

Commissioning toolkit for community based eye care services



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Contents

Ministerial foreword	2
Introduction	4
1. Eye care services – the current context	6
1.1 What are eye care services?	6
1.2 The GOS review – and the wider policy context	10
1.3 Drivers for change	12
2. Commissioning for better visual health	15
2.1 The importance of good visual health – and the links with other programmes and services	15
2.2 Visual health – a public health issue	17
2.3 Community eye care professionals – involvement in prevention	18
3. Eye Care Pathways	20
3.1 Cataract, glaucoma, AMD, low vision	20
3.2 Chronic eye care pilot evaluations	25
3.3 Acute eye care pathways	26
3.4 The evidence base for acute eye care schemes	27
4. Commissioning community based eye care services	30
4.1 The commissioning framework	30
4.2 The commissioning cycle	31
5. Building commissioning capacity for eye care services	37
5.1 The role of practice based commissioning	37
5.2 Payment by results	37
5.3 Sources of advice for PCTs	38
5.4 Third sector involvement	41
6. Practical issues	42
6.1 Set up costs	42
6.2 Training and quality	42
6.3 Prescribing	44
6.4 IT	46
Appendix A – Common eye conditions	49
Appendix B – Eye care professionals	55

Foreword by the Minister of State for Health Services

We often take our vision for granted; yet eye disease can have a huge impact on people's lives. That is why we set up the Eye Care Services Steering Group in December 2002. We asked the group to develop proposals for eye care services that would enable the NHS to provide more responsive and effective services for patients that would contribute directly to the Vision 2020 programme to eliminate avoidable blindness.

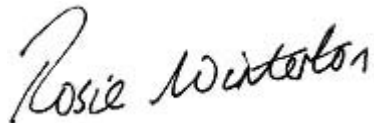


There will also be a growing demand for eye care services over the next decade owing to demographic changes and wider trends in public health, particularly in relation to obesity, which is linked to eye diseases such as diabetic retinopathy. So the demand for services to prevent and treat visual problems – and to support patients with chronic illness – will increase in the coming years.

In meeting the challenges this will bring, we start from a strong base. We have some of the most respected eye hospitals in the world. We also have a high-quality NHS sight testing service that provides patients with convenience and choice. I also believe that eye care services is an area where there is clear potential to develop a wider range of community based services, making better use of the skills and resources in primary care, growing capacity and increasing patient choice. There are already some excellent examples of how the NHS and partner organisations are developing eye care services in new settings that are more convenient and accessible for patients.

I am pleased to launch this toolkit, which emerges from our review of General Ophthalmic Services. The toolkit builds on the work of the Eye Care Services Steering Group, and on the eye care pilots that were set up following that work. As well as providing a substantial amount of background about eye care services more generally, it provides practical advice for primary care trusts and practice based commissioners on commissioning community based eye care services.

I very much hope that commissioners, working in partnership with professions, with patient representatives, and with provider organisations, will find this a valuable resource in improving local eye care services and eye health. I believe that it provides an excellent starting point from which we can look to build and develop the sorts of eye care services that are tailored to what patients – from all backgrounds – want and need.

A handwritten signature in black ink that reads "Rosie Winterton". The signature is written in a cursive, flowing style.

Rosie Winterton

Minister of State for Health Services

Introduction

The General Ophthalmic Services (GOS) review has provided an important opportunity to assess how to support the NHS, within the current framework of NHS reform, to commission a wider range of community based eye services, where this is a clinically and cost-effective way of improving visual health and developing responsive services that patients want. There is clear potential to develop more accessible, tailored eye care services for patients by making greater use of the skills that exist among eye care professionals who work in primary and secondary care settings, to help diagnose and manage a range of eye conditions. There is also scope for greater collaboration between the NHS, social care and the third sector in providing integrated services for patients with low vision problems.

This document provides PCTs and practice based commissioners with practical advice on commissioning community based eye care services. It draws on evidence that has emerged from the evaluated pilot pathways (glaucoma; age-related macular degeneration (AMD); low vision) that were set up following the work of the Eye Care Services Steering Group.¹ It also fits within the wider commissioning framework². The development of more community based eye care services complements the direction mapped out in last year's White Paper: Our Health; Our Care, Our Say³, which set out the intention to develop services in settings more convenient and accessible to patients. Making greater use of the primary care workforce may also help deliver the increased capacity needed in some areas to achieve the 18 weeks target. Payment by results and practice based commissioning provide natural incentives for developing community based eye care services where these could provide more cost effective and responsive care.

