Community Eyecare Services Review
Cabinet Secretary Foreword

Universal access to healthcare is one of the Scottish Government’s key priorities. That is why, in 2006, free eye examinations for all were introduced in Scotland. This meant that anyone from any background was able to access free eye care to help reduce the risk of sight loss.

Since the introduction of free eye examinations, there have been ever increasing demands placed on our health and social care services. The Health and Social Care Delivery Plan that we published last year recognises that the way we provide care to people needs to change and that we need to redesign our services now to better meet our community’s needs in the future. The Modern Outpatient Programme further demonstrates the need for a collaborative approach to healthcare by setting out, where appropriate, when patients should be seen and cared for in the community, rather than travelling to hospital.

Optometry plays a key role in the provision of community care. This has developed since the introduction of free eye examinations, to the service being the first port of call for people with eye problems, helping to detect eye diseases early. Optometrists now need to be seen as an integral part of the transformation of primary care services and the on-going development of community based care. We are fortunate in Scotland that there is very good geographical access to optometry services, but there are still challenges to be met in ensuring that the services are accessed by our more vulnerable communities and individuals.

That is why I announced this Community Eyecare Services Review. The aim of the Review was to consider the care currently provided within community eyecare services, and identify examples of good practice that could be replicated on a national basis.

I believe the report that follows has clearly carried out that task, setting out the excellent care already being delivered by community optometrists on a day to day basis, and making proposals for further development of eyecare in the community. I would like to pass on my thanks to all those who were involved in the Review, and I intend to set out how the Scottish Government plans to respond to the Review’s recommendations later in 2017.

SHONA ROBISON
Cabinet Secretary for Health and Sport
Introduction

A Review group consisting of key stakeholders was established and met on a monthly basis to consider current services, and hear from a range of partners on potential future developments in the service. The remit and membership of the Review Group can be found in Annex A.

Whilst carrying out the Review, the members agreed that a service that is fit for purpose should be underpinned by the following key principles:

- **Person-centred** – for those who both receive and deliver services
- **Intelligence-led** – making the most of what we know about patients and their needs
- **Asset-optimised** – making the most of all available assets and resources
- **Outcomes-focused** – making the best decisions for safe and high quality patient care

Throughout the Review period, the Chair of the Review also met with a number of healthcare professionals from both primary and secondary care who are directly involved in delivering eyecare services for patients. The views of service users were also captured to ensure the patient voice was represented. The views expressed by both service users and providers have been incorporated into this report.

The following report is split into two sections. The first section sets out the current provision of eyecare services, highlighting areas of good practice, as well as current issues facing the service. The second section sets out the recommendations of the Review in delivering eyecare services to meet the future needs of Scotland’s population.

It is intended that the Review should be followed through with an implementation plan in which key stakeholders, including the Scottish Government, NHS Boards, Integration Authorities, professional bodies and patients work together to deliver the recommendations set out in this report.
PART I – CONTEXT AND DEVELOPMENTS SINCE 2006

1. A Ten Year Review

The introduction of the new General Ophthalmic Services (GOS) regulations in 2006\(^1\) heralded a fundamental change from the testing of sight, to a more patient-led approach. NHS eye examinations became free for everyone, removing an important barrier to care. The emphasis was focussed on managing patients in the community where it was safe to do so, and improving the quality of the referrals that were made to the Hospital Eye Service. Disease prevention and early identification of sight-threatening conditions were also key; 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). Dilating older patients, taking retinal photographs, routinely using binocular indirect ophthalmoscopy, contact (applanation) tonometry and repeating measurements of threshold visual field screening have been key elements to developing the service.

Ten years on from the 2006 Regulations being introduced, the community eye care landscape has developed in line with patient needs and government policy\(^2\). More integrated care is being provided in local practices, with community optometry supporting pharmacy, GP, nursing, social care and third sector colleagues to help patients remain within primary care. Many optometrists are caring for more patients within their practices that they would have traditionally referred on to the hospital; referral rates are considerably lower when compared with those in England\(^3\). This is coupled with dramatically developing hospital-based care where enhanced treatments are saving sight in more patients and where the demand for age-related ophthalmological procedures continues to rise. It is more important than ever that primary and secondary care professionals are working effectively together to ensure that patient’s care is appropriate, timely and personalised\(^4\).

Wider integration with social care supports patients in the community with greater needs but despite a universally free service, there is evidence that health inequalities do still need to be addressed\(^5\). Local initiatives have developed some excellent community service models (e.g. NHS Lanarkshire, Grampian and Ayrshire & Arran) enabling care to be shifted into the community where patients are being managed by community Optometry (Annex B).

With many improvements and developments, a ten-year review of community eyecare services is a timely opportunity to reflect on the achievements and to work to develop more clinically evidenced care. It is also the opportunity to assess how patients’ needs have changed and are changing and putting in place a future-proofed service that will continue to be relevant.
2. Scottish Government Policy

Since the introduction of the new General Ophthalmic Services Regulations, the health and social care landscape has changed dramatically. The Scottish Government’s 2020 Vision(2), set out the Government’s strategic vision for delivering quality healthcare services across Scotland, including providing care in a community setting. The publication of the Scottish Government’s Chief Medical Officer’s 2015 annual report Realistic Medicine(4) and the National Clinical Strategy(6) have supported this vision. These strategies highlight the changing demographic of Scotland’s population, the need to deliver quality care in the community where possible, and reduce unnecessary hospital admissions. This work feeds into the Government’s wider primary care transformation agenda of building a multi-disciplinary approach to health and social care, of which optometry will be a key part. The transformational work will explore better ways of working that improve pathways for patients, and ensure that they see the most appropriate healthcare professional in the right place at the right time.

The Scottish Government’s Modern Outpatient Programme launched in 2016(7). The intention of this Programme is to shift focus from outpatient appointments in hospital, to empowering patients to manage their own health, and to be able to access appropriate healthcare support when required. This will involve increasing the delivery of care within a primary/community care setting, therefore reducing the need for patients to attend hospital for treatment where appropriate. This will mean those patients that need to be seen in hospital will be seen quicker, while those that can be managed within the community will see the most appropriate healthcare professional. The Programme is currently in consultation phase.

The eyecare review will also form part of the Health and Social Delivery Plan announced in late 2016(8). Optometry is in a prime position to play a key role in managing this plan, by supporting more patients within the community, and reducing the burden on hospitals.

It is not just Scottish Government policy that has changed the landscape of healthcare provision. The Francis Inquiry examined failings at the Mid Staffordshire NHS Foundation Trust(9) and recommended that healthcare systems should be open and transparent. It emphasised the need for more patient-centred care within the NHS, and high quality leadership. The tragic court case where an optometrist was found guilty of negligent manslaughter(10) has also highlighted the need for good leadership skills within the practice setting, and will influence the training and services provided by locum optometrists. Practices also need to ensure that new and locum optometrists are confident with IT systems before they see patients.

