

Expert Working Group for Primary Eyecare Services

Policy Report February 2021





As Chair of the *Expert Working Group* for Primary Eyecare Services, I have had the pleasure of working with the members of the group to produce this report. It highlights the excellent standard of Community Eyecare services in Scotland and the opportunities to enhance the future of ophthalmic services.

The *Expert Working Group* was established at a time when the sector was already starting to evolve with the expansion of eyecare services to support both secondary care and other primary care providers. The past year has impacted healthcare considerably and I am extremely proud of how the profession has adapted and embraced new ways of working.

This report highlights examples of these new ways of working and the positive impact of optometry on patient care during the peak of the pandemic, also on existing models such as those in Grampian and Lanarkshire. These models are successful due to the willingness of the profession to grow, the support from secondary eyecare and the strong relationships already in place. These models are stellar examples and set a precedent for what community eyecare could achieve across Scotland.

A patient-centred approach needs to be at the heart of policy going forward. The *Expert Working Group*, including experts across primary care, has greatly benefitted from the input of third sector organisations including The Alliance, Macular Society and RNIB. The *Expert Working Group* recognises that improvements can be made to further enhance the patient journey by ensuring additional support is accessible to those who need it.

The *Expert Working Group* demonstrates through this report that the General Ophthalmic Services (GOS) contract has contributed to a more universal service and should be sustained to ensure that Scotland continues to move forward in providing an accessible and efficient service.

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Ophthalmic services require regular funding reviews which acknowledge the rising costs of the ongoing training and technology investment needed for the workforce. This is especially required to support the ageing population, which in turn will ultimately help alleviate the increasing burden on secondary care.

To achieve this, the *Expert Working Group*'s key recommendation is for The Scottish Government to agree to a rolling three-year funding settlement with a minimum budget increase of 3% annually in real terms on fees. This will, in the first instance, protect the integrity of the workforce and current service delivery the length and breadth of Scotland.

The collaborative working from members of the *Expert Working Group* and external stakeholders has highlighted further recommendations surrounding the consistency of service, training and communication with other sectors to ensure the service becomes a more accessible and equitable primary eyecare service throughout Scotland.

Julie Mosgrove

Chair of the Expert Working Group for Primary Eyecare Services

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The *Expert Working Group* presents this report as invited to do so following dialogue between Optometry Scotland and the Cabinet Secretary for Health and Sport, Jeane Freeman MSP, in December 2019. This report explores three remit areas which shape the final recommendations below. These remit areas are as follows:

- 1. Whether the principle of universal NHS-funded eyecare remains the correct approach for The Scottish Government in the delivery of community eyecare services;
- 2. A review of the performance and maintenance of primary eyecare services within Scottish communities;
- 3. How primary eyecare services can be enhanced across Scotland.

Within this report, the *Expert Working Group* has assessed the suitability of the universal policy of NHS-funded eyecare in Scotland, the performance of services across Scotland, prior to and during COVID-19, and how these services can be maintained and enhanced moving forward.

The *Expert Working Group* has arrived at the following recommendations for consideration by The Scottish Government and looks forward to early engagement on these:

Universality

1. The future of universal NHS-funded eyecare as a policy choice should be sustained as the correct one for Scotland moving forward on the basis of health equality, early detection and monitoring of health conditions, and improved service efficiencies within primary and secondary care.

Maintenance

2. Establish a rolling three-year funding settlement with The Scottish Government designed with an inbuilt minimum 3% per annum, in real terms, on the fees for each item of service delivered. Community optometry requires this budgetary increase to ensure the integrity of the workforce, the quality of service standards and the universality of delivery so that they can be sustained moving forward. This increase is critical for the sector to be placed on a more sustainable footing in order to deliver the enhancement agenda.



Alistair Duff, Optometrist and Director at Urquhart Opticians



Enhancement

- 3. Work with Optometry Scotland and the broader primary care alliance to:
 - a. Establish a supplementary GOS payment for technology which facilitates greater uptake of technology such as Optical Coherence Tomography (OCT) machines within a community practice setting. In the case of OCT, the additional benefit will be establishing a world-class, Aldriven, national OCT database.
 - **b.** Set and achieve a greater consistency in working practices across Scotland, drawing upon the notable achievements of health board schemes in Grampian and Lanarkshire. This will improve equity by ensuring that every patient receives the same level of eyecare treatment as per their individual clinical need regardless of geography.
 - c. Encourage investment in the programme of continued professional development for practitioners in order to ensure that the standard remains high across Scotland and patients can attend their usual optometrist at their convenience. This should be complemented with improved interdisciplinary training across primary care, or indeed as mentioned in the report through the courses in Independent Prescribing (IP) offered at Glasgow Caledonian University.
 - d. Enhance the uptake of domiciliary services available by establishing better communication with other primary care, community health and third sector colleagues. Improving awareness within communities and closer working alliances amongst community social care and nursing colleagues would also be aims. This will result in more eligible people accessing these essential services. The *Expert Working Group* also recommends that the domiciliary fee structure is revisited and increased to take account of inflationary pressures and additional costs associated with delivering a mobile service.
 - e. Bridge the gap between optometry and community health and third sector organisations in order to set and achieve common goals which enhance not only eyecare in Scotland but primary and community healthcare as a whole.
 - f. Strengthen the patient's experience by establishing a *Low Vision Plan*, reflective of the Welsh Low Vision Service utilising optometrists and dispensing opticians. This will enable equitable and consistent service provision across Scotland.





Optometry Scotland is the representative body for the optometry sector in Scotland. Optometry Scotland was formed in 2006 and is governed by a Council of approximately 25 people from all aspects of Community Optometry. Optometry Scotland comprises a membership of over 300 providers which are spread across all fourteen of Scotland's health boards: Ayrshire and Arran, Dumfries and Galloway, Forth Valley, Highland, Grampian, Fife, Tayside, Lanarkshire, Lothian, Borders, Glasgow and Clyde, Shetland, Orkney and Western Isles. With almost 900 practices represented across all health board areas. Optometry Scotland serves every community and represents

the views of the optometry sector, from independent owner-managed practices through to larger high street practices. Optometry Scotland is focused on providing representation for the sector with The Scottish Government on the GOS programme.



Statement by **David Quigley**, Chair of Optometry Scotland

Optometry Scotland are grateful for the opportunity presented by Jeane Freeman MSP, Cabinet Secretary for Health and Sport, to initiate this review and commence discussions with The Scottish Government regarding a sustainable model for the future of community eyecare services in Scotland. Optometry Scotland are also hugely appreciative of the *Expert Working Group*'s members for their time and dedication in providing this analysis of the universal model and the current provision whilst helping pave the way for future services.

What this review has helped highlight, particularly in light of the COVID-19 pandemic, is how intrinsic community eyecare is to other primary and community

services, in addition to the ongoing support that it will hope to provide to colleagues in Scotland's hospital eye services. Scotland's ageing population will continue to evidence the impact of sensory impairment on citizens' general health and wellbeing. In the case of mental illness and falls, how effective management and communication of these conditions with social services will become increasingly important. Only a small proportion of elderly persons eligible for eyecare at home are accessing the service. Attention needs to be drawn to Scotland's remote and rural locations and the ability of the people living there to access the same services as those in towns and cities.

Optometry Scotland represents a highly skilled and diverse sector, with well-trained support teams and clinicians regulated by the General Optical Council. The sector offers the prospect of a productive partnership that will require the efforts of all parties in ensuring that services are consistently reviewed and provided for, with appropriate levels of funding and capital investment.

Optometry Scotland trust that the following conclusions and recommendations will herald a sustainable funding model and a fuller appreciation of what the community eyecare sector has to offer the people of Scotland.

1. Overview

Community eyecare in Scotland is hailed as an example of one of the most successful primary care sectors in the UK. In 2004, the then Scottish Executive commissioned a Review of Community Eyecare Services, which evolved into the Scottish Executive setting out key recommendations for changes in Scottish eyecare in 2006¹. Borne out of this was the GOS contract which extended the professional responsibilities of optometrists and led to residents in Scotland being able to access an NHS-funded eye examination irrespective of age or socioeconomic status².

This *Expert Working Group* report has sought to review the policy approach, enacted by the then Scottish Executive in 2006, of universal NHS-funded eyecare and to decide on whether it remains appropriate as a policy choice over a decade later³. The group subsequently assessed how current services can be maintained in future, particularly in light of COVID-19 and exacerbated pressures upon workforce integrity. Moving forward, community optometry can play a more active role in primary care alongside colleagues in dentistry, general practice and pharmacy, and within the wider remit of community-based social and health services. The policy report concludes that the universal provision of NHS-funded eyecare is the correct choice for Scotland - based on accessibility and equity, identification and monitoring of health conditions and service efficiency.

The *Expert Working Group* presents that in order for community based practices to play a greater role moving forward, a **rolling three-year funding settlement** with The Scottish Government should be set with the model incorporating a real terms change for ophthalmic services, ensuring that it keeps pace with growth **in the health budget**, at a minimum of a 3% increase per annum on fees in real terms.

A budgetary rise is necessary to maintain and recruit highly skilled professionals and to provide a strong platform for further enhancement and collaboration with primary and secondary care providers along with third sector organisations.

2. GOS Regulations

The 2006 GOS regulations were measures initiated by a need to reinforce more preventative health strategies in Scottish eyecare. Fifteen years on, this service continues to have a large uptake of patients accessing the service in a community setting.

Key figures that highlight the success of the GOS contract include, but are not limited to the following:

- » Before 2006 approximately 25% of acute emergency eye cases were managed within a community setting whereas in 2018, over 80% of acute eye conditions were managed by community optometrists⁴;
- » In 2006 all optometrists in Scotland had to upskill and undertake a new competency process to be registered with an NHS Board to provide GOS;
- » Improvements were made to develop the case finding/screening for eye disease with the opportunity to recall patients early to reassess or repeat tests or examinations (supplementary eye examination)⁵;
- » The introduction of GOS 2006 empowered community optometrists to take on a greater role in managing eye disorders and disease;
- » Capital funding has enabled the installation of new equipment–with digital fundus cameras and pachymeters available in all practices, to better monitor patients in the community and improve the quality of referrals into secondary care;
- » Allowed for the establishment of optometry as the 'First Port of Call' for all eye problems that present;

¹ The Scottish Government (2006) 'Review of Community Eyecare Services in Scotland: Final Report'

² Jonuscheit, Loffler, Strang (2019) 'General ophthalmic services in Scotland: value for (public) money?'

National Statistics Publication for Scotland (2018), 'General Ophthalmic Services Statistics', p.9.
 Optometry Scotland (2018) 'A Review of General Ophthalmic Services in Scotland 2006-2017', p. 2.