This toolkit consists of the following sections:

- **Section 2:** Sets out the links between wider health and well being and visual health. There are a wide range of existing health programmes that impact on visual health. In particular, the evidence linking public health issues such as smoking and obesity and eye health is becoming increasingly well understood⁴.

1 First Report of the National Eye Care Services Steering Group: 27 April 2004 – available at www.dh.gov.uk/assetRoot/04/08/09/99/04080999.pdf

2 Commissioning Framework (July 2006): www.dh.gov.uk/assetRoot/04/13/72/30/04137230.pdf

3 Our Health, our care, our say: www.dh.gov.uk/assetRoot/04/12/74/59/04127459.pdf

4 Feeling Great, Looking Good. RNIB 2006 – available at www.mib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_healthreportp.pdf

- **Section 3:** Describes the main eye care pathways, in particular how they differ from current (secondary care based) pathways, and the potential benefit for patients and draws some of the key lessons from the ECSSG pilots on the glaucoma, AMD and low vision pathways.
- **Section 4:** Provides an overview of how community based eye care services could be commissioned, in the context of the wider commissioning framework.
- **Section 5:** Describes the relevance of practice based commissioning and payment by results to this area, and suggests how PCTs can build capacity for developing and commissioning eye care, and also covers the potential role of the third sector.
- **Section 6:** Outlines the practical issues that need to be resolved in establishing new eye care services.

With NHS Primary Care Contracting, we have also drawn together a series of case studies, which describe how PCTs with new or established community based eye care schemes have developed these services. The case studies provide the opportunity to learn from the experience of others. This resource, which is web-based, also allows others to submit details about their own services, and provides a forum for discussion between those who are in the process of establishing new services. The case studies will be accessible from 2 February 2007 on the following website:

www.primarycarecontracting.nhs.uk/87.php

A document setting out the findings in relation to a number of other important areas that have been considered under the terms of reference of the GOS Review (the position of dispensing opticians in relation to the NHS, the remit of Local Optical Committees, domiciliary sight testing, and administration of GOS payments) has been published alongside this document:

www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/Optical/fs/en

1. Eye care services – the current context

1.1 What are eye care services?

Eye care services cover all services designed to enable people to maintain good eye health and sight or to make the best use of their remaining sight when there has been a degree of sight loss that cannot be corrected through refractive means or medical intervention. They also include services that provide support in relation to the functional impact of sight loss. Eye care services involve a wide range of professionals including ophthalmologists, GPs, ophthalmic medical practitioners, ophthalmic nurses, hospital optometrists, community optometrists, dispensing opticians, orthoptists, school nurses, health visitors, social services and voluntary sector professionals.

The most important eye diseases, in terms of the numbers of people affected and the cost of providing care are as follows:

Cataract. A cataract is a condition that makes it difficult to see because the lens that focuses light within the eye becomes clouded. Cataract is common and its incidence increases with age. It requires surgical treatment (by removal of the clouded lens and implantation of a prosthetic lens) when it affects aspects of daily life e.g. fitness to drive.

Primary open angle glaucoma⁵. POAG is common and its incidence increases with age with two in every hundred people over the age of 40 affected. This increases over the age of 70 to one person in ten. The African-Caribbean community is particularly at risk of developing glaucoma. There is no single screening test for glaucoma. Glaucoma has no symptoms in its earlier stages but can result in severe, irreversible sight loss. Blindness from glaucoma still occasionally occurs and is nearly always associated with late detection. As there is no reliable population screening test, opportunistic detection at routine optometric testing is the principal means of detection. Treatment of confirmed glaucoma involves the reduction of intraocular pressure to a level at which continued loss of optic nerve fibres is no higher than would be expected from ageing alone and may be achieved medically or, less often, surgically. Life-long follow up is normally required.

5 The National Institute for Health and Clinical Excellence is developing a clinical guideline on glaucoma, which is due to report in 2009.

