathways facilitate training and placement requirements and mentorship arrangements. Health board lead Optometric Advisers to work in co-production across the professions to ensure smooth integration of eye care pathways.
Prevention of eye disease to encourage the population to take preventative action to avoid permanent sight loss that would have an impact on local economies and quality of life if not picked up at an early stage.	IT data and digital tools to facilitate the care of patients along the eye care pathway.	Patients only referred for specialist intervention when clinically necessary.
Early detection, diagnosis, treatment and management of eye conditions in primary care optometry, by appropriately trained optometrists and contact lens opticians.	Enhanced working arrangements between optometrists and primary care clusters to ensure all aspects of care are considered and co-ordinated for delivery.	Increased capacity for specialist services to manage patients and work at the top of their license.

Patient	Optometry Profession	Hospital Eye Service
Correction of eyesight; optometrist prescribing an optical appliance when clinically necessary.	Build upon existing clinical governance and research arrangements to ensure quality improvement throughout all eye care services.	IT data and digital tools to facilitate the co-ordinated care of patients along the eye care pathway.
A fully integrated eye care pathway where care is transferred seamlessly with appropriate communication between health and social care professionals at referral.	Health board lead Optometric Advisers to work in co-production across the professions to ensure smooth integration of eye care pathways.	Reduced risk of serious incidents and patient harm.
Shared care follow-up between optometry and hospital eye departments when clinically appropriate, closer to the patient's home.	A closer working relationship with ophthalmologists and the multidisciplinary eye care team.	
Patient experience that is based upon effective communication and active involvement in decisions about their own care and treatment, co-produced between professionals and patients.		

Context, Background and Barriers to Change:

Context

11. In Wales, our overarching strategic documents to steer optometry into the 21st Century are “*A Healthier Wales*” and “*Prosperity for All*”, underpinned by the key principles of prudent healthcare. The documents provide policy direction for the provision of integrated, quality, sustainable and equitable eye health care for citizens across Wales.

Background- Current Primary Eye Care Services in Wales

12. The Opticians Act 1989 regulates optometry in the UK. An optometrist’s role is to examine eyes, test sight and prescribe spectacles and contact lenses for those who require them (General Optical Council (GOC), 2015a). In addition, optometrists may fit spectacles and contact lenses and provide advice on visual concerns.
13. Optometrists in the UK are trained to detect ocular disease and abnormalities and will refer patients to a medical practitioner if necessary. Optometrists have a significant role within primary eye care in the UK, and are responsible for the majority (approximately 70%) of referrals to the hospital eye departments.
14. Appendix 5 details the current services provided by optometrists, dispensing opticians and contact lens opticians in Wales.

Barriers to Change

Optometry Practice Business Model ¹

15. The current sight test fee, negotiated at UK level, does not meet the cost of providing a sight test.
16. This has resulted in the optometry practice business model strategy known as ‘loss leading’, a marketing tool to attract customers to the practice to stimulate other more profitable sales, providing clinical services at a reduced fee and relying on the sales of optical appliances to compensate for service, workforce and premises costs.
17. Practices implement different targets depending upon their unique selling propositions and strategies. Typically a spectacle conversion rate (the percentage of sight tests/eye examinations that result in a spectacle dispense) of 62% - 75% would be required to sustain the traditional business model. It is estimated, approximately two-thirds of sight tests resulted in the purchase of a new or changed spectacle prescription (Optical Confederation, 2013). However, there is growing evidence that the online market now captures 12% of all spectacle sales with a predicted increase as consumers seek low cost services and appliances ²

¹ Patel, N., 2015. *EXPLORING BUSINESS MODELS TO PROVIDE A FOUNDATION FOR*. Ph.D. Aston University.

² [Optometry Today article: Online spectacles sales increases by 2 percent](#)

The barriers and enablers that affect access to primary and secondary eye care services across England, Wales, Scotland and Northern Ireland. Report by Shared Intelligence. Hayden C. February 2012

- 18.** UK Optometric market research (Intel Group Ltd), suggests spectacle sales represent approximately 60% of the entire market value and contact lens sales account for 19%. Income from clinical services represents a relatively small portion, around 16% of the total income. It is evident the profession relies on the sale of optical appliances (spectacles and contact lenses), as the major source of income and stability of service.
- 19.** Practices in Wales face the perceived dilemma of accepting the UK wide nationally agreed fee for providing GOS sight test at a loss, and/or losing patients to other practices or in some circumstances, losing their practice. 'Loss leading' strategies are developed in numerous businesses; however, for the optometry profession in Wales it detracts from providing citizens with more 'eye health' services in primary care. This has added to the backlog in patient appointments and delay in follow-up in hospital eye departments across Wales (and the other UK nations).

Concerns about loss leading

- 20.** Under General Optical Council (GOC) rules, patients must receive their spectacle/contact lens prescription following their consultation. Patients are entitled to take their prescriptions and have them dispensed at any practice of their choice. The Health and Social Security Act 1984 deregulated advertising and the supply of spectacles to increase competition, enabling patients to take their prescriptions to other competing practices or online retailers. This undermines the traditional business model because whenever a patient takes his or her prescription elsewhere, the cost of the sight test must then be subsidised by another person's spectacle dispense. The same applies whenever the sight test or eye examination outcome does not result in a changed or new spectacle prescription or when a patient chooses not to update their optical appliances. The College of Optometrists³ encourages patients to have spectacles dispensed at the same practice that issued the prescription to avoid problems if non-tolerance to prescriptions occurs.
- 21.** Heavily relying on the sales of spectacles creates commercial pressures on optometry practices, particularly as market competition remains fierce. Unlike pharmacies, there is no 'market entry' application process. There are concerns the 'loss-leading' model may increase pressure on optometrists to meet high conversion targets.
- 22.** The loss-leading model has limited optometrist's ability to widen their scope of clinical services for the NHS, as practitioners and practice managers have no alternative but to value community enhanced services as less profitable than traditional loss-leading services, due to an assumption community enhanced services have lower spectacle conversion rates.

³ [College of Optometrists: The Eye Examination](#)

- 23.** Optometrists are reserved when considering investment in new equipment and higher qualifications due to concerns regarding the cost-effectiveness within the traditional business model. New innovative equipment can be expensive and is often only affordable if additional fees are associated with its use.

Public perceptions

- 24.** The dominant retail aspect of high street optometric practices affects the public's perception of optometry eye health care. The public are acutely aware of the role practices have in the sale and supply of optical appliances and therefore, public perception of optometrists is of their retail sales rather than the clinical services and expertise on behalf of NHS Wales. A number of studies illustrate the lack of public awareness of eye health and many people believe the primary purpose of a sight test or eye health examination is to renew spectacles or to address visual symptoms.

Hospital Eye Department Barriers

- 25.** Traditionally, hospital eye services have developed using a consultant led delivery model. A review of these traditional models has highlighted that there are more efficient ways to deliver services. Instead, implementing seamless integrated eye care pathways between primary and secondary care ensures the right clinical team member assesses patients and in the most appropriate setting, very often this will not be in the hospital eye department.
- 26.** A whole system approach, removing perceived barriers to enable services to be delivered outside of the hospital setting by other appropriately trained professionals, will provide the best possible outcomes for patients. The patient must be front and centre of all services delivered regardless of the setting. The emphasis of all services provided in a hospital setting and optometry practices must be on preventing avoidable eye disease for patients.
- 27.** Evidence indicates that this patient facing approach is welcome by patients and empowers the whole clinical team. It does require a new way of working with empowered patients and clinical teams supported by effective and robust processes, for example, IT data and digital tools.
- 28.** Hospital-based models of care are unable to continue to deliver services in the same way. Current evidence also shows a critical lack of estates and equipment, together with not enough ophthalmologists being trained for future recruitment to address the increased patient demand (Appendix 3).

Analysis:

Primary Care Optometry Contract Reform

29. As described earlier in this paper, the aim of contract reform is to produce a clinically based service with the emphasis on eye health. All areas of the current service provision (GOS, EHEW, LVSW and private examinations) are important in realising this transformational change to achieve the key aims of 'A Healthier Wales' and reach our overall ambition.

Quality Improvement

30. Quality improvement is an essential part of service governance, and optometry will require appropriate tools to enable this to be effective and robust. Practice based research and evaluation frameworks and reportable service clinical audit will be built into all eye care pathways and contractual mechanisms. This needs to be within the context of the programme of education at all levels, so that optometrists of the future enter the workforce as professionals ready to clinically manage patients within primary care on day one with their continued journey supported and developed. Quality Improvement will drive the profession and services to deliver continuous improvement in all aspects of optometry.

31. Appendix 6 details the new clinical scenarios through contract reform. These are summarised below:

General Ophthalmic Services (GOS) Wales Level 1

32. The main causes of sight loss in Wales and throughout the UK are⁴:

- Uncorrected refracted error (39%)
- Age Related Macular Degeneration (23%)
- Cataract (19%)
- Glaucoma (7%)
- Diabetic eye disease (5%)

33. It is important to recognise the significance of correcting sight with an optical appliance; over half of registered sight loss in the world is due to uncorrected refractive error (spectacles and contact lenses). In Wales, correcting refractive error has major implications in terms of individuals' abilities to reach their full educational and social potential, patient safety due to trips and falls and the ability to carry out day-to-day activities safely, for example driving. There are also economic impacts for example being able to work safely. The routine sight test also has an important role to play in opportunistic case finding for both general and ocular health for patients.

34. The elements of the current GOS sight test must be built upon with the introduction of additional components, some of which can be delegated. This would align optometry with NHS Wales GMS, Dental and Pharmacy. Preventative eye care and healthy living discussions for example,

- Smoking Cessation

⁴ RNIB - See differently. 2020. [Sight loss data tool](#)

- Blood pressure
- Lifestyle discussions (obesity, health eating, alcohol)
- Loneliness and isolation
- Trips and falls
- UV protection

35. In addition, individual management plans based upon a comprehensive patient needs assessment need to be co-produced between patient and practitioner. This will determine the individual patient recall appointment based on need.

GOS Wales Level 2 (Low Vision Wales Services (LVSW))

36. The Low Vision Service Wales is a primary care based NHS funded low vision service, provided by practitioners (optometrists, dispensing opticians and ophthalmic medical practitioners) across Wales. The aim of the service is to maintain independence for all those with vision impairment or vision loss through the provision of low vision aids, signposting to other services and offering information regarding daily living and eye conditions.