The Scottish guidance on glaucoma referral and safe discharge(11) recommended discharging stable glaucoma patients to be managed in the community, allowing...
those more serious cases to remain within the hospital eye service. The evidence based guidance supports the safe, high quality community care targeted in the 2020 Vision\(^2\).

### 3. The current and future needs of the population

A key government performance target is that the population will continue to live longer healthier lives\(^{12}\). Current projections suggest that the population of Scotland will rise to 5.7 million by 2039, and that the population will age significantly, with the number of people aged 65 and over increasing by 53% between 2014 and 2039\(^{13}\). It is also predicted that those aged 90 years and above will have nearly tripled (an increase of 190%).

Since 2006, the number of patients over 60 years old being examined has increased by 34%. With the prevalence of many of the most sight threatening conditions increasing dramatically with age, the “demand for ophthalmology care within Scotland is (already) rapidly out-stripping capacity”\(^{14}\).

#### Risk Factors

**Age**

Age is the greatest risk factor for developing sight-threatening conditions\(^{15}\). The revised GOS regulations\(^{16}\) reflect this higher risk group, requiring a more stringent ocular assessment as part of the primary eye examination for those over 60 years, and the option to recall at one rather than two years. The older you are, the greater the risk of developing cataract, glaucoma and macular degeneration, as well as retinal changes due to diabetes. Whilst a cataract can generally be easily managed with surgery, treatment to reduce further visual loss due to glaucoma, and to restore and prevent the progression of macular degeneration and diabetic retinopathy are much more challenging. In many cases, early intervention is key to slowing progression and therefore the optometrist is vital in identifying at the earliest opportunity signs of the developing disease.

**Patients with learning difficulties**

It is widely accepted that children with learning disabilities are considerably more likely to have a visual impairment\(^{17,18}\) although estimates vary between 8 and 200 times higher than the general population\(^{19}\). Certainly, levels of refractive error are very high, and the importance of early intervention with the correct spectacle prescription can have a profound effect not only on future vision potential, but on overall social and intellectual development.

Pathways have been established nationally\(^{20}\) and locally e.g. NHS Ayrshire and Arran\(^{21}\) has developed a network of services and trained specialists, and national
training is also available from NHS Education for Scotland for optometrists\textsuperscript{(22)}. SeeAbility’s qualitative studies have indicated the importance of allowing additional time and repeat appointments to conduct a patient appropriate eye examination\textsuperscript{(18)}, something not presently possible under the GOS fee structure\textsuperscript{(16)}.

The fitting of spectacles on patients with learning difficulties can be challenging and NHS England\textsuperscript{(23)} has introduced additional funding for more specialist fitting (special facial characteristics supplement). SeeAbility\textsuperscript{(24)} has recommended that adults with learning difficulties are only dispensed spectacles by a registered practitioner as required when dispensing for children and patients who are blind and partially sighted\textsuperscript{(25)}. This would support a higher quality of care for these vulnerable patients.

**Ethnicity**

Certain ethnic groups are at a greater risk of developing some sight-threatening ocular conditions. Indeed, in Wales patients who are of “Black or Asian Ethnicity” are entitled to an NHS-funded assessment. Scotland has a lower ethnicity mix than many other parts of the UK with 96% population identified as white\textsuperscript{(13)}. The Asian population is the largest ethnic minority group at 3%. However, national statistics can be misleading, with small areas within Glasgow in particular, with very high percentages of minority ethnic residents, which are dramatically increasing\textsuperscript{(27,28)}.

**Lifestyle**

Like many systemic conditions, good nutrition is vital to good ocular health. Recent studies have revealed the very strong links between macular disease and nutrition\textsuperscript{(29)} driving a large increase in the sale of disease specific supplements.

Poor nutrition frequently leads to obesity which is a growing problem in Scotland\textsuperscript{(30)}. Obesity has a negative effect on ocular health, with not only an increased risk of retinal vascular disease, but an increase in conditions such as pseudo-tumour cerebri (idiopathic intracranial hypertension) in obese women of child bearing age\textsuperscript{(31)}.

Smoking has a very negative impact on eye health and under GOS, optometrists are required to ask whether their patient smokes as part of the eye examination\textsuperscript{(1)}. Macular degeneration has a higher prevalence in patients who smoke; these patients have an increased risk of developing cataract, uveitis, dry eye conditions, and other retinal vascular diseases.

**Diabetes**

One of the many complications of diabetes is the effect on vision and the eye. Variable visual acuity, retinal bleeds and neovascularisation as well as the increased risk of developing other ocular diseases, highlight the need for these patients to have regular eye examinations.
Scotland implemented a national screening programme in 2006\(^{(32)}\) with the primary objective of detecting sight threatening changes in patients with diabetes. The Scottish Diabetic Retinopathy Screening (DRS) collaborative is supported across Scotland by NHS Boards. The screening service has a defined set of standards that are regularly reviewed\(^{(33)}\). In addition to diabetic retinal screening, diabetic patients are examined as part of GOS for routine eye examinations. Retinal photography frequently makes up part of this examination. Ayrshire and Arran support diabetic patients with their own local solution which uses community optometry as the screeners and graders.

**Barriers to eyecare**

It is a key part of the Scottish Government’s policies, that barriers to care are reduced and ideally removed for those in lower socio-economic groups\(^{(2)}\). This remains a challenge across health as well as in community eyecare\(^{(34,35)}\). Eye examinations in Scotland have always been free of charge to those on the lowest incomes and in this respect the introduction of the GOS eye examination in 2006 had a lesser impact on this aspect of access to service.

Convenient practice locations are clearly important to the uptake of a service. Studies have indicated an even distribution of service location to deprivation index\(^{(34,35)}\), with the exception in Scotland of high deprivation areas in NHS Tayside\(^{(35,36)}\).

Sir Lewis Ritchie’s report *Pulling together: Transforming urgent care for the people of Scotland*\(^{(38)}\), set out the need for a multi-disciplinary approach to primary care services, both within and out-of-hours. Optometry is able to play a role in this approach as optometry practices, like pharmacies, are open in the evening and at weekends including Sundays but frequently this is in more urban settings. A recent review of access in optometry\(^{(5)}\) concluded that:

> “the patient access problem is complex and more about patient attitudes and social culture than location of practice.”

Indeed, a qualitative study in England has highlighted the general lack of eye health awareness, poor knowledge of the sight test’s role in detecting disease, and negative perceptions of optometry when it comes to the sale of spectacles, as key factors for people not accessing the service\(^{(39)}\).

**Blind and Partially Sighted Patients**

Sight loss is devastating for any individual. It is frequently associated with co-morbidity\(^{(40,41)}\) and impacts on all areas of daily living. It has been estimated that sight loss costs the NHS and the public sector in Scotland a minimum of £194 million
a year, plus £434 million more in terms of broader costs to the economy and to society\textsuperscript{(42)}.