Age-related macular degeneration. AMD is the commonest cause of registrable blindness in the western world and results in loss of central vision. It is common and its prevalence increases with advancing age – the incidence increases with each decade over the age of 50 to almost 15% by the age of 75. Its effects on daily living tasks are proportional to its severity and mild degrees of AMD have no effects or subtle effects on visual function. It may progress very slowly. Visually disabling AMD falls into two categories referred to as “dry” (atrophic) and “wet” (exudative). There is currently no treatment for dry AMD but it is usually less severe and more slowly progressive than the wet form. Wet AMD frequently results in rapidly progressive loss of central vision with eventual irreversible scarring of the parts of the retina serving the central degrees of vision. Treatment of wet AMD can be achieved by means of laser, photodynamic therapy, or treatment with agents which inhibit vascular endothelial growth factor. There is a limited window of opportunity for treatment. The most important symptom of potentially treatable AMD is the recent onset of distortion of central vision. Smoking considerably increases the risk of AMD.

Diabetic retinopathy. The prevalence of diabetes is about 2% in the population as a whole, but the prevalence is much higher in some ethnic groups (as high as 30%). The prevalence of Type 2 diabetes is increasing steadily. Unlike glaucoma, the “at risk” population can be defined by a simple test (fasting blood glucose). There is now a national screening programme for diabetic retinopathy, which aims to offer all adolescent and adult diabetics annual retinal photographic screening. Although the programme is anticipated to have a major effect on reducing avoidable blindness from diabetic retinopathy, opportunistic screening by optometrists is an important safety net for individuals who have not been screened systematically, for example because their diabetes has not been diagnosed. Sight loss from diabetic retinopathy can be due either to diabetic maculopathy (capillary damage or closure affecting the central few degrees of vision) or the development of new retinal vessels with subsequent haemorrhage or retinal detachment. Tight control of blood glucose and blood pressure considerably reduces the risk of developing sight-threatening retinopathy. Retinal laser photocoagulation is the mainstay of treatment of sight-threatening diabetic retinopathy.

The first point of contact for people with a perceived medical eye problem is often their GP. However, most GPs do not have the necessary equipment, expertise or experience to adequately diagnose and manage more complex eye conditions so the care provided is generally limited to minor eye problems. In addition to this, the main provision of eye care services in the community is sight testing⁶, which is predominantly carried out by optometrists, either privately or through the NHS for eligible groups. The NHS system is referred to as the General Ophthalmic Services, and is funded from a national, demand-led budget. This system of sight testing works well for patients, providing quality, access and choice.

Eye care services more generally have traditionally been a strongly hospital-based specialty. In recent years, there has been a shift with a growing number of eye care services being provided in the community rather than in hospital. The Eye Care Services Steering Group recommended pathways of care for cataract, glaucoma, AMD and low vision, all of which were intended to provide more accessible services for patients, while making better use of resources available in primary care. The pathways for glaucoma, AMD and low vision have been piloted, and there are an increasing number of such schemes that have emerged across the UK, as well as schemes that allow acute eye care problems to be dealt with in the community. The recent emphasis on providing care in settings more convenient and accessible to patients has provided an additional incentive to develop these services.

Cataract service pathways were already being re-designed following the publication of “Action on Cataracts, good practice guidelines” in 2000. This has led to shorter pathways for patients and a reduction in waiting times for surgery.

The table below provides a summary of eye care services, where they are provided and by whom they are, or could be, provided by. Appendix A contains a description of the main eye conditions that we are concerned with (as far as community based eye care is concerned). Appendix B summarises the specialist professional groups involved in the delivery of eye care services.

6 Sight tests include an examination of the health of the eye and are carried out according to The Sight Testing (Examination and Prescription) (No 2) Regulations 1989 – www.opsi.gov.uk/si/si1989/Uksi_19891230_en_1.htm