Scottish Government (2017), 'A Ten Year Review' in 'Community Eyecare Services: Review', p.3.



- » This ensured early access to an eye expert in the community, providing opportunities for early detection, diagnosis, and management of eye disease;
- » This established optometry as a credible and significant resource for the detection and prevention of eye disease.

3. Expert Working Group Membership and Remit

Commissioning

This *Expert Working Group* was commissioned by Optometry Scotland following constructive discussions with the Cabinet Secretary for Health and Sport, Jeane Freeman MSP, and her officials in December 2019 around the future of community-based eyecare in Scotland. This Report is intended to provide a basis for the sector to feed into discussions with officials on a more sustainable funding model for community eyecare services in Scotland.

Membership

This policy report has sought to draw together experts from across primary care to present a series of recommendations for The Scottish Government to consider which places optometry front and centre as the country remobilises from the COVID-19 pandemic.

The *Expert Working Group* comprised eleven members, chaired by Julie Mosgrove, Vice-Chair of Optometry Scotland, met virtually on three occasions between October and December 2020. The complete *Expert Working Group* composition is detailed on Page 10.

The *Expert Working Group* also welcomed Jonathan Reid (Sensory Impairment Coordinator, The Alliance) and Laura Jones (Senior Policy Officer, RNIB Scotland) to attend the November and December meetings respectively. Beyond the formal meetings, the *Expert Working Group* invited and collected evidence from UK industry associations: Federation of Ophthalmic and Dispensing Opticians (FODO), Association of Optometrists (AOP), Association of British Dispensing Opticians (ABDO), The College of Optometrists and Ophthalmology colleagues represented by Eyehealth Scotland, which has been presented throughout this report. The group is grateful for input from regional health board Area Optical Committee chairpersons. Optometric Advisors to health boards were invited to comment also.

The *Expert Working Group* was fortunate to have the opportunity to consult Professor Sir Lewis Ritchie (Mackenzie Chair of General Practice, University of Aberdeen), Dr. Carey Lunan GP (Chair, Royal College of General Practitioners Scotland) and Shona Robison MSP (Member of the Scottish Parliament for Dundee City East; Cabinet Secretary for Health and Sport from November 2014 to June 2018) in preparation of this report and has greatly benefited from their expertise.



Chair of the Expert Working Group and Vice-Chair of Optometry Scotland



Dr. Paul Cauchi Consultant Ophthalmologist Greater Glasgow and Clyde NHS



James Adams Director of RNIB Scotland



Matt Barclay Director of Operations at Community Pharmacy Scotland



David McColl Chair of the Scottish Dental Practice Committee



Dr. Hazel McFarlane Senior Regional Manager, Scotland; Macular Society



Frank Munro Optometry Scotland



David Quigley Chair of Optometry Scotland



Professor Niall Strang Lead for the Vision Research Group, Glasgow Caledonian University



Kevin Wallace Optomerty Scotland



Dr. Alexandros Zangelidis Head of Economics, University of Aberdeen



Remit

The *Expert Working Group* established the following remit at their first meeting on Friday 9th October 2020:

- 1. Explore whether the **universal entitlement** to NHS-funded eyecare, through the General Ophthalmic Services (GOS) budget is the right principle and correct policy choice for community-based optometry moving forward;
- 2. Review the performance of the service across Scotland, prior to and during COVID-19, and how this can be **maintained**⁶;
- **3.** Explore opportunities to **enhance** service delivery post-COVID-19, which could include ongoing investment in technology such as Optical Coherence Tomography (OCT), greater collaboration with secondary care, and promoting the uptake of services in poorer and less accessible areas of Scotland. This would highlight both the rural and physical challenges ophthalmic services face and help address the wider implications of visual impairment on social and other health services.



6 With reference to performance on: prevention of avoidable blindness; detection of chronic eye conditions; awareness and performance within deprived and rural communities, and ageing demographics; domiciliary services.

Chapter Overview

This chapter outlines the principle of universal eyecare in Scotland, how it emerged and why it retains a critical role. This is demonstrated by way of data showing how accessible the GOS contract has been to the people of Scotland who are able to receive primary, and where required, supplementary eye examinations by way of universal entitlement under GOS. Furthermore, it compares different categories of patients utilising the service such as those in different socioeconomic categories i.e. from most to least deprived in Scotland; different health boards across Scotland; and different genders. The data is additionally accompanied with insight from James Adams, Director at RNIB (Royal National Institute of Blind People) Scotland. Secondly, it examines how health conditions are identified and monitored in Scottish eyecare; with insight from Dr. Alexandros Zangelidis, Head of Economics at the University of Aberdeen. Thirdly, this chapter reviews the efficacy of optometry in Scotland, providing evidence that this universal principle of entitlement not only maintains better levels of eye health, by way of the preventive benefits of a universally available eye examination, but is also delivered efficiently in a community setting. Finally, Chapter 1 outlines the core argument that the principle of universal eyecare in Scotland should remain at the centre of primary care policy moving forward.

The Emergence of Universal Eyecare Examinations

Universal eyecare examinations in Scotland were borne out of key recommendations by the then Scottish Government⁷ in 2006. This reversal of policy overturned the decision taken in the 1980s by the UK Government to scrap NHS funded eye examinations. In 2006, the GOS contract in Scotland was developed around the universality of the provision of eye examinations for the people of Scotland, as well as a commitment for preventative measures focused on eye health. The principle of universality echoed throughout the Scottish health care system, with NHS funded pharmaceutical prescriptions for Scottish patients being the heart of a successful Scottish health system that encompasses equality and universality for all those who want to access it. While the principles of the GOS contract retain cross-party support, the budget has not kept pace with inflation nor with fee increases seen in comparable health services. Although the overall GOS budget has increased, this is almost entirely due to the steady rise in volume of examinations being carried out and without significant increases in basic fees. With the necessary investments in workforce and capital this has resulted in a net decrease in investment per eye examination.

Core Argument

Despite the current challenges, the COVID-19 pandemic provides additional impetus in assessing the principle of universal eyecare and whether it is the correct policy choice for future community-based eyecare services.

The *Expert Working Group* for Primary Eyecare Services finds that it is the right principle and policy direction for primary eyecare, working in conjunction with and in support of other health sectors. The *Expert Working Group* concludes that this principle should be maintained on the basis that universal access to eyecare has:

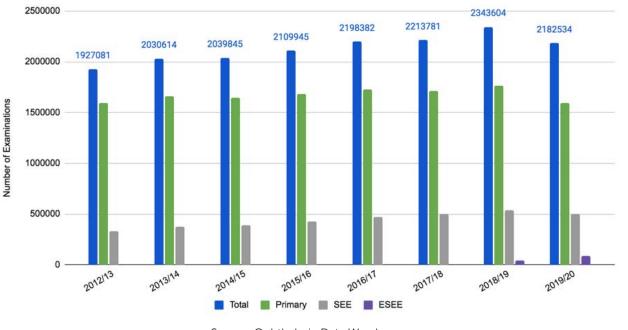
- 1. Enhanced service accessibility across the population;
- 2. Promoted the prevention agenda and enabled the identification, monitoring, and treatment of an array of health conditions and;
- **3.** Improved service efficiencies by reducing the number of referrals and associated potential costs to secondary care.

⁷ UK Legislation. The NHS (2006). The National Health Service (General Ophthalmic Services) (Scotland) Regulations 2006.

1. Accessibility

Optometrists conduct different types of examinations to manage various aspects of patient care as part of General Ophthalmic Services (GOS). This includes Primary Eye Examinations (PEE), Supplementary Eye Examination (SEE), and Enhanced Supplementary Eye Examinations (ESEE). The introduction of SEE in 2006 made it possible for optometrists to carry out repeat eye examinations, allowing for review of many conditions and follow-up management reducing referrals to secondary care. This process also made provision for repeating essential tests for referral refinement, thereby improving the quality of any referrals into secondary care. This helps to reduce unnecessary referrals and ensures that patients attend the appropriate clinic on their first visit improving service efficiency.

The policy principle of the primary and supplementary eye examination being universal at the point of need has achieved considerable success since its introduction within the GOS Regulations of 2006, with the total number of eye examinations increasing to a peak of 2.34 million in 2018/2019 (*Figure 1*).





Source: Ophthalmic Data Warehouse

Figure 1 illustrates the uptake of GOS from 2012 until 2020. There has been a gradual increase in demand until 2019/20*.

The number of Primary Eye Examinations (PEE) undertaken reached a high of 1.76 million in 2018/2019 and Supplementary Eye Examinations (SEE) at over 530,000 in 2018/2019. The increasing uptake that has been achieved for eye examinations over these years advances the case that the universal eyecare policy is the correct one. This is further compounded by studies undertaken, including by Dickie et al. (2012)⁸ stating that the elimination of the fees under the GOS contract had a positive effect on the uptake of eye examinations in line with other comparable studies on the impact that fee removal has upon presentation. The study reported on eyecare uptake, outlining that ahead of the policy, Scotland had the lowest uptake, which was followed by a significant reduction in the differences across the UK⁹.

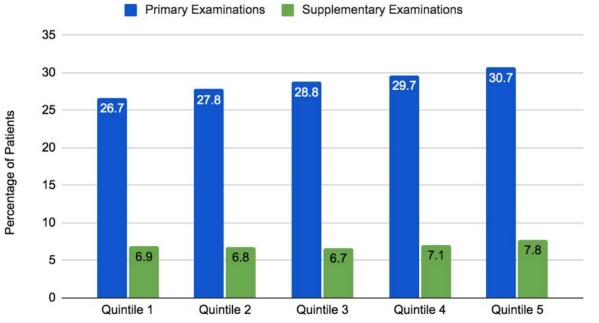
8 Dickey, Heather Suzanne; Ikenwilo, Divine; Norwood, Patricia Fernandes; Watson, Verity; Zangelidis Alexandros (2012), 'Utilisation of eye-care services: the effect of Scotland's free eye examination policy'.
 9 Ibid. p. 9.

*Actual results not adjusted for COVID-19

A National Statistics Report published in late 2018 outlined that 'community optometry is now established as the first port of call for patients with eye problems, reducing pressures on GPs and hospital eye services as well as the need for patients to travel to hospital'¹⁰. Within their study, Dickey et al. assessed the impact upon the level of demand for the 2006 policy and found that uptake was heightened within higher socioeconomic groups¹¹. Regardless of this, the evidence gathered on the volume of all eye examinations across the socioeconomic scale (Scottish Index of Multiple Deprivation (SIMD)), found the uptake across the country for primary examinations by the health boards was more than 25% of the population for all socio-economic areas in 2019/ 2020 (*Figure 2*). Whilst there was a difference of about four points in the percentage of patients receiving a primary eye examination between the most and least deprived groups in Scotland, the baseline assumption remains that the inequality gap would widen if the universal policy was not available. This accessibility is not only mirrored across geographic areas (*Figure 3*) but also by age (*Figure 4a and 4b*), and gender (*Figure 5*).