It is estimated that 1 in 5 people aged 75 and over and half of those aged 90 and over, are living with sight loss\textsuperscript{(43)}. Patients with severe sight loss can be registered as blind or partially sighted. In 2010, 34,492 people in Scotland were registered\textsuperscript{(44)}. These people require support and assistance to remain independent, to avoid social isolation and to maintain a good quality of life. Such support services, whilst often extremely effective are frequently disjointed, of variable quality and patchy across Scotland\textsuperscript{(45)}. There is also no clear picture of what such a service should encompass, although it is widely appreciated that it requires a patient-centred approach from a multi-disciplinary team\textsuperscript{(46)}. One initiative that is making a difference is the introduction of vision support officers, offered in some eye clinics around Scotland. They provide emotional and practical support to people with newly diagnosed sight loss and are making a large difference to patients.

See Hear is Scottish Government’s long-term strategy for meeting the needs of people with a sensory impairment\textsuperscript{(47)}. The strategy, jointly endorsed by COSLA (Convention of Scottish Local Authorities), sets out a commitment that adults and children should expect a seamless provision of assessment, care and support with the same access to public services. It is being implemented through local partnerships of statutory and third sector partners, and local leads have been identified to drive progress across priority areas.

4. The activity and costs in relation to eye examinations since 2006

16.4 million eye examinations have been conducted since the introduction of the new GOS regulations and the number of patients attending for an eye examination has risen each year (Charts 1 and 2).
There have been many factors that have driven this increase and these include:

- A free service to patients (NHS funded for all)
- Optometry is seen as the “First port of call” for all eye disease
- An ageing and increasing population
- An increase in referrals by GPs
- An increase in referrals from other health professionals and social care e.g. pharmacists, community nurses, rehabilitation officers
- Patient education e.g. RNIB campaigns, word of mouth, health promotion, commercial advertising
- More patients being managed and treated within primary care e.g. IP optometrists, local board initiatives
- Occupational requirements e.g. driving, VDU
- Patients discharged from the Hospital Eye Service (HES) e.g. ocular hypertensives
- Board initiatives and shared care schemes
- Closure of walk-in Accident and Emergency departments (AEDs)

Changes in 2010 to reduce the frequency of the primary eye examination resulted in a change in balance between a primary and supplementary examination (see Chart 2).
The total spend on eye examinations has risen from just under £40 million when GOS was introduced in 2006/7 to £76 million in 2015/16. There was an initial steep cost increase with a phased fee rise over the first four years, but there has been no fee increase for Optometrists since 2010. Recent increases in spend have been due to increased demand by patients and a significant shift in the balance of care from secondary into primary care in line with government policy.

**Improved care under GOS**

As well as increasing the required assessments conducted within the primary eye examinations especially for older patients, the 2006 contract introduced the supplementary examination. There was previously no mechanism for a patient to be assessed by an optometrist unless a full eye examination (with refraction) was conducted. The optometrist either had to charge privately, or advise the patient to seek care elsewhere. The increase in supplementary exams of over 500% is a clear indication of the additional care undertaken by optometry as a direct result of government policy to provide more community based care. The main purpose of the supplementary was to fund an assessment outwith the time restricted primary examinations, either on the advice of the optometrists e.g. referral refinement, risk of pathology developing, reviewing treatments implemented, or requested by the patient or another practitioner e.g. loss of vision, recurrent headaches, red eyes, flashes and floaters, ocular injury etc. A post cataract review is a good example of where the supplementary examination has been supporting patients (Case 1). This examination has enabled optometrists to prescribe and treat patients, reviewing and supporting their management. It has also supported the refinement of referrals, particularly for glaucoma, and allows the SIGN glaucoma referral and safe discharge
Case Study 1 – Cataract Referral and Review

A primary NHS eye examination was conducted on an 80-year-old patient in NHS Lanarkshire. She had binocular cataract and was very aware that her vision was getting worse; she was struggling with the crossword and following knitting patterns. Her family was keen for her to have the surgery, but she had declined referral at her last two appointments.

A dilated examination identified significant nuclear and cortical cataract in both eyes. Fundus and anterior eye checks were both normal. The updated spectacle prescription made no difference to her visual acuity. The optometrist advised that to improve her vision, cataract surgery was now the only option. The procedure, complications and consent issues were discussed and she was now keen to be referred. She was given an information leaflet and an electronic referral via the fast track cataract pathway was sent.

Five months later she attended for a supplementary examination having had her surgery 6 weeks previously in Hairmyres hospital, East Kilbride. She was discharged back to her optometrist for the post-op review and refraction. She had completed her course of antibiotic and steroid drops. The entire experience had been trouble free and she was delighted. Her anterior eye was checked and found to have healed well with no complications. Her new refraction enabled her to easily achieve vision better than she’d had in the 10 years of coming to the practice. An electronic referral for the second eye was arranged. She couldn’t wait to get back to knitting with her new glasses as her first great-grandson had just recently arrived.

guidance to be followed\(^{(11)}\). Finally and perhaps often not fully appreciated, this examination allows the optometrist to offer patients piece of mind and support.

Referrals are made following an eye examination when the optometrist identifies a need for further investigation or treatment, and with the agreement of the patient
(Chart 3). In many cases, the referral is made to the Hospital Eye Service (HES) but other hospital referrals include neurology and the stroke service. Referrals are also made to the GP for general health issues e.g. systemic hypertension, prescribed medication concerns, headaches.

**Chart 3 Referrals from optometrists to GPs and the Hospital Eye Service (HES) in Scotland (red and blue bars), and new patients seen in the HES (green bars)**

![Chart 3](image)

**Source:** NSS

To note: Red and blue bars are the referrals recorded on the GOS 1 form – in some Board areas all optometrist’s referrals are direct to the HES whilst in others, some referrals are still via the GP. Therefore, not all GP referrals will be for the HES and may be for the GP themselves.

Green bars are new patients attending outpatient appointments within the HES around Scotland.

There is no routinely collected data on the number of GP referrals to HES.

Other community referrals include to social care (general living issues) or another optometrist (specialist services out-with GOS).

Feedback from the appointment following referral is vital and supports the on-going management of patients within the community\(^{46}\). It is also important to improve the on-going quality and appropriateness of referrals. Of note is the 13% increase in new patients seen at ophthalmology departments in Scotland over the last 10 years, compared with the 32% increase in England\(^{3}\). Whilst fewer patients are referred via their GP, referrals are frequently made for management by the GP, relating to many general health as well as ocular conditions. Close working relationships between general practice and community optometry have been strengthened with no fees as a barrier to care, and referrals from GPs to optometry have increased significantly\(^{48}\).
Optometrists work closely with community pharmacy colleagues\textsuperscript{(49)}. Two-way referral supports community eyecare and a free to patient service allows swift access to treatment and medication.

5. Ophthalmology

New treatments have had a profound effect on the ability of ophthalmologists to save sight. For example: repeatedly successful retinal detachment surgery, macular disease injections and micro-surgical advances, targeted glaucoma drugs and new trabecular drainage surgery and rapid routine cataract day surgery, dramatically improve sight. Scotland’s ageing population combined with these developing treatments results in the continued on-going pressure on hospital services. The annual ophthalmology spend in Scotland is over £145 million\textsuperscript{(50)} and has increased by 45\% in the last five years (Chart 4). This is despite many initiatives around the country to discharge patients out to community optometry e.g. NHS Lanarkshire and NHS Grampian eye health networks, AEDs closed to walk-in patients in many areas of Scotland and early discharge of post-cataract patients.