Table 1: Levels of service provision in eye care

Description	Where provided	Examples of service	Provided by
1. <i>Community eye care</i>	Community optometric practice; General practice	Correction of refractive error; Opportunistic screening; Disease detection and referral to hospitals; Advice; Treatment of a limited range of minor eye problems	Optometrists; GPs; Ophthalmic medical practitioners
2. <i>Enhanced community eye care</i>	Community optometric practice; General practice; Community health clinics	Treatment of a defined range of eye problems; Direct referral via care pathways; Targeted screening; Co-management of stable glaucoma; Low vision services	Optometrist with additional training, sometimes referred to as optometrist with special interest (OSI); Orthoptist; GP with special interest (GPSI); Ophthalmic nurse practitioner; Rehabilitation workers; Dispensing opticians
3. <i>Ophthalmic Primary Care</i>	“Super General Practice”; Community hospital; Health clinic; Community optometric practice; Standard hospital	Treatment of all eye conditions not requiring levels 4-6; Co-management of stable glaucoma	Ophthalmologist with specialist interest in primary care; GPSI; Ophthalmic medical practitioner; OSI Ophthalmic nurse practitioner; Orthoptist
4. <i>Local ophthalmic unit</i>	Smaller district general hospital units; outreach clinics; Treatment centres	Cataract surgery; Intermediate oculoplastic surgery; Treatment of diabetic retinopathy; Some emergency provision; Management of glaucoma, and of squint in children and some adults; AMD	Consultant ophthalmologist or Staff/Associate Specialist ophthalmologist with ophthalmic nursing/ orthoptic/optometry support
5. <i>Regional or sub-regional ophthalmology unit</i>	Larger district general hospital units or teaching hospitals	Treatment of most acute and chronic eye problems; 24 hour accident and emergency provision	Consultant ophthalmologist with ophthalmic nursing/ orthoptic/optometric support
6. <i>Supra-regional services</i>	NICE or National Specialist Commissioning Advisory Group designated unit	Ocular oncology; Macular translocation surgery	Consultant ophthalmologist with specialist multidisciplinary support

1.2 The GOS review – and the wider policy context

The GOS review provided an opportunity to assess how eye care services are currently provided, and specifically, how to support the NHS in commissioning a wider range of community based eye care services, where this is a clinically and cost-effective way of improving visual health and/or developing services that are more responsive to what patients want. There is a range of eye care professionals – optometrists, dispensing opticians, orthoptists, ophthalmic nurses, GPs with a special interest, ophthalmic medical practitioners and ophthalmologists – who could play a greater role in the delivery of community based services.

This commissioning toolkit sets eye care services within the context of the commissioning framework⁷. A strong commissioning function lies at the heart of many of the current changes taking place in the NHS and will be critical to ensuring that the NHS provides high quality, value for money health care.

What types of eye care services are amenable to provision in community based settings? The National Eye Care Services Steering Group (ECSSG) report⁸ outlined four model care pathways for cataract, glaucoma, AMD and low vision, which propose a greater role for community optometrists. The design principles of these pathways were to:

- make best use of available resources.
- have fewer steps for the user.
- make more effective use of professional resource.
- improve access and patient choice.
- show a high standard of clinical care with good outcomes.

In addition to the ECSSG pathways, we have seen over the past two years the development in Wales of the Primary Eyecare Acute Referral Scheme (PEARS), which provides an example of the possible development of acute eyecare pathways⁹. There have also been developments in Scotland, with the introduction of a new eye examination in April 2006.

7 www.dh.gov.uk/assetRoot/04/13/72/30/04137230.pdf

8 www.dh.gov.uk/assetRoot/04/08/09/99/04080999.pdf

9 Wales Primary Eyecare Acute Referral Scheme:
www.wales.nhs.uk/sites3/page.cfm?orgid=562&pid=13555

How has the landscape changed since the ECSSG report was published? Optometry involvement in the cataract pathway has become well established. The other three pathways have all been subject to piloting and evaluation and we are now able to learn lessons from these. There are also a number of well established community glaucoma services in operation (in addition to those sites involved in the pilots). Section 3.2 summarises key messages from evaluation of the pilots.

The policy context has also changed significantly in the past two years, in a direction which is very much in line with the development of community based eye care services:

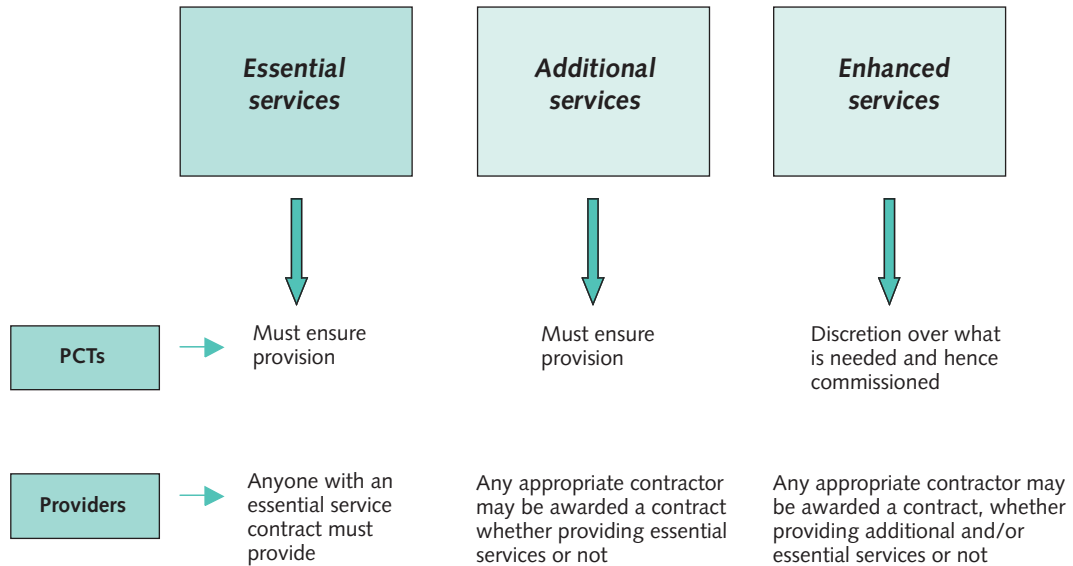
- the Our Health, Our Care, Our Say White Paper¹⁰ sets out the strategic intention to provide a greater range of services in settings that are more convenient and accessible to patients – often closer to their homes. The NHS Operating Framework for 2007/8 reinforces these aims.¹¹
- there is potential to support the attainment of the 18 weeks referral to treatment target in ophthalmology by involving primary care professionals in eye care pathways and hence freeing up secondary care capacity.
- the development of payment by results and practice based commissioning, together with the increased emphasis on commissioning, provide the mechanisms and incentives for service redesign to take place.

The other major change in ophthalmics in the past two years has been on the legislative front. The Health Act 2006 provides powers to remove the restriction on who PCTs may contract with to provide the sight testing service that currently constitutes General Ophthalmic Services. Currently, PCTs may only contract with optometrists, ophthalmic medical practitioners or corporate bodies enrolled with the General Optical Council as being in business as opticians. Powers under the new Act will enable a wider range of providers, including businesses owned by dispensing opticians and lay people, to contract with PCTs for the sight testing service, provided that the performers (i.e. the individuals actually carrying out sight tests) are on a PCT performers list. The new Act, when implemented, achieves this change by bringing contracting for primary ophthalmic services onto the same legislative footing as other primary care services. This also allows the introduction of a tiered framework for commissioning, covering essential services, additional services (any of which would be prescribed in regulations) and enhanced services – see figure 1.

10 Our health, Our Care, Our Say: a new direction for community services: January 2006 – available at www.dh.gov.uk/assetRoot/04/12/74/59/04127459.pdf

11 NHS Operating Framework: 2007/8: www.dh.gov.uk/assetRoot/04/14/11/95/04141195.pdf

Figure 1: General Ophthalmic Services – three-tiered Framework



The Department of Health’s view is that, at least initially, the only service that should be prescribed as an additional service is sight tests for people who are unable to get to a practice (often referred to as domiciliary sight testing). This is a service that it is essential that all PCTs provide for but which not all optometrists or optical businesses will necessarily want to provide so is best placed in this category. The core sight test is an essential service, which PCTs must ensure provision of for their eligible population. Sight testing services (both practice based and for those unable to get to a practice) will, as now, be funded from a demand-led budget. All other community based services should be commissioned as ‘enhanced’ services. The rationale for this is set out further in the document summarising the GOS review outcomes: www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/Optical/fs/en.

1.3 Drivers for change

In addition to the policy drivers described above, there are a number of other factors that should influence the development of community based eye care services. The population is ageing and this will lead to an inevitable increase in the burden of eye disease in the population, particularly as eye disease is frequently chronic in nature, so patients enter the service and then require lifelong follow up. Basic projections suggest that the demand for NHS sight tests will rise by 20% over the next 20 years because of the significant increase expected in the population aged 60 and over. Estimates based on official population projections and epidemiological prevalence surveys predict that the number of cases of glaucoma in England and Wales will increase by a third by 2021, and then continue to rise at a similar pace to 2031. It seems reasonable to assume that trends in public health, such as the rise in obesity, will also affect the prevalence of visual health problems because there is a link between obesity and development of eye disease such as macular degeneration and diabetic retinopathy.