Socioeconomic (Scottish Index of Multiple Deprivation (SIMD))





Source: Ophthalmic Data Warehouse

Figure 2 shows the percentage of the population accessing primary and supplementary eye examinations across SIMD quintiles. While there is a slight difference in uptake between the lower and higher SIMD quintiles, 4.0% in primary and 0.7% supplementary of patients attending for their examinations, accessibility and uptake is broadly consistent.

Figure 2 demonstrates that while slight differences in socioeconomic groups persist, the uptake is fairly consistent and the accessibility under GOS is having its desired impact. Any shift away from universal NHS funded eyecare places this accessibility under threat and would widen uptake between more affluent and deprived areas.

10 National Statistics Publication for Scotland (2018), 'General Ophthalmic Services Statistics', p.13.

11 Dickey, Heather Suzanne; Ikenwilo, Divine; Norwood, Patricia Fernandes; Watson, Verity; Zangelidis Alexandros (2016) "Doctor my eyes": A natural experiment on the demand for eyecare services'.

Geographic

The following graph shows that for the most part, the broad adoption of the GOS contract in all areas of Scotland.

Figure 3: Percentage of the Population Examined by Type of Examination and NHS Board; 2019/20

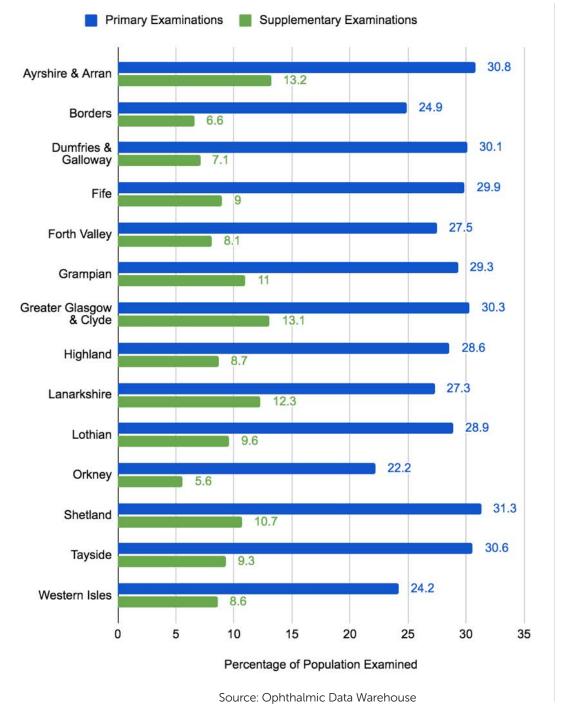
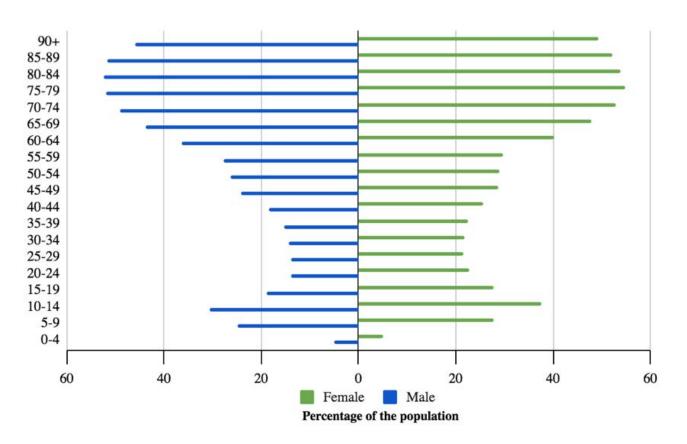


Figure 3 shows the percentage of the population attending for GOS eye examinations across all NHS health boards in Scotland in 2019/20.

Geographically, the percentage of patients receiving primary examinations in different health boards is fairly equitable, with only a few exceptions. For example, the Western Isles has a slightly lower uptake than most other health boards. This is possibly due to the availability of optometrists in remote and rural areas and potentially statistically a consequence of having a smaller population, as small groups often tend to be outliers when compared to larger groups.

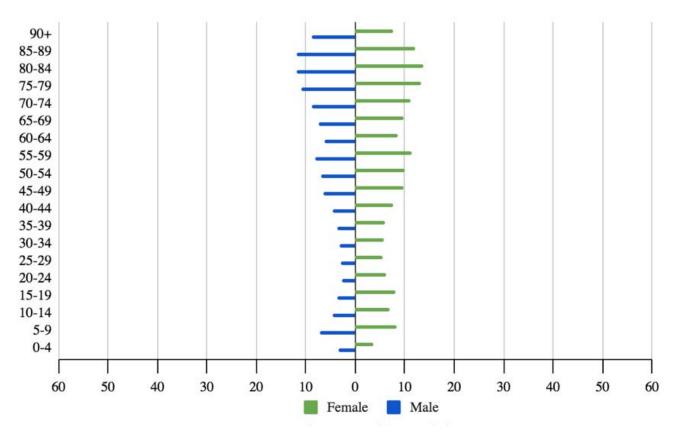
Age Group and Gender





Source: Ophthalmic Data Warehouse

Figure 4b: Percentage of population attending a Supplementary Examination; by age and gender; 2019/20



Source: Ophthalmic Data Warehouse

Figures 4a and 4b show the percentage of the population attending for GOS primary and supplementary eye examinations according to age and gender in 2019/20.

Figures 4a and 4b show a reasonable uptake (approximately 50% of the population requiring a regular eye examination) across all age ranges – the larger percentage values reflect the fact that patients in these groups (children and over 60s) are often required to attend more regularly – the 20-50 group normally attend every 2 years, therefore, the figure is predictable. This is in line with prior expectations based on the literature. The 50% figure still suggests that more can be done to encourage patients to attend regular eye examinations. The uptake is greater in females than males – again reflecting a general social challenge for healthcare.

Chapter 1: Universal Free Eyecare



Expert Insight from **James Adams**, Director at RNIB Scotland:

Stopping people losing their sight unnecessarily is a key priority for RNIB Scotland. Around 178,000 people in Scotland are estimated to have serious sight loss – by 2050. With no intervention beyond current provision, this could double due to the increase in the ageing population and a variety of health factors.

RNIB Scotland supports the maintenance of NHS-funded Eye Health Examinations in Scotland as a keystone of the eye Health journey, and increased resource allocation. It maintains that continual review and reform are essential to meet future demand.

There is a greater need to continue integration and improvement of eyecare provision, to implement effective prevention measures and to provide additional support to those with significant sight loss specifically at the point of diagnosis.

Ophthalmology is already Scotland's largest outpatient speciality. Demand for eye health services continues to increase, with more people waiting longer to be seen. Increasing demands come predominantly from patients with long term eye conditions, such as cataracts, macular degeneration, glaucoma, and diabetic retinopathy. These patients are often the most vulnerable and at the greatest risk of irreversible sight loss. Many long-term eye conditions require long term "return" or "follow-up" appointments, for repeat monitoring and regular treatment¹².

People with sight loss are also more likely to suffer depression and are at an increased risk of falls. Depression and anxiety are common health problems in visually impaired older adults¹³. In addition, across the UK, falls are the most common cause of hospitalisation for people aged over 65, and of accidental death in those aged over 75. Undetected and untreated visual impairment plays a significant role in the high incidence of falls among older people.

If we are to contain preventable sight loss, we must raise awareness of the importance of maintaining good eye health. Optometrists can spot the first signs of sight problems when impairment of vision can be arrested or even reversed - it is therefore crucially important to promote the uptake of free eye examinations in Scotland."

Without this universality policy being retained, the *Expert Working Group* is clear that the health inequalities across geographic areas, age, and socioeconomic status would indeed widen - a point reinforced by a submission made by the Association of British Dispensing Opticians (ABDO) to the call for evidence noting that *"access to free eyecare removes the cost barrier, which reduces health inequalities and therefore going forward should be maintained and developed to include delivery of further enhanced care."* Beyond universality as the correct policy choice based on accessibility through creating a level playing field in eye health for people within Scotland, it is also critical to the identification and monitoring of health conditions.

12 Eye Conditions in Scotland Report 1: Estimates of Current and Future, Scottish Public Health Network (ScotPHN), July 2018.

13 Stepped care for depression and anxiety in visually impaired older adults: multicentre randomised controlled trial, British Medical Journal 2015.

2. Identification and Monitoring of Health Conditions

The eligibility of eyecare for everyone removes any financial obstacle and therefore promotes regular routine eye examinations which may detect health conditions at a much earlier stage. Many symptomless conditions can be detected in these routine examinations. Examples include diabetes, high blood pressure¹⁴ and glaucoma¹⁵. The RNIB Cost of Sight Loss¹⁶ Report found that the most cost-effective measures are in the areas of prevention, detection, and treatment.. The importance of universality as a preventative approach is illustrated by the Expert Insight offered by Dr. Zangelidis:



Expert Insight from Dr. Alexandros Zangelidis, Head of Economics, University of Aberdeen:

The establishment of universal free eyecare in Scotland has been a success so far, as documented by the growing research evidence. Since the introduction of GOS, there has been a positive response from patients, as evidenced by the increase in the uptake of eye examinations¹⁷. Community optometry became the first port of call for patients with any eye problems. This effectively transferred care out of GPs and hospitals and into the community ophthalmic optician practices. This is supported by recent evidence¹⁸ that shows a reduction in GP and hospital referrals as primary eye examinations increase. At the same time, the nature of examinations has changed from a sight test to a more comprehensive

eye examination appropriate to the patient's needs. As a result, various health conditions are now diagnosed through an eye examination. For example, Dickey et al.¹⁹ provide evidence of the wider health benefits and potential cost savings that an eye examination can achieve through the early detection of hypertension. The preventative role of eye examinations is further supported by evidence²⁰ that demonstrates the importance of eye examinations in detecting health problems, as suggested by the positive relationship between supplementary eye examinations and subsequent GP and hospital referrals.