**Chart 4 Total Ophthalmology Spend in Scotland*\textsuperscript{*}

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NSS(50) *inpatient and outpatient activity

6. Service Developments

a) National developments

E-Health

The referral of a patient with an ocular condition was expedited in 2006. The regulations facilitated the routine referral of patients from the community directly to
the hospital eye service (HES), thus reducing the administrative burden on the GP. In 2010, the Scottish Government approved a national optometry programme to deliver electronic payment and electronic referrals for the optometry community, called the Eye Care Integration Programme\(^{(51)}\). The electronic referral of patients between optometrists and hospitals is crucial to supporting patient care\(^{(52)}\) and aimed to deliver the following benefits:

- enhanced patient safety – so those that require sight-saving treatments are seen quickly
- a reduced burden on general medical services (GMS)
- improved ophthalmology waiting time targets
- electronic feedback to optometrists upon receipt of the electronic referral
- better data quality meaning fewer errors
- reduced paperwork

**Chart 5 Percentage of e-referrals by NHS Health Board**

![Chart 5 Percentage of e-referrals by NHS Health Board](chart)

Source: NSS (December 2016)

Electronic referrals have gone live with varying degrees of uptake (chart 6). Work continues to improve uptake and address the issues affecting the programme.

The electronic transmission of General Ophthalmic Services (GOS) claims for payment provides an important cost saving exercise across NHS Services Scotland (NSS). It also supports:

- the validation of a claim while the patient is still available to answer any queries that may arise
- clerical issues resolved at source, reducing the burden on practice resources to correct and re-submit forms that have been rejected
- more robust check of patient entitlement reduces the time to process payment claims
- faster payment of claims to community practices.

Case Study 2 - A Patient Managed within Primary Care

A 72 year old male who had cataract surgery in summer 2016, returned in November to his IP Optometrist in NHS Tayside. He was complaining of a pain over the left side of his head and a red eye which had been a problem for a few weeks. He was booked for an NHS supplementary examination the following day. An external ocular assessment revealed a small mass on the white of his eye (Figure 1). Using a 25 gauge needle the optometrist found that it was a piece of debris that had become embedded. This was carefully removed and the patient was given antibiotic drops with a NHS Prescription. On review the eye had returned to normal and the patient was asymptomatic. This case demonstrates the importance of the NHS supplementary test in the community. The patient was examined by an optometrist who knew him well, he was seen without delay and his problem was managed in a professional and straightforward manner.

The e-payment system has now rolled out with 50 practices submitting claims via a web form, totalling approx. 5,000 claims a month. Two software suppliers are currently developing solutions to allow their customer base to submit claims electronically, and it is hoped uptake will increase over the coming months.

First port of call for all eye conditions
In line with policy, many GPs no longer see patients with eye problems but direct them to optometry. This is helping to reduce the burden on general practice.

“Whatever your eye problem your first port of call should be an optometrist.”
NHS Lanarkshire website
“Community optometrists are now recognised as the first ‘port of call’ for eye problems. If you have any problems with your eyes, make an appointment with an optometrist.” NHS Greater Glasgow and Clyde website and posters in NHS facilities across the Board area.

Awareness of this change is beginning to be understood by the public but there are still issues about getting the message to the wider population\(^{(33, 53)}\). Case 2 is a good example of a patient now fully managed within the community.

All optometrists should be competent to treat basic ocular conditions e.g. dry eye, allergic and bacterial conjunctivitis, blepharitis. Some further training has been provided nationally to more appropriately manage acute ocular conditions and locally in boards where this initiative has been most widely developed e.g. NHS Lanarkshire and NHS Grampian (Annex B).

In parallel with the comprehensive independent prescribing (IP) qualification, local schemes support some treatments with PGDs (patient group directions) and agreements with GP colleagues. Regular audits have shown considerable success and widespread patient satisfaction of these schemes (e.g. \(^{(54-56)}\))

b) Local Developments of the national service (funded under GOS)
There are 14 territorial NHS Boards that are responsible for the protection and the improvement of their population’s health and for the delivery of frontline healthcare services. Whereas General Ophthalmic Services is a national eye care service, Boards can enhance and develop local care. For example, NHS Ayrshire and Arran has developed extensions and pathways to support GOS. These include:

- Smoking cessation
- Transient Ischemic attack pathway
- Falls prevention
- Routine enquiry supporting victims of domestic abuse

c) Enhanced Local Services (funded by the Board)
There are several enhanced optometrist-led services in current operation scattered across different Health Boards in Scotland (see Annex B). These services have been developed and funded by individual Health Boards to meet a clinical need for their population. By the very nature of the processes involved in implementing these services, they are not standardised across the whole country. This means that patients will be accessing varying levels of service, available from different providers across Scotland.

- Diabetic Retinopathy Screening (national DRSS, NHS A&A)
- Low Vision Services
• Post-operative cataract review (only NHS A&A is an enhanced service, all other boards run under GOS)
• Care for patients with learning difficulties (NHS A&A)
• Clinically required contact lenses (various)
• Grampian Enhanced service contract for eye treatments e.g. Case 3
• Glaucoma Shared Care (Grampian)

**Case 3 – NHS Grampian Eye Health Network management of Marginal Keratitis**

A 64-year-old patient in Dyce lives just around the corner from her local optometrist. She attended for an emergency supplementary appointment with a painful red eye. She was very stressed and upset. On slit-lamp examination she was diagnosed with marginal keratitis and treatment with antibiotic eye drops was started immediately. A faxed referral was made to her GP to co-prescribe a steroid eye drop based on the Grampian Eye Health Network protocols\(^{(57)}\).

The follow up was booked in the practice two days later and there was a marked improvement in her symptoms. She was discharged at the 1 week review appointment. The patient was extremely grateful. She was happy with the convenience of being seen “just around the corner” and with an appointment to suit her.

7. The workforce

There are 1,453 optometrists and 3 ophthalmic medical practitioners listed with a Health Board in Scotland\(^{(58)}\). There is no central NHS Ophthalmic list of Optometrists and Ophthalmic Medical Practitioners (OMPs); all lists are held with each Health Board. OMPs conducted less than 0.1% of the eye examinations in 2015/16\(^{(48)}\).

410 qualified dispensing opticians (DOs) are registered in Scotland\(^{(59)}\) but they are not listed with the NHS. They are a regulated profession who specialise in the dispensing of spectacles and with additional qualifications, the fitting of contact lenses. Spectacle fitting on children is a restricted function\(^{(60)}\) and DOs rather than the optometrist, conduct this task in some practices. Their specialist training and considerable knowledge of ocular pathology also supports their wider role in triage in community practice, and their own role in case finding should not be overlooked.