There are two other factors that may also drive demand for eye care services. Firstly, more people are being referred with the earliest signs of glaucoma as diagnostic tests become more sophisticated and easier to apply¹². The second factor is the availability of new treatments for conditions such as age related macular degeneration. NICE is currently reviewing two treatments for the “wet” form of AMD, Macugen and Lucentis. Final guidance is expected in August 2007. The commissioning of these treatments is likely to fall to specialised commissioners rather than to PCTs.

Although the ophthalmology consultant workforce has grown in recent years, many hospital eye departments are experiencing a steady year-on-year rise in workload and most are already working at or close to the limit of capacity in terms of space.

This means that commissioners will have to consider how to prevent eye disease, as well as how to meet the demand for services to treat people with visual problems, and to support them once they have chronic illness.

The other key factor here is the patient perspective. Research carried out as part of the development of the Our Health, Our Care, Our Say White Paper¹³ showed that many people felt that, provided hospital services were not adversely affected, and service quality was maintained, they would like to see new and innovative ways of using community settings to provide services that are traditionally provided in hospitals. They thought that there were potential gains to be made in accessibility, customer service and communication. This view was also supported by focus group work carried out by the Royal National Institute for the Blind, which the Department commissioned as part of the GOS Review.

12 Morley AM and Murdoch I. The Future of Glaucoma Clinics. Br J Ophthalmol (2006) **90(5)**: 640-645

13 www.dh.gov.uk/assetRoot/04/12/74/62/04127462.pdf

Summary

- The GOS Review confirms the view that there are a range of eye care services that could be delivered in community based settings. Much of this care is currently delivered in hospitals.
- The ECSSG proposed some model pathways in 2004, which have now been subject to piloting and evaluation. There have been other changes to the policy landscape which make the situation favourable for the development of a wider range of community based eye care services. The White Paper (Our Health, Our Care, Our Say) sets out the intention to provide services in settings that are more convenient and accessible for patients.
- The other key factor is demand for services, in particular as a result of an ageing population and improvements in medical treatment and technology. The mechanism by which these various factors can be taken into account in developing high quality eye care services is through the effective use of commissioning.

2. Commissioning for better visual health

2.1 The importance of good visual health – and the links with other programmes and services

We often take our visual health for granted. But good visual health is central to a person's health and well being. What is good visual health? In simple terms, it can be described as good visual function in both eyes where any condition relating to the eyes does not affect the quality of life of the person in their natural lifetime. This includes the prevention, where possible, of acute or chronic loss of vision.

What are the determinants of good visual health? These can be summed up as:

- an awareness of the impact of a healthy lifestyle on eye health, e.g. the links of smoking and obesity with poorer vision later in life.
- an understanding of the risk factors for sight-threatening conditions by people in the risk groups, e.g. the increased risk of glaucoma in the African-Caribbean population, or for those with a first degree relative with glaucoma; the fact that type 2 diabetes is up to six times more common in people of South Asian descent and up to three times more common in those of African and African-Caribbean descent, compared with the white population.
- regular sight tests, to enable people to make the most of their visual potential and to identify factors that might require further investigation or treatment.
- effective eye care services that are accessible to all parts of the population, including those who are at risk of exclusion, e.g. minority groups, frail and elderly people and people with disabilities.
- effective services in other areas that have an impact upon, or will be affected by, visual health and vision services, e.g. diabetic services, services for people who are at risk of, or who have had, falls.

It is worth mentioning VISION 2020 in this context. VISION 2020 is a global joint initiative of the World Health Organization and the International Agency for the Prevention of Blindness with an international coalition of professional bodies, eye care institutions, non-governmental organisations and corporations. The central aim of the initiative is to eliminate avoidable blindness worldwide by the year 2020. VISION 2020 UK is a supporting member of the global initiative and has set the following objectives:

- prevent avoidable blindness.
- improve the quality of services to visually impaired people.

- improve the training available to professionals providing advice and services.
- improve communication between organisations working within the visual impairment sector.
- improve the availability of information to visually impaired people.
- ensure that the voices of the visually impaired are heard when planning services and their opinions sought on key issues affecting their lives.
- raise public awareness of the issues and problems relating to sight loss.