37. Practitioners also refer to other professionals and have close links with services that provide additional help and support including, social services, Rehabilitation Officer for Visual Impairment (ROVI) to provide rehabilitation and specialist habilitation services, third sector, hospital eye departments (for those people wishing to be certified as sight impaired or severely sight impaired), education services or employment services.

38. The LVSW is a world leading service for children and adults with vision impairment or vision loss. The service enables individuals to reach their full education, employment and social potential. Building on the current service to further support patient independence and care closer to home is an important element of continued service and contract reform.

GOS Wales Level 2 Eye Health Examination Wales (EHEW)

39. EHEW services were introduced in Wales as enhanced services to prevent sight loss through early detection of eye disease, inform or prevent referrals to specialist services and to support hospital eye departments to monitor low risk eye disease.

40. Building upon current EHEW services is central to contract reform.

Managing and treating conditions in primary care

41. The current EHEW service enables optometrists to repeat measurements and refine referrals to either prevent a referral or further inform a referral. This has resulted in more cases monitored in primary care, and better quality referrals received by hospital eye departments.

42. Postgraduate higher qualifications are available in glaucoma, medical retina and ocular therapeutics and can be utilised to manage and treat more patients in primary care.
43. Optometrists and GPs refer patients to optometrists with additional qualifications for further examinations. This is described as GOS Wales Level 3 (referral refinement) and GOS Wales Level 4 (independent prescribing) in appendix 6.
44. GOS Wales Level 3 enables;
- Optometrists with appropriate skills, knowledge and experience in glaucoma to assess all glaucoma referrals (with the exception of emergency red flag referrals) that would normally have been sent to hospital eye departments.
 - Optometrists with appropriate skills, knowledge and experience in medical retina to refine referrals for wet age related macular degeneration and other medical retina conditions that would normally have been sent directly to a hospital eye department for rapid review.
 - Optometrists with appropriate skills, knowledge and experience, to assess all oculoplastic conditions that would normally have been sent to a specialist service in a hospital eye department.
45. GOS Wales Level 4 (IP) enables:
- Optometrists with an additional qualification in ocular therapeutics and who have qualified as optometry independent prescribers, to assess, manage and treat acute eye conditions in primary care that would normally have been sent directly to hospital eye department rapid access clinics.
46. Sensory eye care statistics for 2018/19 show: 107,448 new patient referrals into hospital eye departments.
- 47. The aim of the new eye care pathways, through GOS Wales levels 3 & 4 is to reduce the number of referrals into hospital eye departments by 1/3.**

GOS Wales Levels 3 & 4 (Monitoring)

48. In addition to reducing referrals into hospital eye departments and managing an increasing number of conditions in primary care, the ambition is to rebalance services to enable low and medium risk patients to be monitored and managed within primary care whilst maintaining specialist service oversight in hospital eye departments.
49. Established services in some health board areas provides insight into the potential number of patients that can be monitored across Wales. For example, Aneurin Bevan University Health Board (ABUHB) in 2018/19, listed 4415 glaucoma patients as seen in primary care optometry practices during a simple data gathering exercise with specialist service oversight in hospital eye departments.

- 50.** ABUHB has an estimated population of 600,000. Wales estimated population is 3,230,490 (office of national statistics).
- 51.** Extrapolating these figures for Wales would provide 23,771 glaucoma low risk follow-up episodes. Additional follow-up services include medical retina conditions such as wet age related macular degeneration and diabetic macula oedema follow-up.
- 52.** Similar services to those in ABUHB are being established in other health boards across Wales; however, figures are not currently available. A conservative estimate including glaucoma follow-ups would be the potential for 35,000 patients to be monitored in primary care to ease demand in hospital eye departments across Wales.
- 53.** **The aim of the new eye care pathways, through GOS Wales levels 3&4 monitoring is to increase capacity in hospital eye departments by freeing up 35,000 follow up appointments through monitoring in primary care.**

Private Patients

- 54.** Current optometry practice has a mixture of approximately 70% NHS patients and 30% private patients. In the review of GOS services and subsequent new contract in Scotland, all eye care services are now provided through the NHS. The provision of an optical appliance is still restricted to exempt groups.
- 55.** There are advantages and disadvantages to this approach in Wales:
- 56.** Advantages include the ability to provide equitable access and standardised eye care services for all citizens in Wales. This standardised approach realises health benefits for all citizens, planning for services can be developed on an all Wales basis with the ability to monitor activity, and data for all eye care services.
- 57.** The main disadvantage concerns the financial exposure to a 30% increase in the eligibility for NHS sight tests in Wales. Models exist elsewhere in primary care where patient revenue charges are collected from patients who are not in an exempt category due to financial reasons (dentistry). This could be applied in optometry to mitigate the increased financial liability to providing NHS services to all.

Primary Care Clusters

- 58.** "A cluster brings together all local services involved in health and care across a geographical area, typically serving a population between 25,000 and 100,000. Working as a cluster ensures care is better co-ordinated to promote the well-being of individuals and communities."
- 59.** One of the aims of the national Wales Eye Care Service Joint Committee is to work with the Welsh Government Primary Care Contract Reform Group to strengthen and drive forward cluster working arrangements. This needs to be

progressed in conjunction with the optometric workforce and in alignment to the other contractor professions across Wales.

- 60.** Cluster decisions need to involve optometry and use the Welsh Index of Multiple Deprivation, to make informed decisions around locally commissioned eye care services in cluster areas: [Welsh Index of Multiple Deprivation 2019](#)
- 61.** Optometrists working within clusters and included in local considerations will ensure decisions are made based on the needs of the local population. Optometrists will also be able to ensure investment and funding is directed at proper utilisation of primary care optometric estates and training.
- 62.** A process needs to be established to include optometry within a cluster area, to meet to consider the eye care needs of its population, and enable the appropriate representation to better co-ordinate and promote the well-being of individuals and communities eye health care provision.
- 63.** Engaging with Regional Partnership Boards would also enable seamless health and social care service provision is provided in line with “*A Healthier Wales*” towards the goals of the “*Well-Being of Future Generations Act*.”

Financial Analysis

- 64.** The barriers to transformational change and the provision of new service models across the eye care pathways have been described previously within this paper; however, optometry practices are an integral part of High Street businesses in Wales, and enable timely convenient access to primary eye health care for citizens. In view of this, the barriers to change need to be removed to improve relationships within the clinical team, to ensure better outcomes for patients, as well as supporting optometry to continue contributing to the overall economy in Wales.
- 65.** Moving away from the loss leading business model with its emphasis on the sale of optical appliances, to a clinical model of eye health care requires a different model of funding with consideration of:
- Improved outcomes for patients
 - Improved access to all eye care services for patients
 - Access to services close to the patients home
 - A skilled workforce fit for delivery of eye care in the 21st century
 - Cost effective eye care pathways for NHS Wales and Local Authorities
- 66.** To achieve this, the Welsh Government has initiated a full options appraisal to scope all financial models to deliver contract reform.

- 67.** The new service and financial model will take a gradual and phased approach over a 5-year period and link to appropriate qualifications and training requirements in optometry. Appropriate costs will be established to deliver effective eye care pathways over the same timeframe as demand for specialised hospital services decrease and capacity increases in the clinical team across the whole eye care pathway.

Continuous professional development, leadership and support for the profession

- 68.** Ensuring the profession can continually progress their skills and knowledge to deliver new services requires change. This is an opportunity not just to enhance continuous professional development (CPD) over and above the regulator's obligations, but also to build support, leadership and quality improvement for the profession. This is underpinned by the development of an optometry section within Health Education and Improvement Wales (HEIW) resulting in improved services and patient care.

Continuous Professional Development (CPD)

- 69.** To deliver new services, certain skills and learning elements are compulsory, with selective CPD allied to the 3-year regulator standards. CPD will be for the whole profession but will also be tailored to the services and work that an optometrist, dispensing optician and contact lens optician undertakes. Reflective portfolios will facilitate teaching, attitudes and professionalism. The focus will be on scope of practice, reflection and mentoring aligned with other health care professions, such as dentistry and medicine.
- 70.** Postgraduate higher qualifications commissioning will continue, as they have been successful to underpin services in Wales. For example, optometrist independent prescribers managed over 90% of patients with acute eye conditions without the need for eye casualty or other hospital eye department intervention during the red and amber phases of Covid-19 recovery plan in Wales.

Placements

- 71.** The attainment of higher qualifications requires optometrists to undertake placements within the hospital eye departments, gaining experience of managing complex cases, and building relationship with the whole clinical team. This aspect is essential for the successful delivery of future eye care services and improves collaborative working between optometry and ophthalmology.
- 72.** In Wales, a unique approach to training placements will be for optometrists to be contracted to work in NHS hospital or specialist teaching practices during their placement. A NHS coordinator working within each hospital to facilitate the placements and ensure an appropriate clinical case mix, adequate and appropriate supervision and management of estates and clinical room is vital to the success of the placements.

Mentorship and support

- 73.** Mentoring facilitates CPD through a network of experienced optometrists that guide newly qualified optometrists. Mentoring considers their scope of practice for CPD requirements as well as providing support and guidance. Mentoring support includes an assigned designated Mentor, an online platform to create a portfolio and a peer support network. Optometrists need support when they take on additional clinical roles and, crucially, enable them to become more adept at managing and accepting clinical risk.
- 74.** The following is an example of how a Mentor can help. Recent research (Parkins et al, 2018) demonstrated, newly qualified optometrists may over refer. At a time when clinical confidence and experience are still developing, an increased workload on qualification may lead to pressure to make quick and more risk-averse decisions, and consequently refer more readily. A Mentor, recourse to a peer support network and opportunities to take part in peer review will build confidence and enable newly qualified optometrists to accept an appropriate level of clinical risk.

Leadership

- 75.** Optometry is taking on an increasing role in the healthcare of our patients in Wales. There has never been a better time to develop clinical leaders in optometry, with integration of optometry into NHS leadership programmes.
- 76.** As an example, the Welsh Clinical Leadership Training Fellowship (WCLTF) initiated in 2013 has enabled Fellows to take up leadership roles in NHS Wales and Welsh Government. NHS organisations in Wales have been highly engaged and committed to the WCLTF process, offering quality improvement projects within their organisations. The aim is for the optometry profession to lead transformation of the clinical workforce and develop healthcare leaders of the future to support eye care services across NHS Wales.