There is growing evidence on the efficacy of the Scottish GOS eyecare services, highlighting the preventative role and the importance of community optometry to public health and the potential NHS cost savings that can be achieved. Scotland is leading the way in the provision of eyecare and it is essential that the universal free evecare policy continues. In addition, there are steps that The Scottish Government can take to further support and enhance the service. Promotion of the eyecare services, especially in more deprived areas of Scotland, will widen the uptake of eye examinations and improve health outcomes with the early detection and treatment of health conditions. Furthermore, future investments in technology, such as Optical Coherence Tomography (OCT), will further enhance the delivery of eyecare provision.

- Dickey, Heather Suzanne; Norwood, Patricia Fernandes; Watson, Verity; Zangelidis, Alexandros (2018) 'More Than Meets The Eye: Has the Eyecare Policy in Scotland 19 Had Wider Health Benefits?
- Zangelidis, Alexandros. (2020). Community Eyecare and GP or Hospital Referrals in Scotland: A Tale of Two Stories. 20

Dickey, Norwood, Watson, Zangelidis (2018) 'More Than Meets The Eye: Has the Eyecare Policy in Scotland Had Wider Health Benefits?'.
 Jonuscheit, Loffler, Strang (2019) 'General ophthalmic services in Scotland: value for (public) money?', p. 225-226.
 RNIB (2009) 'The cost of sight loss Scotland: 2010-2020', p. 12.

¹⁷ Dickey, Heather Suzanne; Ikenwilo, Divine; Norwood, Patricia Fernandes; Watson, Verity; Zangelidis Alexandros (2016) "Doctor my eyes": A natural experiment on the demand for eyecare services

¹⁸ Zangelidis, Alexandros. (2020). Community Eyecare and GP or Hospital Referrals in Scotland: A Tale of Two Stories.

3. Service Efficiency

Beyond the identification of health conditions, early detection and onwards, referrals to primary care save financial resources such as the time of a secondary care professional because if detected early, some diseases can be more managed and treated within a community setting.

This point is echoed by the submission made by the AOP, who commented in their response that:

"The GOS eye examination in Scotland has a particularly important role in giving all patients access to prompt emergency treatment close to their home, and where necessary appropriate referral to the hospital eye service. As GP practices no longer assess patients with ocular symptoms, optical practices are now the first port of call for these patients and can triage and provide appropriate care and follow-up without overburdening hospital eye clinics or A&E departments. If free eye examinations were no longer universally available, some patients presenting with acute issues such as a red eye or dry eyes would choose to see their GP or attend hospital to avoid payment, adding to the burden on these already overstretched services."

This policy statement recognises the importance and need for future investment in both Primary and Secondary eyecare and should not be sacrificed in one for another. Funding in primary care increases the provision in primary care which ultimately means less hospitalisation, and if patients are referred to secondary care, it is at a point at which more complex treatment is required.

The financial efficiency of GOS can be examined through a comparison between the outpatient attendance for ophthalmology patients in Scotland versus England.

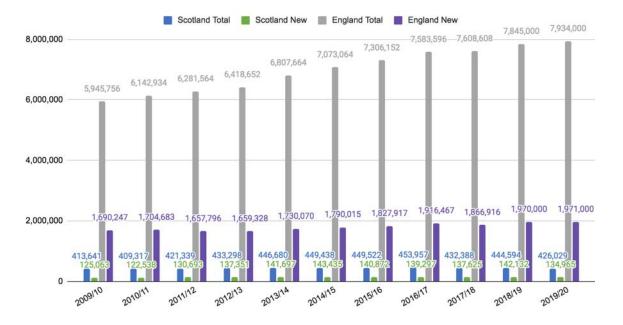


Figure 5: Hospital Ophthalmology Outpatient Attendance.

Source: Ophthalmic Data Warehouse

Figure 5 provides a comparison of the number of Hospital Eye Service (HES) attendance for both new patients and total outpatients between England²¹ and Scotland²² from 2009/10 until 2019/20.

21 https://digital.nhs.uk/data-and-information/publications/statistical/hospital-outpatient-activity

22 https://beta.isdscotland.org/find-publications-and-data/health-services/hospital-care/acute-hospital-activity-and-nhs-beds-information-annual/

Figure 5 depicts outpatient attendance from 2009/10 through to 2019/20 with divergence over time. There is a higher increase over this period of 'new patients' in England but this does not fully account for the overall difference in the 'total' attendance as many of these patients will be returning for ongoing treatment. This is not the case in Scotland, where new referrals into secondary care are fairly stable over time, in part due to the GOS structure that permits funding for repeat or follow-up eye examinations. As a result of this, Scotland perhaps reflects a greater willingness to discharge patients to community optometry from secondary care.

Following the introduction of GOS in 2006, a considerable shift in the balance of care in Scotland compared to GOS England took place. The provision of GOS in reducing pressure on secondary care and promoting service efficiencies was highlighted by The College of Optometrists' submission to the call for evidence which stated that "during the first wave of COVID-19, Emergency Eye Treatment Centres were set up and ran solely within primary care optometry practices, demonstrating the ability of optometrists to manage a wide variety of eye healthcare conditions safely and effectively in the community. Without universal eyecare, services like these would not have been possible, nor would the management of more common and minor complaints have remained within primary care optometry, reducing the pressure on hospital eye services. This helped to reduce unnecessary appointments during the height of the pandemic, while still maintaining sight-saving services." The comparative evidence provided on hospital outpatient attendance in England and Scotland along with the submission by The College of Optometrists highlights the value both before and during the COVID-19 pandemic of the universal provision of eyecare in Scotland.

Conclusion

The *Expert Working Group* concludes that the principle of universal NHS funded eyecare remains the correct approach for The Scottish Government in the delivery of community eyecare services.

The Expert Working Group presents that this is justifiable on the basis that it:

- 1. Enhance service accessibility;
- 2. Enhances the preventative approach to eye health across the country achieving fairly even uptake irrespective of location, gender, age or socio-economic status and in turn enabled the identification, monitoring and treatment of health conditions and;
- 3. Improves service efficiencies by reducing the number of referrals and associated costs to secondary care. With the core argument outlined with regard to the principle of universal NHS funded eyecare, the Report now examines the performance and maintenance of this primary eyecare sector within **Chapter 2**.

Chapter Overview

This chapter outlines a position statement on the performance and maintenance of Community Eyecare services in Scotland. Firstly, this chapter looks at a critical piece of work commissioned by The Scottish Government in 2017, namely the Community Eyecare Review which outlined recommendations for the enhancement of eyecare in Scotland. The Review focused on the successes of the GOS contract since its initiation. This chapter uses information from this Review, incorporating secondary sources to show how specific schemes borne out of the GOS contract have improved community care in certain health boards. In discussing these schemes, this paper shows the strong performance of services and how these could be built upon with an increased budget. Secondly, this chapter reflects on the original aims of the 2006 GOS contract and how these have been delivered or are being actively pursued. Thirdly, Chapter 2 concludes by examining the change in the GOS budget through time and draws observations and a recommendation upon which the enhancement agenda can be constructed.

Community Eyecare Service Performance

In 2016, the then Cabinet Secretary for Health, Wellbeing and Sport, Shona Robison MSP commissioned The Community Eyecare Review, which was later published in 2017²³. Robison explained the two key aims behind the decision of a GOS contract in 2006, being firstly the eye examination itself, and secondly the enhanced services which would be carried out through additional training for practitioners, for example, low vision services²⁴. To examine the performance of community eyecare, it is worth reviewing how the latter aim has been achieved at a more nuanced level, by three different Scottish health boards.

NHS Lanarkshire Eye Network Service (LENS)

The Review²⁵ gives examples of how specific health boards have achieved this aforementioned point, for example, the Lanarkshire Eye Network Service (LENS) which was introduced by Lanarkshire Health Board in 2008²⁶. This scheme is a key example of retaining the management of care in the community and offers patients NHS-funded emergency appointments, with a fast and efficient follow-up. The LENS scheme's original aim was to reduce demand on the Ophthalmology Acute Eye Casualty Clinic by directing a range of eye problems that would usually be seen by a GP or hospital service to optometrists for investigation and diagnosis. LENS permits optometrists who are registered, to access a range of medications through patient group directives which can be supplied to the patient without charge²⁷. This not only ensures a prompt service for the patient but allows for earlier intervention, appropriate treatment, less ocular morbidity and reduces the burden on secondary care.

NHS Ayrshire and Arran - Eyecare Ayrshire

In addition to the success of GOS in enhancing services from 2006 to ensure service performance and patient satisfaction, NHS Ayrshire and Arran have since implemented 5 additional optometry services. These include: Diabetic Retinopathy Screening Service; post-operative cataract assessment; Hospital Contact Lens; Bridge To Vision; and Eyecare Ayrshire²⁸. Eyecare Ayrshire is a scheme that promotes community optometrists within the area. Bridge To Vision again is focused on retention of eyecare treatment in the community, but with a focus on increasing accessibility for those with learning disabilities. The Hospital Contact Lens scheme ensures that these can be fitted in the community. The post-operative cataract assessment ensures that four weeks after a cataract operation, patients have follow-up appointments with a community optometrist. The Diabetic Retinopathy Screening Service provides additional training to optometrists for them to provide diabetic retinopathy screening in the community²⁹. The post-operative cataract assessment has since been incorporated as part of the GOS schedule.

- 23 The Scottish Government, Robison, Shona (2017) 'The Community Eyecare Review'.
- 24 Ibid, p. 31. 25 Ibid. p. 31.
- 26 Ibid, p. 31.
- Kittoch Medical Practice (2020), Lanarkshire Eye Network Scheme LENS.
- 28 The Scottish Government, Robison, Shona (2017) 'The Community Eyecare Review', pp. 32-33.

29 Ibid.

NHS Grampian - Eye Health Network

Lastly the Review³⁰ details another success: the Eye Health Network (EHN) which was implemented by Grampian's Health Board in 2007. The network was borne out of an audit which showed that less than 10% of walk-ins at Aberdeen's Eye Department required the skills of an ophthalmologist³¹.

It is an exemplary model of primary and secondary eyecare working together to ensure patients are seen by the appropriate health professional in a timely manner. An agreement was made between primary care and secondary care professionals in Grampian to manage patients with Herpes Simplex Keratitis, Marginal Keratitis, Anterior Uveitis, or those with a Corneal foreign body under the Eye Health Network (EHN)³². Optometrists can co-prescribe medication for these conditions through local GPs, which ensures that patients can receive their treatment promptly, without the GP or hospital having to assess the patient.

The network of practices are supported by a clinical decision unit (CDU) manned by nurses who can provide advice to the optometrists on how to manage more complex cases within the community and share information in real-time with an ophthalmologist. A decision can then be taken as to whether it is appropriate for the patient to remain in the community or to be booked into the urgent referral clinic (URC)³³.