The issuing of spectacle prescriptions is restricted to medical practitioners and optometrists. The Opticians Act 1989, links an ocular assessment with a refraction, but technology is enabling self-refraction and on-line spectacle ordering, which is soon going to support dispensing of spectacles without the need for a professional refraction\(^{(61)}\).
A good practice team is vital to high quality and safe patient care. Whilst the NHS listed practitioner is often examining patients in the testing room, he/she is reliant on the wider practice staff to attend to patient queries, correctly triage patients and support anxious patients. Optical assistants frequently are conducting delegated functions e.g. visual field assessments, retinal photography and spectacle fitting on children. Staff who are well trained, understand their role and appreciate when to ask for guidance are crucial. Thus, the optometrist needs to have good leadership and management skills within the practices\(^{(62)}\).

**Chart 6 Community IP optometrists in Scotland by NHS Health Board**

![Bar chart showing the distribution of community IP optometrists by NHS Health Board](image)

\(^{(NSS^{(48)})}\)

**Independent Prescribers**

142 community optometrists are qualified independent prescribers (chart 6); 35% UK IP optometrists are in Scotland\(^{(59)}\). Prescribing patterns indicate a very conservative approach, with lubricants by far the most prescribed preparation. There is huge intra-professional variation in prescribing rates which is likely to reflect the variation in experience, with a number of practitioners having been prescribing for many years e.g. under the Glasgow Integrated Eyecare Service (GIES). A national audit of prescribing data is required to further develop and highlight the service that is being provided within the community.

**Locum Optometrists**

There are 417 optometrists listed on part 2 of the Ophthalmic List as locum practitioners\(^{(58)}\). In 2010 the GOC commissioned a report to consider “Risks in the
Optical Profession\(^{(63)}\). The issue was raised by various stakeholders that “locums could pose a risk to patient health and safety”. The report found no available data to support this concern. The role of the locum could be one of reduced accountability, but one also of greater experience from working in many different environments. The GOC report concluded that any risk was largely down to the individual practitioner and not necessarily their role as a locum\(^{(63)}\). Similar risks have been highlighted in medicine\(^{(64)}\), and in light of the locum optometrists found guilty of gross negligence manslaughter\(^{(10)}\), this group of practitioners may well require additional attention.

Developing the Workforce
A dramatic increase in postgraduate education has also been a factor in raising the standard of community eyecare. All optometrists were initially required to undertake training to reach a minimum standard of competence\(^{(2)}\). Any practitioner taking two years away from practice is required to be re-trained and if an optometrist wishes to move to practice in Scotland, they need to attend training. Further, clinical placements, interactive workshops, e-learning and peer discussion groups are all available to support community practitioners. The profession has been enthusiastic in taking on additional responsibility and keen to develop their skills. Nearly 30% of the profession are either qualified, or on their way to becoming Independent prescribers (IP). This qualification supports more community care, with practitioners being able to prescribe treatment for a huge range of ocular conditions reducing both the burden on general medical services and referrals to the hospital eye service. Programmes are also available for dispensing opticians and optical assistants to support the care provided to NHS patients by all practice staff.

Optometry Practices
There is a fair distribution of practices providing GOS across Scotland\(^{(58)}\). The average distance to a practice was 3.4km which related to a drive time of 5.3 minutes. Almost two thirds of the population were within 5 minutes’ drive time of their nearest practice. In Highland, Shetland, the Western Isles, the Borders and Dumfries & Galloway however, many population centres were at distances of 10km or more from local practice\(^{(36)}\).

8. Looking Ahead

It is vital that community eyecare services continue to improve and develop over the next few years to meet the changing needs of the Scottish population. There has already been huge progress with an increase in the range of care that is now being provided; Many more patients are being treated and managed successfully. Evidence to support good practice will allow further developments and enable patients to continue to access a high quality, safe community service.
PART II: ISSUES AND RECOMMENDATIONS

This section of the report presents, in summary form, the issues which have been identified during the review process and proposes recommendations for action. These should be considered in the context of the principles agreed at the outset of the review: person centred, intelligence led, asset optimised and outcome focused. The review also seeks to recognise the recommendations of the CMO report on Realistic Medicine, that only tests and treatments that are clinically indicated and proven to affect overall care are recommended. While the issues are presented under a number of separate headings, many are closely interlinked.

1. Public perception and awareness

As demonstrated in the earlier part of this report, the number of people accessing eye examinations has increased significantly since the new GOS arrangements were introduced in 2006. There is also greater understanding of the role of the community optometrist as the first port of call for people with eye problems. Nonetheless, the evidence from the General Optical Council’s 2016 Public Perception Survey and from the work undertaken for the Review by the Scottish Health Council is that there is still a need to promote wider appreciation of the importance of eye health and that the eye examination and associated services provided by community optometry are a core part of the NHS primary care system. The information on access to services analysed for the Review by Practitioner Services (PSD) from GOS claims confirms the concerns of the profession that those living in challenging circumstances are less likely to attend for regular eye examinations, and thus may fail to benefit from the early detection of sight threatening disease.

It is recommended that Scottish Government consider with the profession a fresh approach to national eye health awareness, the vital role of community optometry in the early detection of eye disease and, where locally arranged, as first port of call for unplanned and emergency eyecare, and the needs of those people who may be most at risk. This should be co-ordinated with more local campaigns targeted particularly at harder to reach communities, supported by local networks involving both the statutory and voluntary sectors, and the development of new ways of working to promote accessibility.

2. Interdisciplinary and interagency working

The changes which have taken place in community eyecare since 2006 have heralded significant improvements in the better integration of community optometric services within the wider health and social care systems. This is demonstrated, for
example, in primary care by general medical practitioners positively encouraging patients to access optometry for all types of eye problem, and in the wide range of extended care schemes which have developed across Scotland through the joint efforts of community optometry and hospital based ophthalmology services. The recently established Integration Authorities provide a focus for even wider integration, including with the voluntary sector which has a vital role to play in supporting people with eye problems.

It is recommended that, as part of their planning and commissioning, Integration Authorities should consider the full range of eyecare needs of their communities. They should encourage close collaborative working not only across the statutory services to ensure the most effective use of professional skills and resources, but also with the voluntary sector. That sector via the Scottish Council on Visual Impairment (including organisations such as RNIB Scotland and local societies) can offer practical and emotional support, including, for example, peer support and community networks, mobility and rehabilitation services, counselling, employment and welfare, and specialist services for those with complex needs. There is also an opportunity to raise awareness across the health and social care professions as a whole of the impact of sight loss.

3. Primary Care Ophthalmic Services

The revised arrangements instituted in 2006 substantially changed the nature of the services provided by community optometry, and the very positive impact on increasing the management of eye conditions in the community has been documented in the earlier part of this report. However, there are concerns that the system has had some unintended consequences. The GOS arrangements are seen as promoting a “tick box” approach focused on ensuring that claims are made for the relevant fees rather than supporting a needs-led, patient centred approach. This is contrary to the approach now advocated in the Realistic Medicine movement which focuses on promoting patient centred care, reducing duplication and limiting harm through unnecessary tests and interventions. In some areas of Scotland, additional services are provided under the GOS banner which are not replicated elsewhere, leading to a disparity in what patients can appropriately expect from a nationally negotiated and defined service.