Communication

- 77.** The Welsh Government Sensory Communications Advisory Group continues to work with all stakeholders to develop key messages and national communication campaigns for the public, clinical team and wider eye care family across social care and other organisations. Working alongside the Wales Eye Care Service Joint Committee to support the transformation of services and delivery of contract reform, the Communications Advisory Group ensures alignment of national communication with local requirements. Key themes include,
- Health boards and primary care clusters delivering a programme of public engagement to create a greater understanding of eye health care services.
 - Linking with national communication programmes, for example, 111, NHS Direct, Choose Well, to ensure public awareness of eye health care services.
 - Developing national and local communication for individuals to manage their own eye health care, through the roll out of self-care.

The overall aim of the Communication Advisory Group is to change the perception of the public about the roles of the clinical team and specifically that of the optometrist,

building on the work already completed that references Sensory Loss as being part of the wider healthcare offering.

Recommendations:

1. Advancement of optometry contract reform to fully realise the agreed future approach for NHS Wales eye health care, moving to a clinically appropriate service model based on the principles of “*A Healthier Wales*” and the seven well-being goals of the Future Generations (Wales) Act.
2. Expansion of continuous professional development programmes, to include reflective practice, mentoring, leadership and placements to fully integrate ophthalmologists and optometrists, develop skills and experience to undertake additional clinical responsibilities.
3. Review of primary care cluster structures to enable full integration of optometry services with an emphasis on patient needs and outcomes at a local population level.
4. Legislative changes to General Ophthalmic Services, Eye Health Examination Wales and Low Vision service Wales clinical examinations will underpin recommendation 1.

Appendix 1⁵

Workforce

1. Data from “Sensory health statistics (eye care and hearing care) published biannually, show the position in Wales regarding workforce, referrals from primary care, and access to hospital eye services.
2. There were 875 optometrists carrying out sight tests paid for by the NHS at 31 December 2018, 34 more than in the previous year and a 19.2% increase since December 2008.
3. At 30 September 2018 there were 133.9 whole time equivalent ophthalmology doctors directly employed by the NHS in Wales.

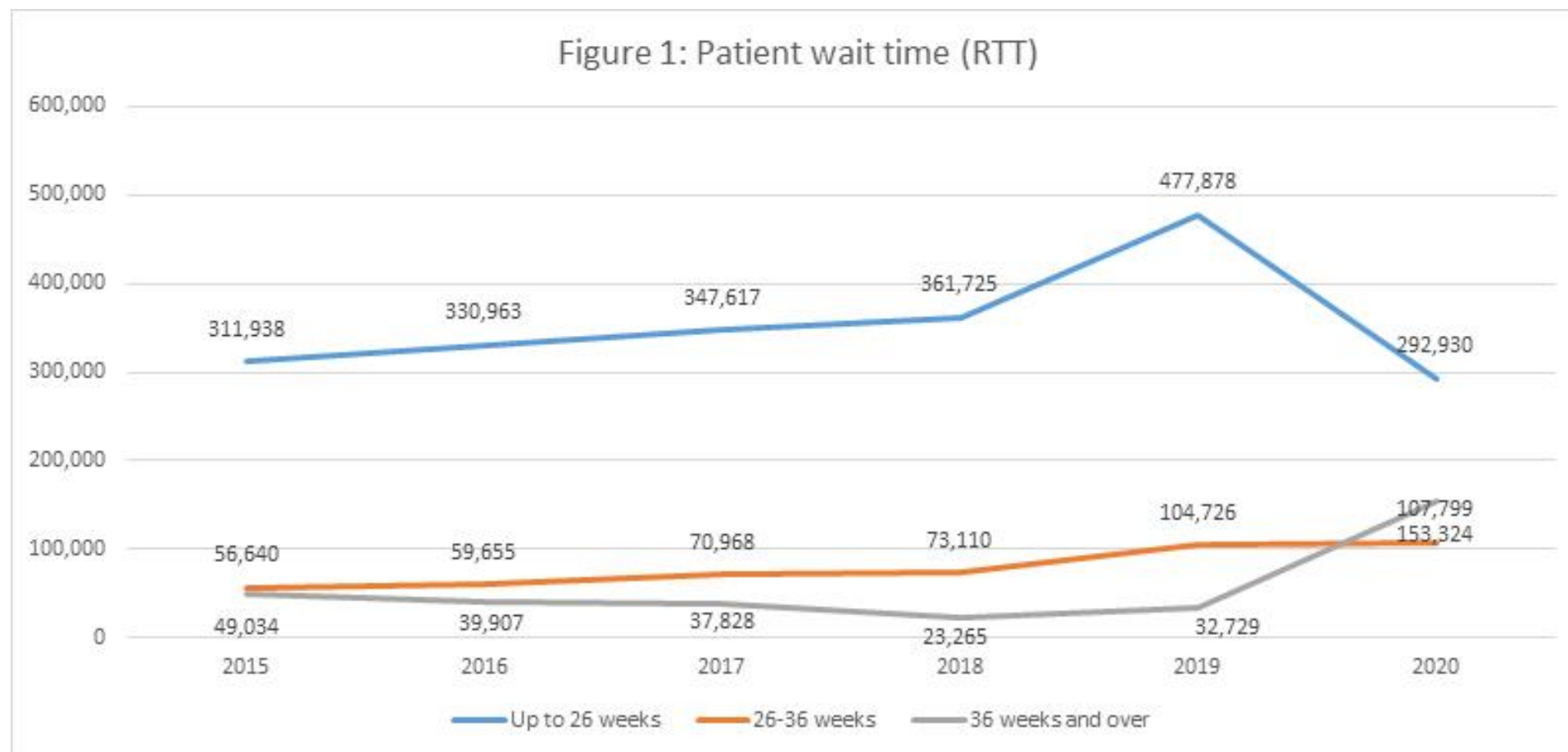
⁵ [Sensory health \(eye care and hearing statistics\): April 2017 to March 2019](#)

Current Demand and Capacity Position in Wales

4. Hospital eye departments managed 322,744 outpatient appointments in 2017/18, of those appointments 85,713 were for new appointments and 237,031 were for follow-up appointments.
5. Hospital eye departments received 107,448 new referrals in the same period.
6. Eye care measures for NHS outpatients have been developed in Wales to provide a framework for new and follow up ophthalmology patients, based on the priority and urgency of care required by each patient and are being reported in addition to the current Referral to Treatment waiting times. The primary intention of the measures is to ensure that:
 - All individuals who are referred to hospital for ophthalmology will have a maximum waiting time which is based on a clinical assessment of their condition and well-being; and
 - All ophthalmology patients who require regular ongoing review or treatment will be seen within clinically indicated intervals, which are also based on their condition and well-being, and should be reviewed at each appointment.
7. The eye care measures for NHS outpatients, by Welsh Local Health Board (LHB) from April 2019 show:
 - The total number of new and follow up ophthalmology patient pathways, that have been assessed as being at risk of irreversible harm or significant adverse outcome should their target date be missed (Health Risk Factor R1), that are waiting for an outpatient appointment.
 - The number and percentage of new and follow up ophthalmology patient pathways, that have been assessed as being at risk of irreversible harm or significant adverse outcome should their target date be missed (Health Risk Factor R1), that are waiting within their target date or within 25% beyond their target date.
8. **Health Risk Factor:** the risk of harm associated with the patient's eye condition if the target review date is missed.
Categorisations are:
 - R1 – risk of irreversible harm or significant patient adverse outcome if target date is missed.
 - R2 – risk of reversible harm or adverse outcome if target date is missed.
 - R3 – no risk of significant harm or adverse outcome.
9. **Target date:** A clinically determined maximum waiting time following referral for a new or follow up ophthalmology outpatient appointment that is in line with national condition specific guidance.

10. **Waiting within target date:** this is the number of new and follow up ophthalmology outpatient pathways that are at or within their target date at the end of the month.
11. **Waiting within 25% of beyond target date:** this is the number of new and follow up ophthalmology outpatient pathways that are up to 25% beyond their target date at the end of the month.
12. Referral to treatment (RTT) figures and performance against eye care measures for ophthalmology (patients waiting within 25% of beyond target date):

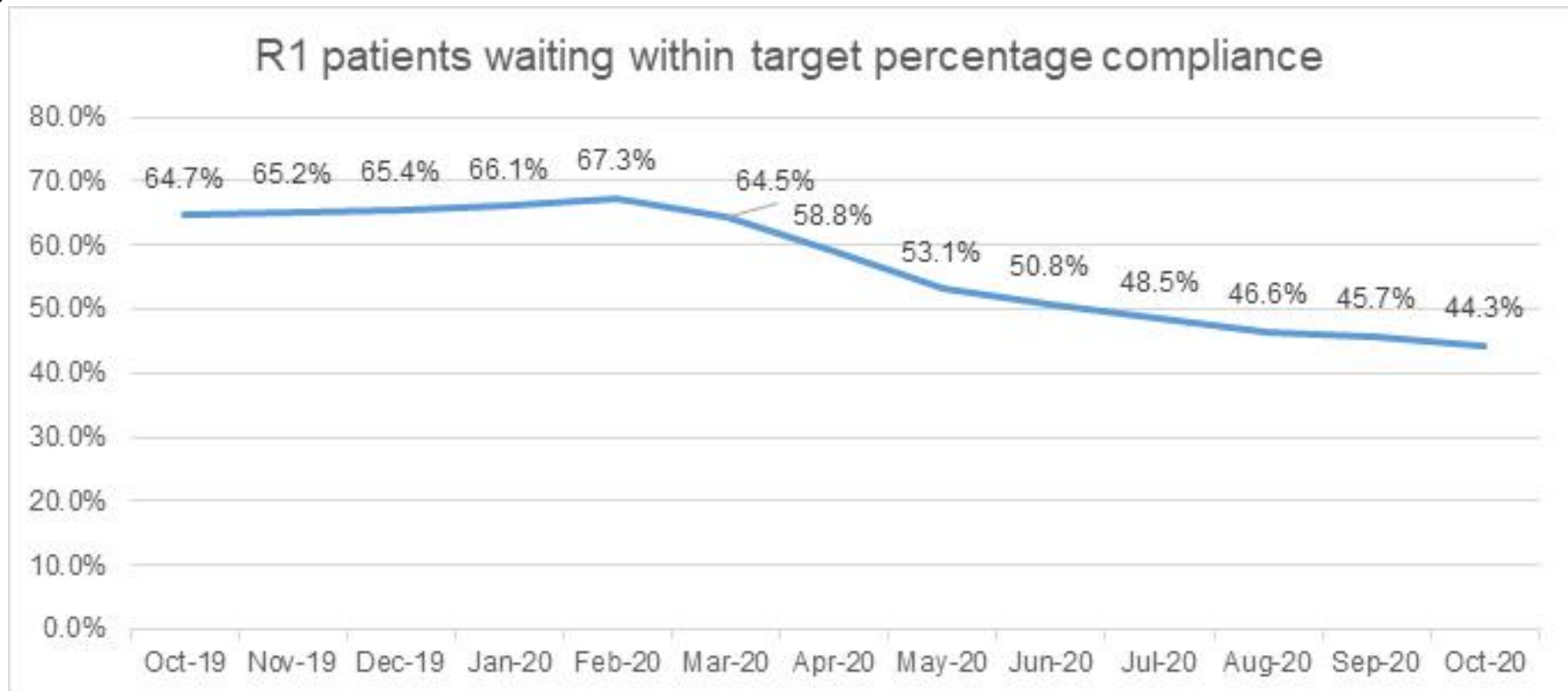
Referral to Treatment Times:



Patient wait time	2015	2015	2016	2016	2017	2017	2018	2018	2019	2019	2020	2020
Up to 26 weeks	311,938	75%	330,963	77%	347,617	76%	361,725	79%	477,878	80%	292,930	53%

Patient wait time	2015	2015	2016	2016	2017	2017	2018	2018	2019	2019	2020	2020
26-36 weeks	56,640	14%	59,655	14%	70,968	16%	73,110	16%	104,726	16%	107,799	19%
36 weeks and over	49,034	12%	39,907	9%	37,828	8%	23,265	5%	32,729	4%	153,324	28%
	417,612		430,525		456,413		458,100		615,333		554,053	

Eye Care Measures:



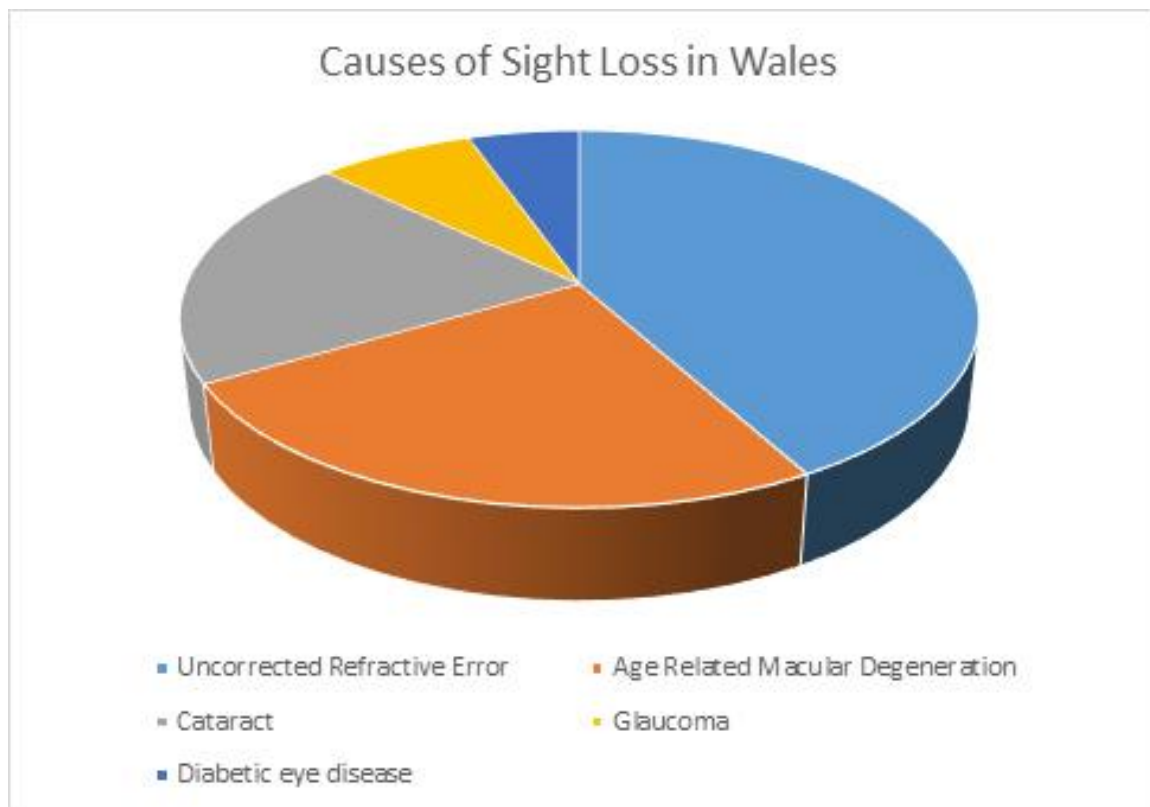
Appendix 2⁶

Population Demographics and Predicted Prevalence of Eye Disease in Wales

1. The demographic changes across the western world are well known; there are more people, and those people are living longer.

The effect of these population changes on ophthalmic services in the UK is clear and this is acknowledged by the College of Optometrists, who are working hard to continue to up-skill their workforce to address the population increase in demand. This is further supported by the Royal College of Ophthalmologists who describe the situation as: “a perfect storm of increased demand, caused by more eye disease in an ageing population requiring long term care”.

2. Attending optometry practices for a regular sight test is important to prevent sight loss and onward referral to hospital eye services. The main causes of sight loss in Wales and throughout the UK are:



- Uncorrected refracted error (39%)
- Age Related Macular Degeneration (23%)
- Cataract (19%)
- Glaucoma (7%)
- Diabetic eye disease (5%)

⁶ [The Royal College of Ophthalmologists: The Way Forward resources](#)

3. Increasing demand for hospital eyes services remains a challenge across Wales, the wider UK nations and Europe. The current demand continues to grow, equating to 10% of all outpatient appointments and 6% of the surgery in the UK.

Table 1 Prevalence of eye disease in Wales

	Prevalence	Predicted increase over next 20 years (%)	Predicted increase over next 20 years (Numbers)
Population of Wales	3,230,490		
Major Eye Conditions			
AMD	159,000 early stages AMD	47%	233,730
	12,200 late stage dry AMD	47%	17,934
	25,300 late wet stage AMD	47%	37,191
Cataract	40,100 people living with cataract	50%	60,150
	19,770 hospital admissions for cataract surgery	50%	29,655
Glaucoma	68,000 people living with Ocular Hypertension (OHT)	16%	78,880
	38,000 people living with glaucoma	44%	54,720
Diabetic Retinopathy	63,800 people living with diabetic retinopathy	20% if age specific prevalence remains constant, 50-80% predicted rise if in line with other western countries.	76,560 if age specific prevalence remains constant, 95,700- 114,840 50-80% predicted rise if in line with other western countries.
	Of those, 5,870 living with severe diabetic retinopathy- (a later stage of the disease that is likely to result in significant and potentially certifiable sight loss)	20% if age specific prevalence remains constant, 50-80% predicted rise if in line with other western countries.	7,044 if age specific prevalence remains constant, 8,805- 10,566 predicted rise if in line with other western countries

Table 2. Prevalence data (2)⁷⁸

	Prevalence	Predicted increase over next 10 years (%)
Population of Wales	3,121,500⁹	3,205,781 (2.7%-Office for National Statistics)
Population aged over 65	678,403 (21%)	861,572
Population aged over 75	290,744 (9%)	298,594
Black, Asian and Minority Ethnic Population	190,598 (5.9%)	195,744
People living with Sight Loss	121,000	146,410 (21% over the next 10 years)
People registered as Severely Sight Impaired or Sight Impaired	16,994	20,563 (21% over the next 10 years)
Cost of sight loss in Wales each year	Including direct and indirect costs, the estimated cost of sight loss each year is £1,438,000,000	

⁷ RNIB - See differently. 2020. [Sight Loss Data Tool](#)

⁸Statswales.gov.wales. 2020. [Ethnicity by Area and Ethnic Group](#)> [Accessed 14 December 2020].

Appendix 3¹⁰:

The Royal College of Ophthalmologists, Workforce Census Executive Summary

The Royal College of Ophthalmologists second workforce census was sent to 135 trust and health boards providing ophthalmology in the UK in May 2018.

1. There are many unfilled consultant posts:

a. Overall there are 77% units (14% of all consultant posts) in the UK where consultant posts do not have a substantive appointment

b. 67% of units are using locums to fill 127 consultant posts

c. The number of locums has increased significantly by 52% since the last census

d. 42 consultant ophthalmologist posts are completely vacant, i.e. not filled with a substantive or locum consultant

2. The census data suggests an extra 230 consultant posts are required to meet the rising demand for ophthalmology services over the next two years. This increase of 22% more consultants compares with an estimated 8% increase in posts required in 2016

3. 54% of units in the UK have unfilled Specialty and Associate Specialist (SAS) doctor posts

4. Responding units estimate that 204 extra SAS posts are required to meet rising demand over the next two years

5. Since the number of trainees acquiring specialist registration through their Certificate of Completion of Training (CCT) or doctors acquiring The Certificate of Eligibility for Specialist Registration (CESR) each

year is on average 74, there are nowhere near enough appropriately trained doctors to fill current and future consultant posts.

6. 27% of consultants and 20% of SAS doctors are aged 55 years and older i.e. nearing probable retirement

7. 25% of consultants and 31% of SAS doctors work less than full time – this has dropped from over 50% in 2016

8. 85% of units are undertaking waiting list initiatives to attempt to manage demand

9. 66% of waiting list initiatives are undertaken by responding units rather than by other independent providers

10. As an estimate, for most unit sizes, there is a current consultant whole time equivalent (WTE) of around 2 per 100,000 population; an ideal consultant whole time equivalent of 3 to 3.5 per 100,000

11. 86% of responding units rely on nonmedical professionals working in extended roles to provide service to some extent

12. 69% of consultants are male and 31% female

13. 53% of SAS doctors are male and 47% female

¹⁰ Ophthalmologists, T. 2020. [Workforce Census 2018 - The Royal College of Ophthalmologists](#).