The success of the service in NHS Grampian is illustrated by a case study:

Caroline Robertson (62), Aberdeen

Ms Caroline Robertson has been seen at Douglas Dickie Opticians in Aberdeen for emergency appointments due to a condition called Uveitis. This is often a recurrent condition where patients have symptoms of a painful red eye. If left untreated, this condition can be sight threatening and is usually seen at the hospital by an ophthalmologist for treatment. As this is one of the Grampian EHN conditions, optometrists can co-prescribe the appropriate medication through the GP without the need for onwards referral to the hospital eye service.

She attended her optometrist in September 2020 when she became increasingly light sensitive with a sore eye. Her optometrist Lindsey Jones diagnosed anterior uveitis and following the local protocols, contacted the GP asking for Ms Robertson to start on treatment.

Caroline said "I was very happy with the service that I received. It was a lot less stressful being seen in my local practice compared to the hospital. Since I am required to have the dilation drops to assess my Uveitis it's a lot easier if I don't have far to drive. It also saved me so much time as I am aware of the lengthy wait to be seen if I have to attend the eye clinic, sometimes you wait many hours".

Lindsey Jones, Optometrist enjoys being part of the EHN in Grampian and says "The EHN has made a huge difference to how we practice in Grampian. It has allowed me to expand my role as an optometrist and gain confidence in treating conditions that I would have had to refer to the hospital in the past. It is much more convenient for patients saving them a trip to the hospital. It has led to a better working relationship between myself and the local GP's with GP's being happy to prescribe based on my diagnosis."

Overall, exploring the health board successes as mapped out within the 2017 Review is important because it shows that the work already done has been efficient in enhancing the service of GOS. It also gives us foresight into the developments that additional funding from The Scottish Government could ensure for Scottish eyecare services across the length and breadth of the country. Beyond the health board initiatives, a comparison between the 2006 General Ophthalmic Regulations (2006) aims and their delivery, as detailed within Table 1, helps to further illustrate the case for strong performance upon which the enhancement agenda can be constructed.

30 Ibid. 31 lbid.

McPherson, Stephen and Olson, John (2014) 'The Eye Health Network - an 'optometry-first' approach to eyecare'.

The Scottish Government, Robison, Shona (2017) 'The Community Eyecare Review', p. 32. 32 33

Table 1: Comparison Between 2006 GOS Regulations Aim and Delivery

Aim of 2006 GOS Contract	Delivery
Improved patient access to services, for acute and chronic disease management	 Before 2006 approximately 25% of acute emergency eye cases were managed within the accessibility of the community setting. By 2018, over 80% of acute eye conditions were managed by community optometrists, enabling easy community access to expertise.³⁴ Improved patient access to services has been illustrated during the Coronavirus pandemic, with Optometry Scotland's survey and data collection identifying that over a five week period during the peak of the pandemic, 74,117 enquiries were dealt with across a sample of community practices. This survey revealed the large numbers of patients seeking support, guidance and care during the pandemic with community eyecare fulfilling a significant role in managing patient needs within the community and meeting The Scottish Government's objectives of relieving the pressure on both primary and secondary care services.
Improved quality of community eyecare service	 In accordance with a National Statistics report published in late 2018, 'Community optometry is now established as the first port of call for patients with eye problems, reducing pressures on GPs and the hospital eye service and the need for patients to travel to hospital.'³⁵ The community optometrist in Scotland has evolved from offering the basic sight test and corrective spectacles prior to April 2006, to being the 'primary care-provider' in the management of eye conditions.
Reduced waiting times for assessment, diagnosis and treatment of common eye complaints	» Patients are met with largely reduced waiting times for assessment, diagnosis and treatment ³⁶ .

- Optometry Scotland (2018) 'A Review of General Ophthalmic Services in Scotland 2006-2017', p. 2.
 National Statistics Publication for Scotland (2018), 'General Ophthalmic Services Statistics', p.13.
 Annoh, Patel, Beck, Ellus, Dhillon, Sanders (2019) 'Digital Ophthalmology in Scotland: Benefits to Patient Care and Education'.

Aim of 2006 GOS Contract	Delivery
Improved integration of eyecare using the skills of many different groups and professions	 In 2006, all optometrists wishing to remain registered with NHS Scotland had to undergo further clinical competency assessments. These included: Contact tonometry Threshold visual fields Binocular indirect ophthalmoscopy Advanced slit-lamp skills³⁷ New treatments have meant that ophthalmologists have increased their ability to 'save sight'³⁸. These treatments include but are not limited to: Retinal detachment surgery Macular disease injections Targeted glaucoma drugs Trabecular drainage surgery Cataract day surgery Independent Prescribing (IP) was introduced to Optometry in Scotland in 2010 resulting in more complex eye conditions being managed in the community by optometrists. There are now 354 IP optometrists working across the country. In 2014, a master's degree (MSc) in Primary Care Ophthalmology was created by the University of Edinburgh. This brings a range of professions looking to enhance skills, namely, junior doctors, allied health professionals and ophthalmic trainees who wish to enhance their knowledge of clinical ophthalmology³⁹ As a result of the popularity of this introduced masters, a Master of Surgery (ChM) in Clinical Ophthalmology was introduced in 2015⁴⁰. In 2020, NHS Education Scotland introduced a new glaucoma qualification (NESGAT) that will provide greater opportunities for the management of glaucoma in the community by accredited community optometrists.
Enhanced community preventative care to increase the detection of sight-threatening disease	» Disease prevention and early identification of sight-threatening conditions have improved greatly from 2006 to 2017. Improvements were made to develop the case finding/screening for eye disease with the opportunity to recall patients early to reassess or repeat tests or examinations (supplementary examination) ⁴¹ .

- 37 Scottish Executive (2006) 'Review of community eyecare services in Scotland: final report'.
 38 Scottish Government (2017), 'Community Eyecare Services', p.13.
 39 Annoh, Patel, Beck, Ellus, Dhillon, Sanders (2019) 'Digital Ophthalmology in Scotland: Benefits to Patient Care and Education'.
 40 Ibid.
- 41 Scottish Government (2017), 'A Ten Year Review' in 'Community Eyecare Services: Review', p.3.

Aim of 2006 GOS Contract	Delivery
Improved patient satisfaction	From a NHS Lanarkshire (2013) patient satisfaction survey on the Eye Network Service, it was found that 89% of patients were 'very satisfied' with the eyecare they received in primary care ⁴² .
Improved patient outcomes by early diagnosis and treatment	 A study across 12 years (2000-2012) compared the quality of more than 300 glaucoma referrals. It found that following the introduction of the GOS contract, 'patients with glaucoma were correctly referred at an earlier point, allowing timely intervention'⁴³. Additionally, this study found that following the introduction of the GOS contract, there were an increased rate of true positives and fewer cases of false positive referrals⁴⁴.
Improved access to low vision support at an early stage	 In 2017, a review found 'very patchy provision' of low vision support services across Scotland⁴⁵. Because of this, The Scottish Government launched a separate review the same year to investigate the provision of low vision service in Scotland⁴⁶. The main point from this was that access to low vision services were inequitable across Scotland. The Review concluded that future planning of low vision services would require policy makers to seek an evidence-based solution to improve access and equality⁴⁷.

- NHS Lanarkshire (2013) Eye-Health Network Service (LENS) Patient Satisfaction Survey.
 Jonuscheit, Loffler, Strang (2019) 'General ophthalmic services in Scotland: value for (public) money?', p. 225-226.
- 44 Ibid.
- 45 The Scottish Government, Robison, Shona (2017) 'The Community Eyecare Review'.
 46 The Scottish Government, Court, Mitchell (2017) 'A Review of Low Vision Service Provision in Scotland'.
 47 The Scottish Government, Court, Mitchell (2017) 'A Review of Low Vision Service Provision in Scotland'.

Service Delivery During COVID-19

The financial support, additional service measures, and guidance provided by The Scottish Government during the COVID-19 lockdown from March onwards have been welcomed by primary eyecare clinicians across the country. This support played a vital role in allowing practices to retain clinical staff in order to offer remote triage and consultations. Treatment continued where appropriate and when face-to-face care was not practical. The collective intention and aim identified by Optometry Scotland and The Scottish Government was to safely maintain eyecare services, supporting our primary care colleagues in general practice and pharmacy and in particular minimising the number of patients attending secondary care ophthalmology.

The strong performance of community based services during the pandemic is further illustrated by case studies from South Lanarkshire and Grampian prepared for the 2020 National Eye Health Week:

The strong performance of community based services within Lanarkshire is further illustrated by a case study prepared for the 2020 National Eye Health Week:

Ian Johnstone (72), South Lanarkshire

lan Johnstone went to his optician believing he had something in his eye – but later learned he had experienced a mini stroke.

By chance during his tests, kidney cancer was also detected before it metastasised, allowing him to be referred for vital treatment.

In July, lan was working outside and thought he got a foreign object stuck in his eye – and after a few days his vision started to become blurry.

He contacted Localeyes opticians in Stonehouse and optician Colette Dunsmore arranged for him to be examined. The optician could see a "grey shadow" in Ian's retina at the optic disc, in addition to haemorrhages at the other side of the disc. Following this, Colette referred him to Hairmyres Hospital for further investigation.

It was discovered the grey shadow was ischaemia, a restriction in blood supply to tissues, which causes a shortage of oxygen to them - the hospital's ophthalmology department diagnosed a mini stroke.

During his stay in hospital it was discovered lan had very high blood pressure and he was kept in for a further three days to determine the cause. His kidneys were scanned and a cancerous mass was discovered on his right kidney – however a full body scan confirmed it had not spread to any other areas of his body despite doctors suspecting he may have had the cancer for some time without any symptoms. He is now set to undergo surgery to remove part of his kidney in the coming months.

lan said: "I'm a pretty active 72-year-old and thought I simply had something in my eye – I didn't suspect a mini eye stroke and had absolutely no reason to suspect I had cancer. I am so grateful to Localeyes for ensuring I was referred to the hospital where the cancer was discovered. Although it wasn't connected to the mini eye stroke, it was found as a result of this hospital stay and the doctors described it as an 'accidental find'. Luckily this means I am aware of it and can be referred for vital treatment." The success of the service in reacting to the COVID-19 pandemic is illustrated by a further case study prepared for the 2020 National Eye Health Week:

Marjorie Sim (56), Aberdeenshire

Marjorie Sim from Aberdeenshire received potentially life-saving treatment during lockdown after blurred vision and headaches turned out to be symptoms of a brain aneurysm.

One morning in May she experienced what she described as an "explosion in her head" followed by painful headaches and sickness. A week after the symptoms began, her vision gradually blurred in her left eye leaving her unable to see out of it.