It is recommended that Scottish Government should discuss with the profession a revised national framework for GOS, to be provided by all listed optometrists, which has a focus on patient need and greater flexibility for professional judgement. This would also include the potential to review, in the light of international evidence, the frequency of eye examinations for those at minimal risk, and the nature of the primary and follow-up examinations for those with specific clinical conditions.
Consideration should also be given to developing a system that better reflects the level of care provided, in particular where patients have complex needs or disabilities. Any new arrangements should be subject to full audit and review.

Despite the fact that optometric practices in Scotland are, in geographical terms, readily accessible, the actual use of services shows that people in disadvantaged communities and those from certain ethnic minority groups have not accessed services to the same extent as others, leading to continued inequalities.

It is recommended that any revised system should seek to target better those whose needs may currently not be met, supported by the targeted information and networks referred to above.

There has been duplication of effort across Scotland in some of the administrative functions which support the system locally and nationally. Dispensing opticians, who are key members of the community optometric team, are not currently included in local Ophthalmic Lists, and thus excluded from local clinical governance arrangements.

It is recommended that support be given to territorial Boards through national listing of optometrists and dispensing opticians (as is currently being proposed for other primary care contractor groups). There are other functions, such as dealing with discipline and GOC cases, that would benefit from greater central co-ordination.

4. Enhanced Optometric Services in the Community

As shown in Annex B to this report, a number of “enhanced” services have been implemented in various ways in several areas of Scotland, in addition to “core” GOS, with a range of different funding mechanisms. The evidence gathered from these initiatives demonstrates additional benefit both for patients whose care is delivered wholly within a community setting, and also for those patients whose care is provided in various ways between community and hospital based care (see 19 below). In most cases, these enhanced services are provided by a subset of designated optometrists/practices in any one area, and they have generally undertaken additional training in order to satisfy local accreditation arrangements and to provide ongoing quality assurance. The work undertaken by the Scottish Government Access Team on the National Ophthalmology Workstream, in co-operation with ophthalmologists and optometrists, has demonstrated how such schemes can best be put into place and sustained. In addition, over 142 optometrists have undertaken the independent prescribing course, and are now able to prescribe certain medications; this puts optometry in a prime place to support enhanced services as part of the wider primary care team.
It is **recommended** that national evidence based guidance be used to facilitate the care of relevant patients safely in the community. The Access Team’s evidence, SIGN 144 (Glaucoma referral and safe discharge), and established local schemes supporting, for example, anterior eye conditions, post-surgery cataract patients, ocular hypertensives and low vision services, should be available across Scotland. A key component is to define the associated information needs of optometrists and ophthalmologists. It will be for local areas to determine the best way for these services to be delivered, taking into account local circumstances such as rurality, through locally funded contracts with designated and appropriately trained and accredited optometric practices, and agreements with ophthalmology services.

These local systems should include the ability to cross refer between optometrists to ensure that patients of all practices have access to the relevant community based expertise. It is also suggested that, in order to support more effective continuity of care and exchange of information across primary care and with hospital services, the principle of those patients with specific ongoing conditions having a “named optometrist/practice” should be explored, supported by a system of voluntary registration akin to that which already exists in community pharmacy for the pharmaceutical care of patients with long term conditions. This approach could also be extended to the “core” optometric services for those with continuing care needs.

### 5. Diabetic Retinopathy Screening

The national programme provides annual retinal screening for people (aged 12 and over) with diabetes. It is underpinned by nationally agreed standards which promote accessible and equitable delivery of the service across Scotland. A new IT system is planned for 2017 to deal with future screening needs. As a national screening service, it is separate from the services provided by community optometry (with the exception of Ayrshire and Arran which locally funds optometrists to carry out this work), and many diabetic patients find it difficult to understand why they have to attend two separate services for their eyecare needs. Community optometrists also see an opportunity for better sharing of information.

It is **recommended** that, in the implementation of the new screening system, patient information makes clear the benefits of this separate national system, and that there is further exploration of the potential for better sharing of information with community optometrists. Opportunities to reduce duplication of care should also be explored.

### 6. Care Homes and Care at Home

Many residents of care homes and a number of people who are receiving care at home have continuing and sometimes complex eyecare needs; they include some of
the most vulnerable patients. At present, most of the optometric services in care homes are provided by a small number of “specialist” practices, and there is little monitoring of the quality of service delivered. In addition, the services are generally provided in isolation from the other health and social care needs of the residents. The same issues apply to some extent to those receiving care at home, depending on the arrangements in local areas.

It is recommended that Integration Authorities should work with local care home providers to ensure that the quality of optometric care for residents is appropriately monitored and co-ordinated with the other primary care services. Similar arrangements should apply to optometric services delivered to patients receiving care at home. Enhanced services should also be available in the same way as to the rest of the community. If a service is unable to be delivered through the normal route, there is the potential it could be provided by directly employed optometrists using a model similar to the Public Dental Service.

7. Low Vision Support Services

The recent review undertaken for Scottish Government demonstrates the significant effect that low vision can have on people’s physical and mental health. Appropriate provision of low vision aids can support a person’s independence within the community, reducing their reliance on other support services. The review showed the very patchy provision across Scotland, with often poor access and lengthy waiting times. Integrating the provision of low vision aids with other community support services dramatically enhances the success of the model, combining community, social care and voluntary providers. Those models which are seen as particularly successful in meeting local needs in a cost effective way include the all Wales service, and community based schemes such as those in Ayrshire and Arran and Lanarkshire.

It is recommended that the conclusions of the Low Vision Services review, which demonstrate the value of a well organised community based model with clear pathways, should be taken forward by Scottish Government, in partnership with the statutory and voluntary sectors, in order to secure more equitable and accessible services across Scotland.

8. People with Complex Needs

Adults, young people and children with complex needs, specifically those with learning disability, autism, dementia, and stroke, are significantly more likely to have serious sight problems, may have communication difficulties, and have a range of
issues impacting on their physical and mental health and wellbeing. A number of support services exist in various forms across Scotland which can provide:

- A functional vision assessment to provide information on what useful sight a person has and how the person uses their vision in everyday life. This can primarily be carried out in the community.
- A personalised vision passport which captures information of their vision, mobility, sensory needs to inform and influence support plans. This also provides information that can support an optometrist at a clinical eye examination.
- Practical solutions and support strategies for living with sight loss and identifies and engages with professionals and carers supporting people with complex needs.
- Advice, information and signposting and supporting access to eye care services and other services and products.
- Peer and volunteer support confidence building and self-management programmes.

It is recommended that Integration Authorities work with the voluntary sector to ensure delivery of these types of support services in local communities. Any review of GOS might wish to address the increased level of time and expertise to provide services to those with complex needs.