Appendix 4:

Aims of Contract Reform and Links to Current Welsh Government Policy

Aim	Link to A Healthier Wales	Link to Primary Care Strategic Programme	Link to other Policies, including primary care contract alignment
1. To continue to develop primary care optometry services to prevent unnecessary referrals into hospital eye departments.	<ol style="list-style-type: none"> 1. A whole system approach to health and social care 2. An equitable system which achieves equal health outcomes for all 3. Services which are seamless, delivered closer to home 4. People will only go to hospital when it is essential 5. Using technology to support high quality, sustainable services 	<ol style="list-style-type: none"> 1. 24/7 Service Model 2. Digital Technology 3. National Transformational Programme and Vision for Clusters 4. Prevention and Wellbeing 5. Workforce & OD 	<ol style="list-style-type: none"> 1. Principles of Prudent Healthcare 2. Improving access to and from services 3. Focussing on quality and prevention 4. Driving cluster working/working at scale 5. Strengthening our workforce
2. To reduce the demand on hospital eye departments to ensure that only those patients needing specialist services are referred.	<ol style="list-style-type: none"> 1. Longer, Healthier and Happier lives 2. A whole system approach to health and social care 	<ol style="list-style-type: none"> 1. 24/7 Service Model 2. Digital Technology 3. National Transformational Programme and Vision for Clusters 	<ol style="list-style-type: none"> 1. Principles of Prudent Healthcare 2. Improving access to and from services 3. Focussing on quality and prevention

Aim	Link to A Healthier Wales	Link to Primary Care Strategic Programme	Link to other Policies, including primary care contract alignment
	<ul style="list-style-type: none"> 3. An equitable system which achieves equal health outcomes for all 4. Services which are seamless, delivered closer to home 5. People will only go to hospital when it is essential 6. Using technology to support high quality, sustainable services 	<ul style="list-style-type: none"> 4. Prevention and Wellbeing 5. Workforce & OD 	<ul style="list-style-type: none"> 4. Driving cluster working/working at scale 5. Strengthening our workforce
<p>3. To ensure only patients who need to be monitored and treated in specialist services remain in the hospital eye department. All low and medium risk patients to be monitored by optometry in primary care.</p>	<ul style="list-style-type: none"> 1. A whole system approach to health and social care 2. An equitable system which achieves equal health outcomes for all 3. Services which are seamless, delivered closer to home 4. People will only go to hospital when it is essential 5. Using technology to support high quality, sustainable services 	<ul style="list-style-type: none"> 1. 24/7 Service Model 2. Digital Technology 3. National Transformational Programme and Vision for Clusters 4. Prevention and Wellbeing 5. Workforce & OD 	<ul style="list-style-type: none"> 1. Principles of Prudent Healthcare 2. Improving access to and from services 3. Focussing on quality and prevention 4. Driving cluster working/working at scale 5. Strengthening our workforce

Aim	Link to A Healthier Wales	Link to Primary Care Strategic Programme	Link to other Policies, including primary care contract alignment
<p>4. To introduce technology solutions (i.e. electronic referrals, digital electronic patient record and video capability for consultation between health professionals and the patient) to support full implementation of the national integrated patient eye care pathways and reaffirm the requirement for shared care.</p>	<ol style="list-style-type: none"> 1. Longer, Healthier and Happier lives 2. A whole system approach to health and social care 3. An equitable system which achieves equal health outcomes for all 4. Services which are seamless, delivered closer to home 5. People will only go to hospital when it is essential 6. Using technology to support high quality, sustainable services 	<ol style="list-style-type: none"> 1. 24/7 Service Model 2. Communication and Engagement 3. Digital Technology 4. National Transformational Programme and Vision for Clusters 5. Prevention and Wellbeing 6. Workforce & OD 	<ol style="list-style-type: none"> 1. Principles of Prudent Healthcare 2. Improving access to and from services 3. Focussing on quality and prevention 4. Driving cluster working/working at scale 5. Strengthening our workforce

Appendix 5

Primary Care- Eye Care Services in Wales

General Ophthalmic Services (GOS)

1. The four countries of the UK have different structures and ways of delivering eye care services. As health is a devolved area, Northern Ireland, Scotland and Wales can make their own decisions. Optometrists, like many other primary care professionals, are contracted to deliver NHS services. Primary eye care services in the UK are mainly provided under a General Ophthalmic Services (GOS) contract between the NHS and practice owners (contractors). More than two-thirds of sight tests delivered across England, Northern Ireland and Wales, and all tests in Scotland, are under a GOS contract.
2. General Ophthalmic Service sight tests must meet requirements as set out by the GOS mandatory service contracts. These establish that a sight test must include an internal and external ocular examination, and carry out any additional examinations as appear to be clinically necessary to detect signs of injury, disease or abnormality in the eye or elsewhere (Opticians Act, 1989;). Therefore, the extent of sight tests and eye examinations is limited only to detection, and not to the scope of diagnosis, monitoring or managing ocular conditions.
3. Prior to changes to the rules on referral in 2000, optometrists referred all patients with signs of ocular disease or abnormalities to a medical practitioner in the hospital eye departments or a GP. The GOC changes to the rules on referrals following the NHS Act of 1997, permitted optometrists to use their own clinical judgement to refer only when necessary and to monitor and manage non-urgent eye conditions. This amendment to the role of optometrists led to the expansion and continued developments of NHS community enhanced services and eye care pathways (see section below about Eye Health Examination Services, Low Vision Services and Diabetic Eye Screening services).
4. In Wales, you are eligible for NHS funded sight test if you:
 - Are under 16;
 - Are in full-time education and aged 16, 17 or 18;
 - Are aged 60 or over;
 - Are a diagnosed glaucoma patient;
 - Are aged 40 or over and are the parent, brother, sister, son or daughter of a diagnosed glaucoma patient, or
 - Have been advised by an ophthalmologist that you are at risk of glaucoma;
 - Have been diagnosed as diabetic;
 - Are registered blind or partially sighted;
 - Need complex lenses;
 - Are someone whose sight test is carried out through the hospital eye department as part of the management of your eye condition;
 - Get or are included in an award of someone getting:
 - Income support, or Income-based Jobseeker's Allowance,

- Universal Credit,
- Income-related Employment and Support Allowance, or
- Pension Credit Guarantee Credit
- Are entitled to, or named on, a valid NHS tax credit exemption certificate;
- Are named on a valid HC2W certificate

NHS optical vouchers

In addition to a funded NHS sight test, the following groups are also entitled to an optical voucher for help towards the cost of glasses or contact lenses, if you:

- Are under 16;
- Are in full-time education and aged 16, 17 or 18;
- Need complex lenses
- Get or are included in an award of someone getting:
 - Income support, or Income-based Jobseeker's Allowance,
 - Universal Credit,
 - Income-related Employment and Support Allowance, or
 - Pension Credit Guarantee Credit
- Are entitled to, or named on, a valid NHS tax credit exemption certificate;
- Are named on a valid HC2W certificate.

Eye Health Examination Wales (EHEW)

5. NHS Wales nationally commissions enhanced eye health care services outside the remit of the GOS sight test. Enhanced eye health services are delivered through the eye health examination service, and enable more people to be managed in primary and community care through an eye health examination, further investigation/examination after a GOS or private sight test.
6. Recognising the increasing gap between the demand for, and capacity to provide specialist services in hospital eye departments, the Welsh Government developed policy to utilise the available skilled optometric workforce. The launch of the enhanced eye health examination in May 2002 brought together the Primary Eye Care Acute Referral Scheme and an enhanced examination for groups at risk of developing eye disease, to produce the Wales Eye Care Initiative.
7. The service enabled optometrists to become the first point of contact for acute eye conditions in primary care, enabling optometrists to manage a range of non-sight threatening conditions and alleviate pressures on GPs. Direct referral routes from the optometrists to the hospital eye departments were also implemented, to become standard across Wales.
8. The routine dilation of patients, use of a binocular indirect retinal examination, threshold visual field testing and Goldmann tonometry, formed the basis of NHS Wales enhanced service provision for at risk groups, with an emphasis on early detection of eye disease and improved outcomes for patients.

9. Patients eligible for an enhanced examination included at risk categories such as:
- People with sight in only one eye;
 - People with a hearing impairment;
 - People diagnosed with retinitis pigmentosa;
 - People at risk of eye disease by reason of ethnic group (Asian or Black).
10. As Welsh Government policy evolved, eye health services developed to be known as the Wales Eye Care Services (WECS), encompassing the Eye Health Examination Wales (EHEW), Low Vision Service Wales (LVSU) and Diabetic Eye Screening Wales (DESW).
11. NHS Wales recognises the important role optometrists play in delivering WECS services to reduce the burden on GP primary care services and hospital eye departments. The EHEW service now comprises three elements.
- EHEW Band 1 examinations are for patients presenting with an eye problems of an acute nature, those who would find losing their sight particularly difficult or those who are at increased risk of developing sight-threatening conditions. Band 1 also accepts referrals from other health professionals.
 - EHEW Band 2 examinations enable patients to have additional investigations following a GOS or private sight test only. Band 2 is used to further inform or prevent onward referral to the hospital eye departments
 - EHEW Band 3 examinations enables a patient to be followed-up after an initial appointment for an EHEW Band 1 or for a hospital eye department post-operative cataract review.
12. These services enable optometrists to reduce referrals and demand for specialist services and enhancing working relationships between health professionals enables shared patient care and improves patient outcomes.

Low Vision Service Wales (LVSU)

13. Eye care services continued to develop with the introduction of the Low Vision Service Wales in 2003. Increased waiting times for low vision appointments in hospital eye departments across Wales, led to the development of the service for delivery by practitioners (optometrists and dispensing opticians).
14. The service enables practitioners to assess patients and determine if any low vision aids are available to help with their sight impairment, to live as independently as practicably possible and to reach their full educational and social potential. The assessment might include a variety of magnifiers and visual aids for both distance and near tasks, as well as non-visual aids such as angled lamps and typoscopes (outlined in the NHS Wales low vision aid catalogue). As an NHS Wales service, all low vision aids are available on loan and are free of charge.

- 15.** Practitioners also refer to other professionals and have close links with services that provide additional help and support including, social services, Rehabilitation Officer for Visual Impairment (ROVI) to provide rehabilitation and specialist habilitation services, third sector, hospital eye departments (for those people wishing to be certified as sight impaired or severely sight impaired), education services or employment services.
- 16.** Patient referrals to access a low vision assessment is through a number of routes including self-referral, hospital eye departments, social services, other professionals, the third sector and education. Patients will qualify to access the low vision service if they meet the key criteria, which is binocular best corrected visual acuity of 6/12 or worse, and/ or near acuity of N6 or worse (with a plus 4 dioptre reading addition) or significantly constricted visual fields.