Her GP referred her to an optometrist at Aberdeenshire's Emergency Eye Treatment Centre who organised a video consultation with her. Optometrist Craig McCoy noticed her eyelid was drooping and her eye was pointing down which can be caused by several serious conditions.

He referred Marjorie to an ophthalmologist at Aberdeen Royal Infirmary who arranged a CT scan and angiogram that same day, and the results revealed an aneurysm in her brain which was pressing on a nerve. She was transferred to the Edinburgh Western General Hospital to undergo surgery to prevent the aneurysm from bursting and she is now recovering at home.

Marjorie said: "I am very thankful to the optometrist at the Emergency Eye Treatment Centre for acting so quickly. The situation was scary enough but the fact that we were in lockdown at the time made it extra difficult and I could have chosen to persevere at home, rather than seeking treatment. I'm so lucky I didn't and it just goes to show that it's so important to follow your instincts when it comes to your health."

The positive experience of practitioners is highlighted by The College of Optometrists who commented that: "during the pandemic, patients were still able to access a high-level service and optometrists have worked incredibly hard to continue to support patients and other healthcare professionals in both secondary and primary care – through the Emergency Eye Treatment Centres or by providing remote care and triaging services."

This was reinforced by the testimony from Eyehealth Scotland who advocated that "community eyecare performed more than admirably during COVID-19–they demonstrated what can be achieved with a willingness to work together with secondary care to deliver the best possible service for the patient. Enhanced optometric roles, sharing of data electronically, centralised hubs, and teleophthalmology all contributed to this achievement. Government funding, plus benchmarked training to provide standardised quality, governance and audit are required in order to maintain or recreate this level of service, while also ensuring it is cost-effective."



Expert Insight from **Ian Jarvis**, Jarvis Optometrist Dundee, NHS Tayside:

The COVID-19 crisis has highlighted the enhanced role of Optometry, both in how it had a positive impact on patient care and reduced the burden on secondary care. During lockdown, Jarvis Optometrist was one of the Emergency Eyecare Treatment Centres, which continued to see patients face to face where required. During this period, of the 280 patients examined, only 6 needed to be referred to secondary care and seen by Ophthalmology. The rest of the patients were managed successfully in primary care. COVID-19 raised the

profile among fellow primary care colleagues in pharmacy and general practice, who are now aware that we are the first point of contact for ocular problems.

The expert insight provided by lan Jarvis, combined with a wider industry view, highlights that community optometry performed well throughout the COVID-19 pandemic which has been achieved through collaboration with secondary care and a constructive relationship with The Scottish Government. Moving forward, how services are maintained has to be considered within the context of COVID-19 and beyond. The *Expert Working Group* proposes that increased support will be required to ensure high-quality care as primary care remobilises.

Maintenance of Services

The current service standard in community-based optometry has been delivered through incremental increases across time at the annual Scottish Government budget iterations. Over the last decade, there has been a gradual cash terms increase in the GOS budget rising by £16.5 million between 2012/13 to 2019/20 (Table 2). However, this has been driven by an upsurge in the total volume of eye examinations increasing from 1.92 million in 2012/13 to 2.18 million in 2019/20 (Table 2).

Table 2: Scottish Health Budget, GOS Year on Year Iterations (2012-2020), GOS Examinations, GOS Mean Examination Cost and Mean Cost +CPI

	2012-1348	2013-14 ⁴⁹	2014-15 ⁵⁰	2015-1651	2016-17 ⁵²	2017-1853	2018-19 ⁵⁴	2019-2055
Global Health Budget	£11.9bn	£12.0bn (+0.8%)	£12.0bn (-/+ 0%)	£12.2bn (+1.7%)	£12.9bn (+5.7%)	£13.1bn (+1.6%)	£13.4bn (+2.3%)	£14.2bn (+6.0%)
General Ophthalmic Services	£93.0m	£93.0m (-/+0%)	£93.0m (-/+0%)	£93.0m (-/+0%)	£100.0m (+7.5%)	£107.4m (+5.3%)	£108.4m (+0.9%)	£109.45m (+1%)
Number of GOS Examinations	1,927,081	2,030,614 (+5.4%)	2,039,845 (+0.5%)	2,109,945 (+3.4%)	2,198,382 (+4.2%)	2,213,781 (+0.7%)	2,343,604 (+5.8%)	2,182,534 (-6.87%)
Mean GOS Examination Cost	£36.74	£36.52 (-0.6%)	£36.39 (-0.4%)	£36.20 (-0.5%)	£36.04 (-0.5%)	£36.48 (+1.2%)	£36.46 (-0.1%)	£36.45 (-/+0%)
Mean GOS Examination Cost + CPI	£36.74	£37.59 (+2.3%)	£38.15 (+1.5%)	£38.30 (+0.4%)	£38.68 (+1.0%)	£39.69 (+2.6%)	£40.60 (+2.3%)	£41.29 (+1.7%)

The overall trend in the year-on-year percentage changes to the Global Health Budget, compared to the budget for General Ophthalmic Services shows the overall health budget increasing at a higher rate, as illustrated by Figure 6.

- The Scottish Government: Scottish Budget Draft Budget 2015-16, p.26.
 The Scottish Government: Draft Budget 2016-17: Health and Sport, p.9.
 The Scottish Government: Scotland's Budget: Draft Budget 2017-2018, p.31.
- 53 The Scottish Government: Scottish Budget: draft budget 2018-2019, p.57
- 54 The 55 Ibid. The Scottish Government: Scottish Budget 2020-21, p.53.

⁴⁸ The Scottish Government: Scottish Budget Draft Budget 2013-14, p. 30.

⁴⁹ The Scottish Government: Draft Budget 2014-15: Health and Sport, p.14.

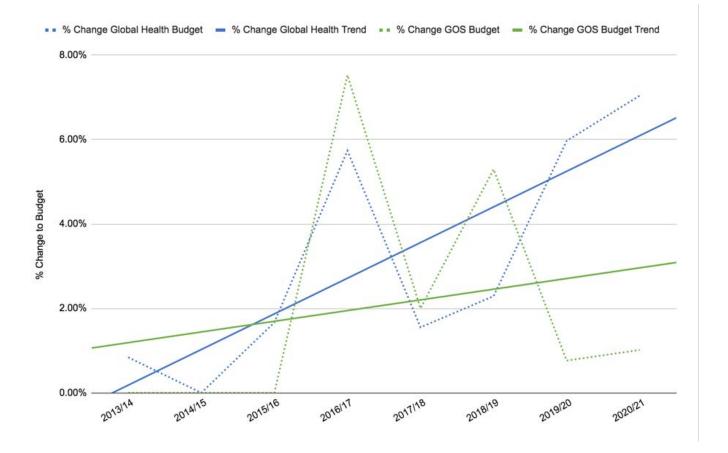


Figure 6: Percentage (%) Changes to GOS Budget Compared to Global Health Budget

Despite the growth in cash terms, the real terms investment per examination has decreased from £36.74 to £36.45 per examination between 2012/13 and 2019/20 (*Table 2*).

The overall increase in patient volumes and investment deflation is part of a deeper, multifaceted challenge since a growth in patient numbers requires further capital investment (examination rooms and equipment) and personnel (optometrists, dispensing opticians and support staff), the costs of which have increased over time.

With regard to maintaining the integrity of the workforce, it should be noted that staff costs have risen:

- The UK National Minimum Wage increased for those over the age of twenty-two rising from £6.19 in 2012 to £8.72 for those aged twenty-five and above in 2020 (known as the National Living Wage rate)⁵⁶. This represents an increase of 40.8% from 2012 to 2020 in the Minimum/ Living Wage alone, and demonstrates the growing pressure of staff costs.
- » Under the Pensions Act 2008, employers must automatically enrol staff in a workplace pension scheme. As the scheme has been phased in, the minimum employer contribution has risen from 1% in 2012 to 3% in 2019⁵⁷, further adding to staff costs.

⁵⁶ House of Commons Library (October 2020): National Minimum Wage Statistics.

⁵⁷ Office for National Statistics (January 2021): Annual Survey of Hours and Earnings Pension Tables.

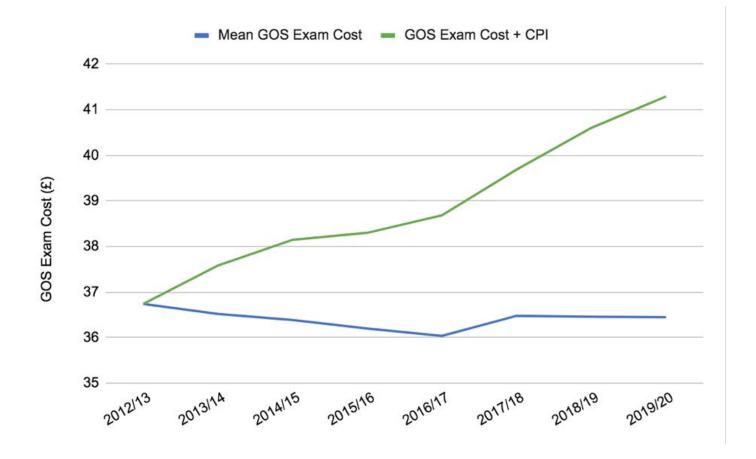


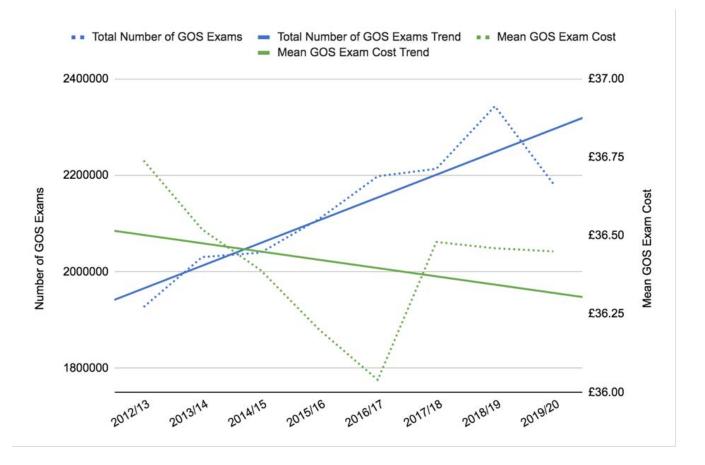
Figure 7: Actual Cost of Mean GOS Exam Compared to Cost Increased by CPI

As *Figure 7* demonstrates, had the mean GOS exam cost in 2012/13 (£36.74) risen annually in line with CPI⁵⁸, the GOS exam cost in 2019/20 would stand at £41.29, £4.84 higher than the actual mean cost of £36.45 per exam.