9. Primary/Secondary Care Interface

This review has recognised that, while the 2006 GOS arrangements have had a significant effect in providing services to many patients who would otherwise have gone to hospital, or have ensured that there is more effective care shared between community and hospital, there continues to be significant pressures on the specialist services. As mentioned above, the work of the Access Team on the National Ophthalmology Workstream has demonstrated how a re-engineering of systems can create capacity by utilising all the resources across primary and secondary care. Key elements in underpinning this include effective IT links through the Eyecare Integration Programme (see 10 below) which support continuity of care through referrals, discharge information etc., and the removal of unnecessary duplication of appointments, tests and investigative procedures. A dedicated telephone helpline can also support more confident clinical decision making in the community. In some areas, a key factor in enhancing the most effective use of both primary and secondary care resources has been the creation of a formal Network, led jointly by optometry and ophthalmology.

It is recommended that the conclusions and recommendations of the report from the National Ophthalmology Workstream should be allied to the recommendations from
this review, and taken forward together by Scottish Government in partnership with
the service. Implementation, suitably resourced, needs to be seen as a partnership
between primary and secondary care interests. Specific examples of services where
immediate benefits can be realised include glaucoma referral refinement and safe
discharge of ocular hypertensives (implementing SIGN 144) and post cataract
follow up.

10. Data and information

It is important in any care service to ensure that there are robust data systems and
information exchange mechanisms to support effective clinical care, planning,
communication and efficient administration, and that the appropriate IT systems are
in place. A key element in this has been the Eyecare Integration Programme which
has sought to support clinical communications between community optometry and
hospital services, and IT links between optometry practices and PSD. Both aspects
have been slower in uptake than planned, not least because of the need to resolve a
number of technical issues. While electronic referrals from optometry to hospitals
are increasing, the system does not provide effective support for electronic
communication back from hospitals, a potentially key element in promoting continuity
of care for patients. Similarly, the transmission of electronic claims to PSD has been
patchy and reviews by ISD of the data submitted on GOS claims have demonstrated
cconcerns about the accuracy of the clinical information. Similar concerns exist about
the hospital ophthalmology outpatient data, where the diagnostic and follow up data
required to plan and manage services safely are not being gathered. The
development of a new data warehouse in ISD planned for 2017 will bring significant
opportunities for better use and linkages of data, but only if the data input into the
system are accurate.

It is recommended that the Eyecare Integration Programme should ensure issues
affecting uptake by optometrists, whether technical or otherwise, are addressed, and
that support is locally provided to enable the systems to operate effectively. In
addition, the importance of accurate completion of the clinical sections of the
relevant GOS forms (which could usefully be revised as part of an updated GOS
framework) should be stressed to all listed optometrists. Greater sharing of test
results (e.g. retinal photographs, visual field plots) and two-way dialogue on
treatment planning between optometrists and ophthalmologists would produce
significant improvements in efficiency and clinical effectiveness. Consideration
should also be given to the sharing (with consent) of relevant patient information
from the Emergency Care Summary with community optometry.
11. Clinical Governance/Quality and Monitoring

The information referred to above is a key element in reviewing the nature and quality of the services provided, both within community optometry and in the interface with secondary care. In addition, appropriate and targeted education and training (see 13 below) are important contributors to maintaining and improving standards of care. The current practice inspection scheme for community optometry is almost exclusively focused on the physical and equipment aspects. Some of the specifications for extended services in some areas set out quality and audit requirements, but this is not universal.

It is recommended that any revised framework for GOS and service specifications for enhanced services should include relevant quality markers that can be readily reported and monitored. The practice inspection system could be usefully extended in scope to review and support quality improvement in practices (as with other primary care contractors), including review and support of the training and CPD of the practice workforce. The local Optometric Advisers, which should exist in all areas, could also have a broader role in supporting clinical governance at local level and in working together as a Group to support national developments.

12. Workforce

While there is detailed information about the distribution of optometric practices across Scotland, there is very little information about the workforce within these practices. There is increasing interest in securing better workforce data in the primary care contractor sector (as well as in the managed services) in order that there can be more effective planning for the future particularly as services become more community focused to meet local needs.

It is recommended that Scottish Government should work with the profession and Public Health Intelligence (PHI) to define the relevant workforce data needed and find ways of gathering this on an as required basis. This will fit in with the Scottish Government’s commitment to deliver a national workforce plan for health and social care services. The role of dispensing opticians should also be considered to support patient care and deliver a quality service as part of an overall workforce review.

13. Education and Training

There are repeated references in this report to the importance of education and training as a key underpinning of service delivery and quality. It is recognised that the General Optical Council (GOC) is undertaking a UK wide review of future
requirements for continued registration, and this will continue to provide an important baseline. The 2006 changes brought additional requirements for community optometrists in Scotland to provide professional assurance of standards and quality. NES has continued to develop a wide range of well regarded, supporting education and training activities; these have been taken up by the majority of, but not all, optometrists.

It is recommended that, in any future changes to GOS and for enhanced services, appropriate accredited training packages coupled with robust assessment are put in place. These should be seen as formal and on-going continuing professional development requirements for optometrists who provide NHS care in Scotland to support a consistently high quality and safe service. As part of this, consideration should also be given to providing protected learning time (as happens currently in general medical practice) to assist optometrists and their teams to benefit from the educational support and undertake any related quality improvement initiatives. The undergraduate course and the pre-registration year in Scotland also needs to reflect adequately the care requirements of the qualified optometrist. Consideration of more clinical training, leadership and management skills, wider patient health needs, multi-disciplinary working and clinical governance should be key elements. Interdisciplinary education and training with medical and other care professionals can bring significant benefits in shared understanding, trust and patient benefit.

14. Equipment

Since 2006, significant investment has been made both through direct Scottish Government funding and by individual optometric practices in ensuring that the appropriate equipment is available to provide the relevant services and meet specific patient needs. The most recent central investment was in pachymeters for all NHS practices. A number of optometric practices now have Optical coherence tomography (OCT) facilities, presenting an opportunity for extended care in local communities.

It is recommended that future developments in community based eyecare should include consideration of any related equipment requirements. Appropriate technology will also be required to support increased use of tele-health developments.

15. Implementation

The recommendations in this report should be seen as a coherent package, but it is recognised that implementation must be prioritised and phased in a realistic way to
reflect the potential resources available and capacity issues within stakeholder
organisations. It is also important that they are set within the wider Scottish
Government’s transformation agenda. They should be taken forward in partnership
with the relevant professional and patient interests and with the local statutory and
voluntary organisations who can best effect delivery. It will also be important that
specific measures of outcome and impact, including service use and access, patient
experience and clinical audit, are agreed as part of the implementation plan.
Annex A: Role and Remit of the Review Group

In carrying out the Review, a Review Group was set up consisting of key stakeholders involved in delivering community optometry services.