Private Eye Examinations

- 17.** NHS Wales provides free sight tests for a number of different categories of people (paragraph 27 above); EHEW and Low Vision services are also accessed with no charge to all citizens of Wales. Anyone who does not fit into one of the category criteria will instead access and pay for a private sight test.
- 18.** Private sight tests must meet the same mandatory requirements as set out in the Opticians Act 1989. These establish that a sight test must include an internal and external ocular examination, and carry out any additional examinations as appear to be clinically necessary to detect signs of injury, disease or abnormality in the eye or elsewhere.

Optometrists that work in Secondary Care

- 19.** Optometrists working in hospital settings carry out both traditional optometric roles such as refraction for patients under the care of ophthalmology, and more commonly, extended-role working. This includes care and management of patients in high-priority clinics such as medical retina, glaucoma and emergency eye care, and often working autonomously at an interchangeable level to a specialist ophthalmologist registrar.
- 20.** Management of “medium-risk” patients by highly trained optometrists in this setting frees up valuable senior ophthalmologist time for more complex cases/surgery, and helps to meet some of the demand with doctor shortages.

Appendix 6

Clinical Scenarios

Prevention and wellbeing:

- Patients to access this through all health board ophthalmic services in Wales.
- All elements to be provided as routine by eye care practitioners in Wales in each step of the eye care pathway.
- Ability to use dispensing opticians (DOs) contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway.
- To be provided as routine for each sight test and as clinically necessary as part of other clinical scenarios. An example would be lifestyle discussions or services supporting population risk factor priority area, where patients present for an acute eye problem linked to an underlying health cause.

Prevention and healthy living	<ul style="list-style-type: none">• Making Every Contact Count - Lifestyle discussions (obesity, alcohol?)• Services supporting population risk factors priority areas based on evidence of effectiveness in this setting<ul style="list-style-type: none">○ Behavioural e.g. smoking cessation○ Clinical e.g. blood pressure• UV protection• Loneliness and isolation• Trips and falls (general advice)	<ul style="list-style-type: none">• Optometrist• Dispensing Optician• Contact lens Optician• Orthoptist• Optometric assistant/other non-professional staff.
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Delegation

The College of Optometrists provides the following guidance regarding delegation by optometrists¹¹:

Delegation is different from referral. Referral is when you arrange for another practitioner to provide a service that falls outside your scope of practice, contract or professional competence, such as referring a patient to a contact lens optician for contact lens care. Delegation is when you ask a colleague to provide care or undertake a procedure on your behalf.

When you delegate care, you are still responsible for:

1. the overall management of the patient, and must ensure that your patient receives the same standard of care that you would provide, and
2. the work of the person to whom you have delegated the procedure and any clinical findings.

When you delegate, you should be satisfied that the person to whom you delegate has the skills and experience to provide the relevant care or undertake the procedure. If harm can result from the procedure, such as instilling eye drops or insertion and removal of a contact lens, you must remain on the premises so you can intervene if necessary.

You should not ask someone who is not suitably qualified to interpret any clinical findings.

You should explain to the patient that you are delegating a particular part of their care to your colleague and that you will discuss any clinical findings with the patient.

You must not delegate any part of the protected functions of sight testing or contact lens fitting, including any part that would be regarded as assessing the patient or exercising professional judgement, other than to someone who is registered to perform the protected functions.

¹¹ <https://guidance.college-optometrists.org/guidance-contents/communication-partnership-and-teamwork-domain/working-with-colleagues/delegation/>

Summary Table

Proposed Service	Current equivalent Service	Additional service elements	Qualifications/training required
GOS Wales Level 1	General Ophthalmic Services Sight Test (GOS)	<p>Prevention and wellbeing:</p> <ul style="list-style-type: none"> • Smoking cessation • Blood pressure • Lifestyle discussions (Obesity, Alcohol) • Loneliness and isolation • Trips and falls • UV protection <p>Patient management plan based on individual needs assessment</p>	<p>Core competencies for all optometrists.</p> <p>CPD requirements for additional service elements</p>
GOS Wales Level 2 (Low Vision Service Wales)	LVSW	<p>No additional service elements.</p> <p>To be performed by optometrists/dispensing opticians as per current LVSW protocols and guidance.</p>	Current LVSW accreditation (Prof cert Low Vision)
GOS Wales Level 2 (referral Refinement)	<p>EHEW Band 2</p> <p>Low Vision Annual re-assessment</p>	<p>No additional service elements.</p> <p>To be performed by all optometrists/contact lens opticians as per current EHEW protocols and guidance.</p>	<p>Core competencies for all optometrists.</p> <p>Current EHEW accreditation</p> <p>Current LVSW accreditation (Prof cert Low Vision)</p>

Proposed Service	Current equivalent Service	Additional service elements	Qualifications/training required
GOS Wales Level 2 (Acute Eye Care)	EHEW Band 1	No additional service elements. To be performed by all optometrists/contact lens opticians as per current EHEW protocols and guidance.	Core competencies for all optometrists. Current EHEW accreditation Contact Lens Opticians Anterior segment EHEW Accreditation
GOS Wales Level 2 (Follow-up Care)	EHEW Band 3	No additional service elements. To be performed by all optometrists/contact lens opticians as per current EHEW protocols and guidance.	Core competencies for all optometrists. Current EHEW accreditation Contact Lens Opticians Anterior segment EHEW Accreditation
GOS Wales Level 2 (Monitoring)	N/A - New service development	<ul style="list-style-type: none"> Co-management model with HES where, patients are monitored with decisions made virtually by a consultant ophthalmologist. 	Core competencies for all optometrists. EHEW accreditation
GOS Wales Level 3 (Monitoring Glaucoma Medical Retina)	N/A - new service development	<ul style="list-style-type: none"> Discharge model, where patients are discharged with a management plan. Changes in clinical appearances requiring referral back into HES 	Equivalent levels of qualifications needed to practice at this level. Higher certificate in glaucoma and Professional Certificate in medical retina for

Proposed Service	Current equivalent Service	Additional service elements	Qualifications/training required
		<p>when specified conditions have been met.</p> <ul style="list-style-type: none"> • Capable of detecting change in clinical status. • Recommends treatment changes to be instigated. • Approved by consultant ophthalmologist via virtual review. • Patient not discharged from hospital eye service. 	<p>example being the appropriate level of expertise.</p>
GOS Wales Level 4 (Acute Eye Care)	N/A - new service development	<p><u>Advanced practitioner managing acute presentations,</u></p> <ul style="list-style-type: none"> • Intended for advanced referral refinement/management in primary care with an expectation of increased level of management, treatment and prevention of onward referral. • Intended to provide an eye casualty in primary care • Practitioner capable of making independent diagnosis and treatment decisions • Formulates a management plan. 	<ul style="list-style-type: none"> • Minimum qualification of Optometrist Independent Prescriber

Proposed Service	Current equivalent Service	Additional service elements	Qualifications/training required
		<ul style="list-style-type: none"> • Reviews patient at intervals as dictated by NICE/other appropriate clinical guidelines. • Refers to HES only when outside of clinical competencies of IP optometrist/other treatments required. • Patients access the service via a referral from a WECS 2 accredited optometrist (Inter-referral/intra-practice referral). • Increased necessity for clinical audit, research and governance embedding quality improvement into all elements. 	
GOS Wales Level 4 (Follow-up Care)	N/A - new service development	<ul style="list-style-type: none"> • Intended for advanced follow-up in primary care with an expectation of increased level of management, treatment and prevention of onward referral. • Patients access the service following a WECS Level 4 acute assessment (as per EHEW band 3 at present) 	<ul style="list-style-type: none"> • Minimum qualification of optometrist independent prescriber

Proposed Service	Current equivalent Service	Additional service elements	Qualifications/training required
		<ul style="list-style-type: none"> Increased necessity for clinical audit and governance embedding quality improvement into all elements. 	
GOS Wales Level 4 (Monitoring/treatment Glaucoma)	N/A- new service development	<ul style="list-style-type: none"> Discharge to optometrist with relevant qualifications to autonomously manage OHT, glaucoma suspect and low risk glaucoma patients including changes in treatment. Capable of detecting change in glaucoma status. Capable of changing management plan and treatment independently. Patients discharged into care of optometrist 	<ul style="list-style-type: none"> Minimum qualification: Higher Certificate in glaucoma plus IP

General Ophthalmic Service (Wales) Level 1

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Patients to access this through all health board ophthalmic services in Wales
- All elements to be provided as routine by eye care practitioners in Wales.
- Includes domiciliary sight tests

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician • Contact lens Optician • Orthoptist
Prevention and well being	<ul style="list-style-type: none"> • Making Every Contact Count - Lifestyle discussions (obesity, alcohol?) • Services supporting population risk factors priority areas based on evidence of effectiveness in this setting <ul style="list-style-type: none"> ○ Behavioural e.g. smoking cessation ○ Clinical e.g. blood pressure • UV protection • Loneliness and isolation • Trips and falls (general advice) • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician • Contact lens Optician • Orthoptist • Optometric assistant/other non-professional staff.
Determination of prescription (for the purposes of supplying an optical appliance)	<ul style="list-style-type: none"> • As clinically necessary 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician • Contact lens Optician

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway
		<ul style="list-style-type: none"> • Orthoptist (with additional training) • Autorefractor
Ocular health examination (undilated)	<ul style="list-style-type: none"> • Anterior segment examination (slit lamp)* • Posterior segment examination (Volk)* <p>*Where clinically possible. In situations which prevent slit lamp examination, optometrist to annotate clinical record accordingly</p>	<ul style="list-style-type: none"> • Optometrist • Orthoptists with additional training.
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields (all over 40 and other at risk groups as clinically necessary) • Tonometry (As clinically necessary) • Retinal photography • OCT • Other 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. • Starting place for subsequent examinations. 	<ul style="list-style-type: none"> • Optometrist
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> • Quality Improvement • PROMS 	<ul style="list-style-type: none"> • Optometrist • DO

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway
	<ul style="list-style-type: none"> PREMS 	<ul style="list-style-type: none"> CLO Orthoptist

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms. Review of management plan at subsequent appointments.	Alteration in lifestyle	Patient reported outcome measure (PROM) or Review of management plan at the next appointment.
Correction of defect of sight	Optical appliance	Improvement in visual acuity	VA measurement as recorded in clinical record Clinical audit
Detection of ocular pathology	Eye health examination. Referral as appropriate for specialist intervention	Prevention of avoidable sight loss Intervention for specialist advice and treatment.	Recorded in clinical record. Clinical audit
Good quality experience	Nationally agreed level of skills/training	Positive experience and outcome	Continual professional development met and recorded by eye care practitioner. Patient reported experience measure (PREM)
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit

Desired outcome	Intervention	Change Affected	Measurement
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the overall number of referrals to the hospital eye service.			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) level 2 (Referral Refinement):

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Patients to access this through all health board ophthalmic services in Wales
- Examination follows a routine examination.
- Current equivalent of EHEW band 2 and accreditation.
- All practices in Wales provide this service (increase in standards for all practices)
- LVSW- inclusive to all who wish to participate.
- Referral to HES only from EHEW accredited practitioners.