Since 2012/13 the number of exams has risen, while the cost of GOS exams has fallen. This has put the service under additional pressure as the gap between activity and investment has widened, as shown in *Figure 8.* Going forward, there must be a direct link between the GOS budget and GOS fee levels.

58 Office for National Statistics (January 2021): Dataset: Consumer price inflation time series.

Figure 8: Number of GOS Exams Compared to GOS Exam Cost



Key Observations

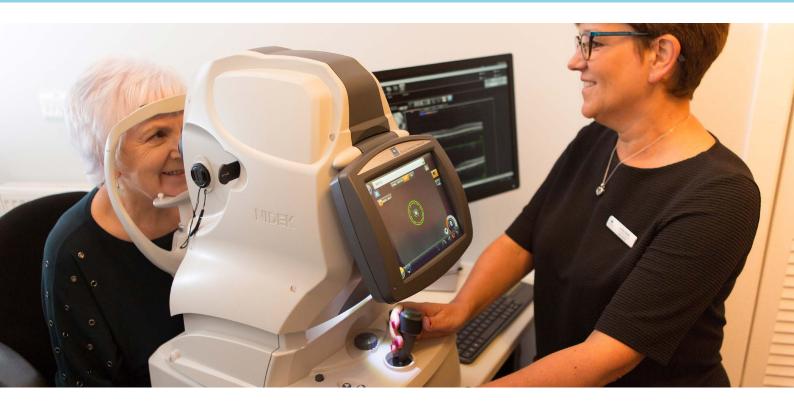
- The activity undertaken in terms of the total number of eye examinations (primary, supplementary and more recently the enhanced supplementary) has risen by 13% from 1.92 million to 2.18 million between 2012/13 and 2019/20;
- Meanwhile the real terms investment per examination has flatlined and decreased from £36.74 in 2012/13 to £36.45 in 2019/20;
- At the same time, staff costs and capital investment in facilities have risen in response to the increase in eye examination activity - with the National Minimum Wage increasing by 40% between 2012 and 2020 and minimum employer pension contribution increasing to 2% of staff costs over the same period;
- » The widening gap between the number of examinations undertaken and the real terms investment per examination has resulted in additional year-on-year pressures on the service.

Conclusion

The *Expert Working Group* argues that for community-based practices to sustain themselves and look at playing a greater role moving forward, a rolling **three-year funding agreement with The Scottish Government should be established**. The *Expert Working Group* recognises that the funding cannot be found to immediately replace the lost income and investment between the average GOS examination cost of £36.74 in 2012-13 and the index-linked £41.29 modelled for 2019-20.

The *Expert Working Group* proposes that a **funding agreement incorporates an annual 3% real terms** increment on fees for each item of service incorporated into a rolling review of services and investment in resource training and technology.

These budgetary increases are required to retain the integrity of the service and workforce and to ensure that the gap between the average GOS examination fee and index-linked cost of delivering the service can be managed in a controlled way. Without this The Scottish Government risks a detriment not only to the integrity of community eyecare in Scotland, but also in its ability to deliver a greater role within primary health care and support for The Scottish Government's remobilisation agenda.



Use of OCT Machine in a Community Practice

Chapter Overview

The *Expert Working Group* understands that COVID-19 has been at the forefront of The Scottish Government's priorities in 2020, and is fully aware that its legacy will remain a focus in the coming years as the country recovers. As has been evidenced during the pandemic crisis, community eyecare has performed a central role in the delivery of local healthcare and the support of fellow primary and secondary care providers. The ability of the sector to adapt rapidly and deploy services in the toughest of conditions has - with appropriate Government support - demonstrated a flexibility that could be maintained and extended to other community health and social care services.

This Chapter will further build on the previous two chapters and demonstrate how additional investment in optometry will enhance the role of an optometrist and dispensing optician within the primary care setting.

These are:

- a. Funding Innovation through technology;
- b. Service consistency in working practices;
- c. Advancement of embedded enhanced training;
- d. Widening the provision of quality eyecare in a home setting;
- e. Improving communication and cooperation with the third sector and social care;
- f. Enhancing the patient's experience.

Each section in Chapter 3 will reflect the above.

(a) Funding Innovation Through Technology

Importance of Consistent Equipment Standards

The application of consistent national standards of care - by way of GOS regulations - is integral in providing high levels of clinical excellence. Central to this is the application of technology. Advancements in clinical technology were initially supported in 2008 by way of Government grants for fundus cameras but the cameras and technology are now outdated and have given way to the advent of Optical Coherence Tomography (OCT) which is now being adopted in some practices where patients are having to pay for the benefit of the enhanced diagnostics, helping practitioners recoup their investment in new technology.

The benefits of funding innovation and achieving a more equally distributed cover of OCT is increased by:

- 1. Equity across all health board areas;
- 2. Employing a national standard of equipment quality which promotes equality, and in turn, more efficient outcomes by way of increased Community management and reduced hospital referral;
- 3. Removal of a two tier service based on the patient's ability or willingness to pay.

Community eyecare practices already operate with minimum equipment standards and are audited against a specified list of equipment as set out by the NHS, which is uniform across all health boards. This has been enhanced with investment from The Scottish Government over the years with fundus cameras in 2008 (now outdated) and pachymeters in 2016. Further budgetary increases in line with technological advances, will ensure an enhanced service across Scotland.

The *Expert Working Group* recommends that enhancing consistency in equipment standards will also contribute to equity for all Scottish patients and the next step to achieving this is through the broader rollout of advanced digital imaging.

OCT Investment

The importance of Optical Coherence Tomography (OCT) scans lie in their preventative impact for patients, enhanced diagnostic and patient management capabilities.

'The ability to visualize vitreoretinal or anterior segment structures in real time may improve the ease and success of current surgical interventions and may provide novel, important information regarding postoperative healing processes.'⁵⁹

OCT scans can provide advanced detection of conditions such as glaucoma and retinal disease. These scans are increasingly being provided privately, meaning accessibility is reduced to those with financial limitations. Where this is available, optometry services are enhanced leading to better referral refinement and relieving pressure on secondary care by retaining ongoing assessment and management in the community. Increasing the chances of detection of disease at an earlier stage, they improve referral refinement and the potential avoidance of inappropriate misuse of valuable secondary care resources.

In order to improve access to OCT technology while recognising the considerable capital costs involved to purchase the technology - in excess of £30,000 per unit - The *Expert Working Group* recommends that a supplementary fee to the GOS regime be introduced. This will both incentivise community practitioners to normalise investment in technology such as this and widen its availability. A supplement for digital fundus imaging was already established in 2008 however is now outdated and becoming redundant with advances in digital imaging such as OCT and Optomap imaging.

⁵⁹ Hahn, Migacz, O'Connell, Maldonado, Izatt, Toth (2012). The Use of Optical Coherence Tomography in Intraoperative Ophthalmic Imaging.

Establishing an OCT Database

A universality of OCT scans in Scottish optometry practices could contribute to establishing a Scottish database of imagery from the scans, which would give better analytics across optometry. Establishing a single database would prove invaluable to both primary care practitioners and ophthalmologists receiving referrals from a practice. There is already work underway by Glasgow Caledonian University (GCU) and The University of Edinburgh collaborative project (Scottish Collaborative Optometry-Ophthalmology Network e-research (SCONe)) in assessing the feasibility of constructing a retinal image (OCT and fundus photography) database. This project proposes to build an image resource for innovation in eye research, implemented Scotland-wide⁶⁰. SCONe project lead, Professor Niall Strang explains the project as being in its early stages, and will help from an educational perspective, but also help optometrists to diagnose and improve referral. The *Expert Working Group* recommends that The Scottish Government work closely with Optometry Scotland, GCU and the University of Edinburgh to work with SCONe to create a database vital to the enhancement of the service.

The *Expert Working Group* recommends early engagement by The Scottish Government with the sector to amend the current GOS fee model in order to facilitate greater uptake of advanced digital imagining such as OCT machines. Along with establishing a national OCT database, the *Expert Working Group* proposes a supplementary fee is added to the existing fee regime in order to incentivise practice investment and widen the presence of this technology in the community.

(b) Service Consistency in Working Practices

As previously mentioned in this report when discussing the performance of the service, success stories have been borne out of specific schemes implemented within certain health boards in Scotland. This is demonstrated through examples within the Grampian Eye Health Network (EHN), Lanarkshire Eye Network Services (LENS), and the Low Vision services in Ayrshire and Arran. As an example, the EHN scheme has added an enhanced level of empowerment for optometrists through additional training which provides skills for immediate action for treatment intervention. The Low Vision service in Ayrshire and Arran is a clear model for demonstrating what could be achieved if a national Low Vision Plan was implemented.

The standards of those practicing optometry in Scotland are consistently high, but the service could be enhanced through better provision of how skills are applied throughout the whole of Scotland. This would help to address the aforementioned concerns of disparity between certain areas in Scotland accessing eyecare services and those living in rural or remote areas of Scotland, who although may be close to a practice, may not be close to a hospital.

For example, in the Highlands and Islands:

- » If all of the Highland population were to attend the hospital eye service (HES), the average journey would be 92 miles (45.5 miles each way);
- » 34,700 patients live over 90 miles away with an average of 173 miles round trip;
- » 60,250 patients live over 30 miles from Raigmore, but all have an optometrist within 30 miles.

The *Expert Working Group* recommends that setting the standards and achievements of these schemes as the benchmark to which all health boards work across Scotland will improve equity and the service overall, and ensure that every patient in Scotland receives the same level of eyecare as per their individual clinical needs. Much of the success of community eyecare in Scotland is due to a consistent drive towards equity across all services and consistent national standards of care across all health boards.

60 The University of Edinburgh (2020). The Scottish Collaborative Optometry-Ophthalmology Network e-research (SCONe).

(c) Advancement of Embedded Enhanced Training

Optometrists and Dispensing Opticians undergo annual training to remain registered practitioners. In Scotland, all optometrists are assessed with certification in dilated volk assessment, contact tonometry and pachymetry as part of quality assurance. The increasing level of independent prescribers in Scotland also shows the profession willing to engage and upskill from their core competencies. The *Expert Working Group* recommends that this be more established in undergraduate qualifications, such as the Independent Prescribing (IP) qualification as instructed through Glasgow Caledonian University⁶¹.