Membership

The Review Group was chaired by Hamish Wilson, and include the following stakeholders:

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Hamish Wilson</td>
<td>Chair of the Review</td>
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<tr>
<td>Nicola McElvanney</td>
<td>Chair, Optometry Scotland</td>
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<tr>
<td>Janet Pooley</td>
<td>Scottish Government Optometry Adviser</td>
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<tr>
<td>Catherine Taysum</td>
<td>Chair, Scottish Optometric Adviser Group</td>
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<tr>
<td>Carrie McEwen</td>
<td>Ophthalmology Adviser, Scottish Government</td>
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<tr>
<td>Martin Morrison</td>
<td>Practitioner Services, National Services Scotland</td>
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<tr>
<td>David Howie</td>
<td>Patient representative, Alliance</td>
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<tr>
<td>Linda Mason</td>
<td>Patient representative, Scottish Health Council</td>
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<tr>
<td>Debbie McGill</td>
<td>Optometry Scotland Executive Team</td>
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<tr>
<td>Frank Munro</td>
<td>Optometry Scotland Executive Team</td>
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<tr>
<td>Samantha Watson</td>
<td>Optometry Scotland Executive Team</td>
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<tr>
<td>Graham Cormack</td>
<td>Chair, Eyecare Scotland</td>
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<tr>
<td>Samantha Whipp</td>
<td>Principal Information Analyst, ISD</td>
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<tr>
<td>Campbell Chalmers</td>
<td>Scotland Director, RNIB</td>
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<tr>
<td>Alex Bowerman</td>
<td>Scottish Government</td>
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<tr>
<td>Richard Foggo</td>
<td>Deputy Director, Primary Care Division, Scottish Government</td>
</tr>
<tr>
<td>Linda Gregson</td>
<td>Team Leader, Primary Care Interfaces, Scottish Government</td>
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<tr>
<td>Liam Kearney / Calum Drummond / Laura McCulloch (secretariat)</td>
<td>Primary Care Interfaces, Scottish Government</td>
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The aim of the Review Group was:

- To provide governance, direction, advice and make key decisions relating to the Review.
- To consider and agree options and recommendations.

The Chair of the Review also met with a range of healthcare professionals during the review period including those from a number of territorial Boards, NHS Education for Scotland and the General Optical Council to hear their views on optometry services in Scotland.
Annex B: Enhanced Eyecare Services in Scotland

When the current eye examination service was developed in 2005, two levels of community eyecare were envisaged:

- Level 1 – the GOS Eye Examination
- Level 2 – services that require additional training by accredited optometrists e.g. treatment of common eye conditions, low vision services, co-management of chronic eye diseases such as glaucoma, macular degeneration etc.

There are a number of successful schemes that have been delivered under or in combination with GOS by individual health boards over a number of years. Most of these should have been delivered as level 2 services. These have not only resulted in patients being safely discharged from the hospital eye service into the community, but has resulted in costs being shifted from local to national budgets.

A number of these ‘enhanced’ services that are delivered across Scotland are set out below.

**Lanarkshire Eye Health Network Service (LENS):**
The LENS scheme was introduced in Lanarkshire in 2010 with the purpose of attempting to reduce demand in the Ophthalmology Acute Eye Casualty Clinic. The scheme involves patients receiving treatment for a number of conditions and follow up appointments with their community optometrist, who have undergone robust training. This means patients can be seen in the community rather than being referred into secondary care. Patient satisfaction rates for the service have been high. Optometrists provide this service under the current GOS supplementary fee structure.

**NHS Grampian Eye Health Network**
The walk-in service at Aberdeen's Eye Department was increasingly being used by the public for non-urgent eye problems. The level of walk-ins was at 6,000 annually and increasing, leading to long travel times and waits for patients, a chaotic environment, and specialist resources being used to treat non-urgent cases. An audit demonstrated that only 9% of patients coming to the eye department required referral to the hospital eye clinic; over 90% could have been treated within the community.

In response to this, in 2010, a clinical accord was agreed between GPs, ophthalmologists and optometrists to enable optometrists to undertake the management and treatment of patients with:
• Anterior Uveitis
• Herpes Simplex Keratitis
• Marginal keratitis
• Corneal foreign body which requires removal with a needle and/or an algerbrush.

To undertake this extra service, community optometrists have to undertake accredited training and following strict protocols. Following the introduction of this service, most patients are now managed in the community. Community optometrists receive an additional fee for carrying out these services.

**Hospital Contact Lenses**

There is a contract between a community optometrist and NHS Grampian to provide all complex lenses, therapeutic and cosmetic contact lenses. The Health Board funds the fitting, after care and supply of contact lenses and solutions.

**Glaucoma Tertiary Care**

In 2004, a ‘shared care’ service for glaucoma was set up provided by accredited glaucoma optometrists (AGOs). The aim was to reduce the number of unnecessary referrals to the hospital, to initiate treatment and prevent delays associated with secondary referral and monitor those at risk of developing glaucoma. The Glaucoma consultant vets new glaucoma referrals to decide whether patients are seen by the AGOs or in the hospital glaucoma clinic. AGO’s now diagnose, treat and manage patients with glaucoma depending on their level of experience, referring patients at higher risk of visual impairment to the hospital based service. AGOs have an open line of communication with the glaucoma consultant to discuss any cases seen. They are expected to attend glaucoma-related postgraduate teaching sessions with the rest of the glaucoma team.

**NHS Ayrshire & Arran**

NHS Ayrshire and Arran currently run five additional optometry services. These are:

- **Post-operative cataract assessment** – patients who have received uncomplicated cataract surgery are assessed 4 weeks post-op by their local optometrist. This appointment is arranged prior to the patient being discharged from the Hospital Eye Service and helps to upskill optometrists. There are approximately 80 optometrists accredited to carry out this scheme.

- **Low Vision Service** – Optometry practices provide low vision assessments and aids to patients, funded by the NHS Board. These aids are funding entirely by the NHS Board.

- **Hospital Contact Lens** - complex fitting, therapeutic and cosmetic contact lenses are all fitted in the community.
- **Bridge To Vision** – a service whereby optometrists promote and support patients with learning disabilities to access regular eye care. 18 optometry practices are currently involved in this scheme.
- **Diabetic Retinopathy Screening Service** – optometrists undergo training to provide diabetic retinopathy screening in a community setting.
- **Eye Care Ayrshire** – a new scheme set to launch in October 2016. Optometrists will be promoted as the first port of call for all eye conditions, with all optometrists able to prescribe eye drops without the need to undergo independent prescribing training. Optometrists receive an additional fee for providing each of these services.

In addition to these services, community optometrists also refer patients on a number of pathways, including smoking cessation and to local falls prevention teams.

**NHS Tayside**
In NHS Tayside, second eye cataract extraction patients are discharged after their operation into the community. Untreated ocular hypertension patients are discharged into the community. The Board has released guidelines on the discharge of treated ocular hypertension patients and some stable glaucoma patients.

**NHS Fife**
NHS Fife is progressing a shared care initiative via a ‘test of change’ with community optometrists for the treatment of patients with uveitis. Protocols have been shared from NHS Grampian where this initiative has been in place for several years. Optometrist’s remuneration has been agreed locally.
Annex C: References


3. NHS Digital – NHS England


20. Autism Scotland – Eyecare pathways