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician 	<ul style="list-style-type: none"> • EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
		<ul style="list-style-type: none"> Contact lens Optician Orthoptist 	
Cycloplegia/ Mohindra Myopia control	<ul style="list-style-type: none"> As clinically necessary 	<ul style="list-style-type: none"> Optometrist 	<ul style="list-style-type: none"> EHEW
Anterior Segment Assessment	<ul style="list-style-type: none"> Pre-dilation Oculoplastics Dry Eye (Appropriate clinical guidelines) Chronic ocular conditions Others as clinically necessary 	<ul style="list-style-type: none"> Optometrist Contact lens Optician Orthoptists with additional training. 	<ul style="list-style-type: none"> EHEW
Ocular health examination (As clinically necessary. Dilation/use of OCT as clinically necessary)	<ul style="list-style-type: none"> Cataract (for direct listing) Dry AMD Glaucoma refinement (disc and macula assessment) At risk groups Others (monitoring e.g. hydroxychloroquine?) List not exhaustive 	<ul style="list-style-type: none"> Optometrist Orthoptists with additional training. 	<ul style="list-style-type: none"> EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields (repeat or strategy change) • Contact tonometry • Retinal photography • OCT • Biometry • Patient counselling 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant 	<ul style="list-style-type: none"> • Appropriate training and standard operating procedures
Low Vision Assessment	<ul style="list-style-type: none"> • Examinations performed as per current protocols. • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • DO • Orthoptist with appropriate qualification 	<ul style="list-style-type: none"> • LVSW (Prof cert Low Vision)
Specialist Contact Lenses	<ul style="list-style-type: none"> • To be confirmed following WOC paper 	<ul style="list-style-type: none"> • Optometrist • CLO 	<ul style="list-style-type: none"> • EHEW • TBC
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> Starting place for subsequent examinations. 		
Reporting/Data Collection/Quality Improvement/	<ul style="list-style-type: none"> Quality Improvement PROMS PREMS Research 	<ul style="list-style-type: none"> Optometrist DO CLO Orthoptist 	<ul style="list-style-type: none"> EHEW

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms. Review of management plan at subsequent appointments.	Alteration in lifestyle	Patient reported outcome measure (PROM) or Review of management plan at the next appointment.
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.

Desired outcome	Intervention	Change Affected	Measurement
Good quality experience	Correct level of skills/training	Positive experience and outcome	Continual professional development met and recorded by eye care practitioner. Patient reported experience measure (PREM)
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the overall number of referrals to the hospital eye service.			Statistical analysis Practitioner audit
80% conversion rate for cataract referrals			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) Level 2- Acute eye care:

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Patients to access this through all health board ophthalmic services in Wales
- Examination follows referral/self-presentation.
- Current equivalent of EHEW Band 1 and accreditation.
- All practices in Wales provide this service (increase in standards for all practices)

- Referral to HES only from EHEW accredited practitioners.
- Includes domiciliary acute eye care

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician • Contact lens Optician • Orthoptist 	<ul style="list-style-type: none"> • EHEW
Anterior Segment Assessment	<ul style="list-style-type: none"> • Pre-dilation • Red eye • Foreign body • Trauma • Acute glaucoma • Anterior Uveitis • All anterior segment • Others as clinically necessary • List not exhaustive 	<ul style="list-style-type: none"> • Optometrist • Contact lens Optician • Orthoptists with additional training 	<ul style="list-style-type: none"> • EHEW
Ocular health examination (dilated)	<ul style="list-style-type: none"> • Medical retina 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> • Suspect Retinal detachment/PVD • Acute loss of vision • As clinically necessary • List not exhaustive 		
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields (repeat or strategy change) • Contact tonometry • Retinal photography • OCT 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant 	<ul style="list-style-type: none"> • Appropriate training and standard operating procedures
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. • Starting place for subsequent examinations. 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • EHEW
Reporting/Data Collection/Quality Improvement/	<ul style="list-style-type: none"> • Quality Improvement • PROMS • PREMS 	<ul style="list-style-type: none"> • Optometrist • DO • CLO 	<ul style="list-style-type: none"> • EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
		<ul style="list-style-type: none"> Orthoptist 	

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.
Good quality experience	Correct level of skills/training	Positive experience and outcome	<p>Continual professional development met and recorded by eye care practitioner.</p> <p>Patient reported experience measure (PREM)</p>
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit

Desired outcome	Intervention	Change Affected	Measurement
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the overall number of referrals to the hospital eye service.			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) Level 2- Follow-up care:

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Patients to access this through all health board ophthalmic services in Wales
- Examination follows GOS Wales Level 2 Acute (As per EHEW band 3 at present).
- Current equivalent of EHEW band 3 and accreditation.
- All practices in Wales provide this service (increase in standards for all practices)
- Includes LVSW annual follow up.
- Referral to HES only from EHEW accredited practitioners.

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician 	<ul style="list-style-type: none"> • EHEW

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
		<ul style="list-style-type: none"> • Contact lens Optician • Orthoptist? 	
<p>Ocular Examination</p> <p>Experiencing an eye problem that requires urgent investigation, which subsequently may require a follow-up appointment.</p>	<ul style="list-style-type: none"> • Re-assessment of a patient following: • Red Eye • Foreign body removal • Flashes/floaters/PVD • Trauma • Marginal Keratitis • Corneal abrasions • Corneal lesions of unknown origin. • Chronic ocular conditions (Appropriate clinical guidelines) • Post-operative CMO • Others as clinically necessary • List not exhaustive 	<ul style="list-style-type: none"> • Optometrist • Contact lens Optician (anterior eye) • Orthoptist with additional training 	<ul style="list-style-type: none"> • EHEW
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields • Contact tonometry 	<ul style="list-style-type: none"> • Optometrist • DO 	<ul style="list-style-type: none"> • Appropriate training and standard

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> • Retinal photography • OCT 	<ul style="list-style-type: none"> • CLO • Orthoptist • Optometric assistant 	operating procedures
Low Vision Follow-up Assessment CVI registration.	<ul style="list-style-type: none"> • As per current protocols • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • DO • Orthoptist with appropriate qualification 	<ul style="list-style-type: none"> • LVSW (Prof cert Low Vision)
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. • Starting place for subsequent examinations. 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • EHEW
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> • Quality Improvement • PROMS • PREMS 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist 	<ul style="list-style-type: none"> • EHEW

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.
Good quality experience	Correct level of skills/training	Positive experience and outcome	<p>Continual professional development met and recorded by eye care practitioner.</p> <p>Patient reported experience measure (PREM)</p>
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit

Desired outcome	Intervention	Change Affected	Measurement
Reduction in the overall number of referrals to the hospital eye service.			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) Level 3 Referral Refinement:

Advanced practitioner referral refinement

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Intended for advanced referral refinement/management in primary care with an expectation of increased level of management, treatment and prevention of onward referral.
- Service to be provided by EHEW practitioners with additional relevant qualifications.
- Number of advanced practitioners linked to clusters with appropriate coverage per cluster (inclusive of all who wish to provide a service and hold the relevant qualifications).
- Patients access the service via a referral from a GOS Wales Level 2 optometrist (Inter-referral/intra-practice referral).
- Equivalent levels of qualifications needed to practice at this level. Higher certificate in glaucoma and Professional Certificate in medical retina for example being the appropriate level of expertise.
- Increased necessity for clinical audit, research and governance embedding quality improvement into all elements.

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Dispensing Optician 	<ul style="list-style-type: none"> • Higher qualifications

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
		<ul style="list-style-type: none"> • Contact lens Optician • Orthoptist 	
Anterior Segment Assessment	<ul style="list-style-type: none"> • Pre-dilation • Oculoplastics • Dry Eye (Appropriate clinical guidelines relevant to qualifications/experience) • Others as clinically necessary • List not exhaustive 	<ul style="list-style-type: none"> • Optometrist • Orthoptists with additional training. 	<ul style="list-style-type: none"> • Higher qualifications
Ocular health examination (dilated)	<ul style="list-style-type: none"> • Wet AMD • Other medical retina • Glaucoma (management to equivalent of higher certificate in glaucoma) • Others as clinically necessary with appropriate qualifications oculoplastic/ orthoptic) • List not exhaustive 	<ul style="list-style-type: none"> • Optometrist • Orthoptists with additional training 	<ul style="list-style-type: none"> • Higher qualifications
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields (repeat or strategy change) • Contact tonometry 	<ul style="list-style-type: none"> • Optometrist • DO 	<ul style="list-style-type: none"> • Higher qualifications

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> • Retinal photography • OCT • Patient counselling • Gonioscopy 	<ul style="list-style-type: none"> • CLO • Orthoptist • Optometric assistant 	
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. • Starting place for subsequent examinations. 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • Higher qualifications
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> • Quality Improvement • PROMS • PREMS 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist 	<ul style="list-style-type: none"> • Higher qualifications

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)

Desired outcome	Intervention	Change Affected	Measurement
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.
Good quality experience	Correct level of skills/training	Positive experience and outcome	<p>Continual professional development met and recorded by eye care practitioner.</p> <p>Patient reported experience measure (PREM)</p>
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the overall number of referrals to the hospital eye service.			<p>Statistical analysis</p> <p>Practitioner audit</p>
80% conversion rate for cataract referrals			<p>Statistical analysis</p> <p>Practitioner audit</p>

Desired outcome	Intervention	Change Affected	Measurement
Reduction in the number of false positive glaucoma referrals to the hospital eye service (20% target)			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) Monitoring:

General

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Service to be provided by practitioners with additional relevant qualifications.
- Access to the service is via the Hospital Eye Service (HES).
- Potentially three levels of advanced monitoring co designed by the health board according to need and availability of workforce with additional qualifications (see below)
- GOS Wales Level 2: Data gathering in optometric practice with all review and decisions made by ophthalmologist following virtual review
- GOS Wales Level 3: Discharge model, where patients are discharged with a management plan. Changes in clinical appearances requiring referral back into HES when specified conditions have been met.
- GOS Wales Level 4: Discharge to optometrist with relevant qualifications to autonomously manage the patient including changes in treatment.
- Increased necessity for clinical audit and governance.