The *Expert Working Group* acknowledges that there are some conditions that community eyecare clinicians are already trained to diagnose, treat or manage within current core competencies.. This is already evidenced in some health boards such as Grampian and Lanarkshire but could be rolled out in others to help ease the number of patients attending secondary care without the need of enhanced qualification. Utilising the skills that practitioners already have is a key first step in addressing what can be managed in community. Dispensing Opticians play a vital role in practice settings being accessible to patients and with the clinical knowledge to offer expert advice and support on optical appliances and in particular low vision aids. The *Expert Working Group* also recognises that management of more complex conditions that may require certification through continued Professional Development (CPD), however maximisation of core competencies, as evidenced in some health board areas, will ensure a patient centred approach with further training providing an enhancement without being a barrier to this.

In addition to the above, the *Expert Working Group* recognises that the skills already possessed by the sector are valuable to incorporate into other areas of primary care which improves the level of interprofessional training amidst the four sectors. Sharing skills in the practices of General Medical Services, Optometry, Dentistry, and Pharmacy will not only contribute to the better professional development of those in healthcare but also improve the quality of networks between the services.

The *Expert Working Group* acknowledges that all optometrists should continue to maintain the same core competencies through continued professional development. This should be complemented with improved interdisciplinary training across primary care. This will ensure that there is a consistent standard across Scotland and patients can attend their usual optometrist at their convenience. Enhanced skills such as corneal foreign body removal can be easily taught to optometrists without the need for a further qualification.

(d) Widening the Provision of Quality Eyecare in a Home Setting

The Federation of (Ophthalmic and Dispensing) Opticians (FODO), Association of British Dispensing Opticians (ABDO), Association of Optometrists (AOP), and the College of Optometrists took the policy position in 2007 that 'all housebound and disabled patients should have the same level of access to eyecare services as able bodied patients'⁶².

Of the 2.1m eye examinations delivered annually in 2019/20, only 55,000 were provided to persons in their own homes or a care home setting. These services are delivered by specialist practitioners and operators across the country but the relatively low numbers suggest that a sizable number of eligible persons are not accessing the service to which they are entitled. These patient groups may include more vulnerable patients, elderly or with other health issues, and those susceptible to isolation, falls or other issues relating to sensory impairment.

Despite the success of NHS funded examinations and Community Eyecare in Scotland, some eligible persons in a home setting are not accessing the service. The collateral benefits of addressing visual impairment on fall

⁶¹ Glasgow Caledonian University: Independent Prescribing for Optometrists.

⁶² Association of British Dispensing Opticians, Association of Optometrists, the College of Optometrists, Federation of Opthhalmic and Dispensing Opticians (FODO) (2007). A fundamental right to sight: A contribution to the national service frameworks for older people and long-term conditions, and independence, well-being and choice.

prevention, dementia, and other mental illnesses are already documented so finding more effective routes to care must be found to provide the equality of provision that is expected of the service.

The Expert Working Group recommends that in order to improve the uptake of domiciliary services across Scotland, better coordination and communication between Community Eyecare, Third Sector and Social Care colleagues is required in the interests of addressing the mounting challenges of sensory impairment on general health and wellbeing amongst vulnerable groups.

The Expert Working Group proposes that visit fees are increased to reflect this in addition to the 3% inflationary increases proposed within Chapter 2. It should be noted that mobile providers have higher levels of variable cost and therefore, do not benefit from the economies of scale available to fixed premises.



Insight from Professor Sir Lewis Ritchie OBE, Mackenzie Chair of General Practice, University of Aberdeen

Whilst there is very much a case for a full review of how optometry services are delivered in suburban and urban high street settings, the increasing needs of the elderly and citizens living in remote and rural areas of Scotland must continue to be provided for, in order to ensure equitable care.

Of the circa 1.5 million primary care eye examinations delivered annually in Scotland, only 50-55,000 (about 5%) relate to those persons eligible for eyecare in a home setting. In 2018,

67,985 persons received routine home care between the three-month period January-March 2018⁶³. This suggests that many with undiagnosed sight-threatening conditions, or those for whom visual impairment might increase the likelihood of falls or other untreated conditions, might place further pressures on other services. Awareness-raising of these vital services must be improved and eyecare providers properly funded to deliver an increased number of examinations in a home setting.

Scotland has a good network of optometry practices throughout the country. The majority are concentrated around major cities and towns. In remote and rural areas, in keeping with other primary care providers, ophthalmic practitioners are hard to access, since many remain living and local to their original training institutions (mostly around Glasgow and more recently, Inverness). Ongoing community eyecare depends on a good and equitable supply of professional staff throughout Scotland. Practices in remote and rural locations throughout Scotland should not be systematically disadvantaged over urban and conurbation areas⁶⁴. Future support must address and mitigate this palpable risk.

Citizens living in remote and rural areas of Scotland are on average 65 miles from a hospital and only 30 miles from a community eyecare practice. The potential and imperative exists for patients requiring enhanced eyecare services to receive them in their own locale. The recently-introduced shared care initiative should be continued in order to provide a long-term sustainable delivery mechanism for persons with lower-risk eye conditions to facilitate their early discharge from ongoing care. Equally, those patients with more complex chronic conditions require to be co-managed in their local community, on an ongoing and sustainable basis⁶⁵ In order to realise this aspiration, the availability of sufficiently robust remote (virtual), learning, coaching and training is imperative.

- NHS Scotland, ISD Scotland (2019) 'Insights into Social Care in Scotland: Support provided or funded by health and social care partnerships in Scotland 2017/18'
 The Scottish Government (2020) 'Shaping the Future Together: Remote and Rural General Practice Working Group Report'
- The Scottish Government (2015) 'Summary Report of the National Review Primary Care Out of Hours Services'

Chapter 3: Enhancement to the Service

(e) Improving Communication and Cooperation With the Third Sector and Social Care



An Insight from **Jonathan Reid**, National Coordinator for the See Hear Strategy; The Health and Social Care Alliance Scotland (The ALLIANCE):

As the National Coordinator for the See Hear Strategy, the development of enhanced pathways, information and services for people living with sight loss, including the preventative benefits that this brings, are of significant importance. The Scottish Government, via the See Hear Strategy, has developed a See Hear Lead in every Local Authority area of Scotland who connects and coordinates with local sensory networks including Third Sector partnerships, Local Health Boards and other care providers. Against this backdrop, enhanced cooperation and connected messaging between the high street and the Third Sector can give rise to an enriched experience for the citizens of Scotland, providing clearer and quicker pathways to diagnoses and identification and easing pressure on secondary care provision. In addition, a forecasted rise in real terms in sight loss within certain

demographic groups highlights the importance of prevention and eye health literacy within the community. The socio-geographic nature of Scotland offers opportunities for a move towards community-led primary eyecare in this regard, ensuring cohesive approaches across the nation, and an enhanced architecture of knowledge and resource for the population.

Third sector organisations for eyecare in Scotland are already engaged in awareness-raising around the health complications that visual impairment, blindness and eye diseases can bring and to vulnerable groups in particular. These organisations work consistently to a preventative eyecare agenda.

As described by Jonathan Reid, See Hear is a long term strategy for Scotland, implemented in each health board, within which there are local sensory groups. If fully endorsed and implemented across all health boards, this strategy would support Community Eyecare and Social Care achieve an equitable national level of eyecare, by ensuring that each health board has tailored strategies for problems that are more prevalent within that area. The strategy recognises that different populations, in age, gender and ethnicity account for a wide spectrum of problems, for example, the average eye problem of a resident of Glasgow City Council may not be the same as someone inhabiting the Western Isles.

The *Expert Working Group* proposes working with third sector and social care organisations on policy such as the See Hear Strategy in order to achieve common goals which will enhance not only eyecare in Scotland but primary healthcare as a whole. The ultimate aim is to raise public awareness to the point that more of the population, especially those who are within lower income, high-risk groups, maintain their eye health. Creating this culture in Scotland of raising citizens' awareness of eye health will contribute to creating a culture of Scots with overall better health care, meaning less problems and financial burden for both primary and secondary care in the long-term. In uniting with the third sector, through increased funding to launch awareness campaigns, the *Expert Working Group* hopes to help lead the way in ensuring better primary care throughout Scotland.

(f) Enhancing the Patient's Experience

In their manifesto for the 2021 Scottish Parliament Elections, RNIB summarised four main requests oof the next Scottish Government⁶⁶. Linking to the aforementioned section on improving communication and cooperation with the Third Sector, RNIB asked that the government 'launch a public campaign to raise awareness of eye-health'. Importantly, RNIB Scotland details specific ways thiscould happen by:-

- 1. Funding independent advice and advocacy services on/for social security;
- 2. Mandatory training for bus drivers which will help passengers who need assistance;
- 3. Providing information and advice in accessible formats.

Community eyecare in Scotland should be as much about raising public awareness as enhancing optometric practices and creating long-term solutions for Scottish people living with sight disabilities. In launching a public campaign which stretches from sectors such as health care to Scottish transport, The Scottish Government would show a commitment to ensuring that Scotland is a consistently fair society, and that help for those who need it is not solely found in health care but across other important aspects of life. Launching such a campaign will also address an important concern raised in the RNIB manifesto which is that 'only one in four blind and partially sighted people' are 'in paid employment'. The most important policy ask from RNIB is their Low Vision Plan which is supported by the Association of British Dispensing Opticians (ABDO) and the *Expert Working Group*. RNIB's Low Vision Plan is reflective of the Welsh Low Vision Service. A Low Vision Plan will enable equitable and consistent service provision across Scotland.

In furthering the wider communication of these and other positive healthcare messages, Community Eyecare media partners have discussed the possibility of using existing marketing and PR platforms in the interests of raising better healthcare awareness.

Conclusion

Chapter 3 outlines the following recommendations which the *Expert Working Group* offers to enhance the provision of optometry services within primary care moving forward. The *Expert Working Group* recommends that The Scottish Government should work with Optometry Scotland and other primary care providers to:

- 1. Fund technological innovation through establishing a greater consistency in equipment standards, introducing a supplementary fee to incentivise uptake in technologies such as Optical Coherence Tomography (OCT) and creating a database to enhance analytics. Introducing a supplementary fee will remove inequalities in service and encourage ongoing investment in technology while supporting those who have been unable to do so;
- 2. Enhance the service and ensure consistencies in service provision;
- 3. Embed enhanced training within the optometry sector such as at post and undergraduate levels;
- 4. Provide an improved infrastructure for equality of eyecare in a home setting, remote and rural communities;
- 5. Improve coordination/cooperation with the third sector and social and community care providers and revisit the domiciliary fees to reflect the costs of time and travel in addition to the 3% inflationary increase;
- 6. Enhance the patient experience and raise awareness of the services on offer.

66 RNIB Scotland (2020): A Vision for the 2020s - Focus on sight loss. RNIB Scotland's Manifesto for the 2021 Scotlish Parliament election.

Commissioned by



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