Advanced Monitoring - Glaucoma (GOS Wales level 3)

- **Optometrist remains the responsible professional in the eye care pathway for sign off (i.e. has oversight of all results and is able to consider action and formulate an appropriate management plan)**
- Higher qualification in glaucoma

- Capable of detecting change in glaucoma status.
- Capable of changing management plan and treatment audited and reviewed as necessary by lead consultant ophthalmologist.
- Patient can be discharged into care of optometrist following risk stratification by hospital eye service (suggest stable glaucoma patients)

Advanced Monitoring - Glaucoma (GOS Wales Level 4)

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Minimum qualification: IP plus higher certificate in glaucoma.
- Capable of detecting change in glaucoma status.
- Capable of changing management plan and treatment independently.
- Patients discharged into care of optometrist

Advanced Monitoring-Medical Retina (Wet AMD/ Diabetic Macular Oedema/ Other Medical Retina Conditions) GOS Wales Level 3

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Higher Qualification in medical retina
- Patient can be discharged into care of optometrist following risk stratification by hospital eye service.
- Capable of detecting change in clinical status.
- Capable of changing management plan and referring appropriately for treatment independently.

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway?	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist • Orthoptist 	<ul style="list-style-type: none"> • Optometrist with higher qualifications
Anterior Segment Assessment	<ul style="list-style-type: none"> • Pre-dilation • Oculoplastics • Advanced orthoptics • Other as clinically necessary 	<ul style="list-style-type: none"> • Optometrist • Orthoptist with additional training 	<ul style="list-style-type: none"> • Optometrist with higher qualifications • Orthoptist with relevant qualifications
Ocular health examination (dilated)	<ul style="list-style-type: none"> • Wet AMD • Other medical retina • Glaucoma • Other as clinically necessary 	<ul style="list-style-type: none"> • Optometrist • Orthoptist with additional training 	<ul style="list-style-type: none"> • Optometrist with higher qualifications
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields • Contact tonometry • Retinal photography • OCT 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant 	<ul style="list-style-type: none"> • Appropriate training and standard operating procedures

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway?	Qualifications
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> To be completed at every examination Forms basis of needs assessment for ongoing management of the patient. Starting place for subsequent examinations. 	<ul style="list-style-type: none"> Optometrist 	<ul style="list-style-type: none"> Optometrist with higher qualifications
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> Quality Improvement PROMS PREMS 	<ul style="list-style-type: none"> Optometrist Orthoptist 	<ul style="list-style-type: none"> Optometrist with higher qualifications

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.

Desired outcome	Intervention	Change Affected	Measurement
Good quality experience	Correct level of skills/training	Positive experience and outcome	Continual professional development met and recorded by eye care practitioner. Patient reported experience measure (PREM)
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Access to services closer to home for patients			PREM PROM
Reduction in the demand of hospital based services.			Activity data
Quality service provided by appropriately qualified professional.			Continuing professional development. PREM PROM

General Ophthalmic Service (Wales) Level 4: IP

Advanced practitioner managing acute presentations

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).
- Intended for advanced referral refinement/management in primary care with an expectation of increased level of management, treatment and prevention of onward referral.
- Intended to provide an eye casualty in primary care
- Minimum qualification of optometrist independent prescriber
- Practitioner capable of making independent diagnosis and treatment decisions
- Formulates a management plan.
- Reviews patient at intervals as dictated by NICE/other appropriate clinical guidelines.
- Refers to HES only when outside of clinical competencies of IP optometrist/other treatments required.
- Number of advanced practitioners linked to clusters with appropriate coverage per cluster (inclusive of all who wish to provide a service and hold the relevant qualifications).
- Patients access the service via a referral from an EHEW accredited optometrist (Inter-referral/intra-practice referral).
- Increased necessity for clinical audit, research and governance embedding quality improvement into all elements.
- Consideration to be given for other referral routes i.e. A&E, eye casualty or GP.
- Consideration needs to be given to a patient who presents directly to a practice/location where an advanced practitioner resides. The above scenarios describe an examination being performed by an EHEW practitioner then referring for a second examination by a practitioner with a higher qualification.

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none">• As clinically necessary	<ul style="list-style-type: none">• Optometrist	<ul style="list-style-type: none">• IP

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> • Tele-optometry/video consultation 		
<p>Ocular Assessment</p> <p>Level of assessment as expected to be seen in eye casualty clinic.</p>	<ul style="list-style-type: none"> • Pre-dilation • Red eye • Foreign body • Trauma • Acute glaucoma • Anterior Uveitis • All anterior segment • Others as clinically necessary • List not exhaustive 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • IP
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields (repeat or strategy change) • Contact tonometry • Retinal photography • OCT • Scans (via GP/HES- local arrangements) • Bloods (via GP/HES- local arrangement) 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant 	<ul style="list-style-type: none"> • Appropriate training and standard operating procedures

Step in eye care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> To be completed at every examination Forms basis of needs assessment for ongoing management of the patient. Starting place for subsequent examinations. 	<ul style="list-style-type: none"> Optometrist 	<ul style="list-style-type: none"> IP
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> Quality Improvement PROMS PREMS 	<ul style="list-style-type: none"> Optometrist. 	<ul style="list-style-type: none"> IP
Prevention and wellbeing	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

Measuring Patient Outcomes

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.

Desired outcome	Intervention	Change Affected	Measurement
	Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)		
Good quality experience	Correct level of skills/training	Positive experience and outcome	Continual professional development met and recorded by eye care practitioner. Patient reported experience measure (PREM)
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the number of referrals to the rapid access eye clinic (eye casualty). 50% target			Statistical analysis Practitioner audit

General Ophthalmic Service (Wales) Level 4 IP Follow-up:

- **The optometrist remains the responsible professional in the eye care pathway for sign off, has oversight of all results and is able to consider action and formulate an appropriate management plan.**
- Optometrists to be able to delegate elements to dispensing opticians (DOs), contact lens opticians (CLOs), orthoptists and non-professional staff along the eye care pathway (Please refer to above section regarding delegation page 39).

- Intended for advanced follow-up in primary care with an expectation of increased level of management, treatment and prevention of onward referral.
- Service to be provided by practitioners with additional qualifications in independent prescribing.
- Number of advanced practitioners linked to clusters with appropriate coverage per cluster (inclusive of all who wish to provide a service and hold the relevant qualifications).
- Patients access the service following a GOS Wales Level 4 IP acute assessment (as per EHEW band 3 at present)
- Increased necessity for clinical audit and governance embedding quality improvement into all elements.

Step in Eye Care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
History and Symptoms	<ul style="list-style-type: none"> • As clinically necessary • Tele-optometry/video consultation 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • IP
<p>Ocular Examination</p> <p>Experiencing an eye problem that required urgent investigation, which subsequently may require a follow-up appointment.</p>	<ul style="list-style-type: none"> • Re-assessment of a patient following presentation for an advanced 2 acute assessment: • Red Eye • Uveitis • Foreign body removal • Flashes/floaters/PVD • Trauma • Marginal Keratitis • Corneal abrasions 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • IP

Step in Eye Care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
	<ul style="list-style-type: none"> • Corneal lesions of unknown origin. • Chronic ocular conditions (Appropriate clinical guidelines) • CMO/DMO • Others as clinically necessary <p>List not exhaustive</p>		
Additional examinations (as clinically necessary)	<ul style="list-style-type: none"> • Visual fields • Contact tonometry • Retinal photography • OCT • Scans (via GP/HES- local arrangements) • Bloods (via GP/HES- local arrangement) 	<ul style="list-style-type: none"> • Optometrist • DO • CLO • Orthoptist • Optometric assistant 	<ul style="list-style-type: none"> • Appropriate training and standard operating procedures
Management plan/needs assessment/clinical care plan/risk assessment.	<ul style="list-style-type: none"> • To be completed at every examination • Forms basis of needs assessment for ongoing management of the patient. • Starting place for subsequent examinations. 	<ul style="list-style-type: none"> • Optometrist 	<ul style="list-style-type: none"> • IP

Step in Eye Care pathway	Elements to include	Who can perform the element of the eye care pathway	Qualifications
Reporting/Data Collection/Quality Improvement	<ul style="list-style-type: none"> • Quality Improvement • PROMS • PREMS 	<ul style="list-style-type: none"> • Optometrist. 	<ul style="list-style-type: none"> • IP

Desired outcome	Intervention	Change Affected	Measurement
Patient			
Prevention of eye disease	Discussion and use of questionnaire as part of history and symptoms	Alteration in lifestyle	Patient reported outcome measure (PROM)
Management of ocular pathology	<p>Eye health examination.</p> <p>Data gathering to prevent further referral and continue to manage patient in primary care.</p> <p>Referral as appropriate for specialist intervention (optometrist with higher qualification/ophthalmologist)</p>	<p>Prevention of avoidable sight loss.</p> <p>Intervention for specialist advice and treatment.</p>	Recorded in clinical record.
Good quality experience	Correct level of skills/training	Positive experience and outcome	<p>Continual professional development met and recorded by eye care practitioner.</p> <p>Patient reported experience measure (PREM)</p>

Desired outcome	Intervention	Change Affected	Measurement
Health Board			
Access to eye care for all health board residents	Data collection tool		Quality in optometry toolkit
Safe premises to access services			Quality in optometry toolkit
Adequate infection control			Quality in optometry toolkit
Information governance			Quality in optometry toolkit
Reduction in the number of referrals to the rapid access eye clinic (eye casualty). 50% target			Statistical analysis Practitioner audit