The Department of Health is committed to the principles of VISION 2020 for the elimination of avoidable blindness. There are a wide range of programmes and services in place across the NHS that will contribute to the achievement of this aim.

Table 2 summarises the programmes and specific services (in addition to core eye care services) that contribute to safeguarding visual health, including some services that help to maintain the well being of people with existing eye disease.

Table 2: Programmes and services that link to visual health

Programme or service	How it links to visual health
Older People’s National Service Framework^{14, 15}	<p>A number of the standards relate to visual health including:</p> <p>Standard 2: Person Centred Care</p> <p>Standard 5: Stroke. Stroke can give rise to significant vision problems such as hemianopia – loss of half the visual field to one side – and quadrantanopia – loss of a quarter of the visual field. There is also the possibility of ocular movement defects as a consequence of cranial nerve palsies.</p> <p>Standard 6: Falls. There is evidence to suggest a link between visual impairment and falls. There is also some evidence to suggest that older people from lower socioeconomic groups are less likely to access services and there may be unmet need in these groups¹⁶.</p> <p>Standard 7: Mental Health in Older People. Vision loss is linked to depression. One study has identified the prevalence of depression among patients with macular degeneration to be 30%¹⁷.</p> <p>Standard 8: The Promotion of Health and Active Life in Old Age.</p>

14 www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/OlderPeoplesServices/OlderPeoplesNSFStandards/fs/en

15 The RNIB has produce a helpful resource pack for health and social care on the relationship between the NSF standards and visual problems in older people – available at www.rnib.org.uk/seechange

16 The evidence is well documented in the following College of Optometrists; British Geriatric Society report: www.college-optometrists.org/coo/download.cfm?uuid=E3234F38-3048-216E-8029BB62764B0333&type=guidance

17 Casten RJ *et al* Current Opinion in Ophthalmology 2004 Vol 15(3) p181-183

Children's NSF¹⁸	Standard 1 of the Children, Young People and Maternity Services NSF deals with the need to promote the health and well-being of children and young people, identifying needs and intervening early in order to maximise the long-term gain. This standard highlighted the need for a national, orthoptist-led pre-school vision screening programme. Local agencies have the flexibility to plan and prioritise how the NSF standards should be met. The Department of Health is working with an expert reference group to develop products that support practitioners in the delivery of this NSF standard.
Diabetes NSF¹⁹	The diabetes NSF introduced screening for diabetic retinopathy in adults with diabetes and early laser treatment for those identified as having sight-threatening retinopathy in order to reduce the incidence of new visual impairment and blindness in people with diabetes. The NSF also introduced a standard to improve detection of diabetes, which of course is important if sight loss through retinopathy is to be prevented.
Public health measures on smoking cessation, nutrition and obesity	Recent public health initiatives such as <i>Choosing Health</i> ²⁰ and <i>Health Challenge England</i> ²¹ have sharpened the focus on public health problems such as obesity and smoking related illness. The prevalence of eye disease is strongly linked to some of these public health issues (see section 2.2 below).

2.2 Visual health – a public health issue

Research suggests that almost 90% of people say that sight is the sense that they most fear losing. But very few of us are aware of the links between a healthy lifestyle and sight problems. The various risk factors for developing sight problems are documented in a recent report by the RNIB²². The evidence in some areas is stronger than others, but common public health issues have been widely linked with eye problems, including:

- **Active smoking** can cause AMD (and can lower the age of onset) and cataracts. For people with a genetic predisposition for developing AMD, smoking can significantly increase the risk of developing AMD over and above the underlying increased genetic risk.

18 www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/ChildrenServices/ChildrenServicesInformation/ChildrenServicesInformationArticle/fs/en?CONTENT_ID=4089111&chk=U8Ecln

19 www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4002951&chk=09Kkz1

20 www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4094550&chk=aN5Cor

21 www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4094550&chk=aN5Cor

22 Feeling Great, Looking Good. RNIB 2006 – available at www.rnib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_healthreportp.pdf

- **Obesity** is increasingly seen as a risk factor for sight loss most directly for diabetic retinopathy. Obesity significantly increases the risk of developing type 2 diabetes – which can lead to the complication of diabetic retinopathy. Other eye conditions, such as retinal vein occlusion and hypertensive retinopathy, can also result from high blood pressure and raised levels of cholesterol due to obesity.

The RNIB report also highlights the importance of regular sight testing in helping to detect eye disease in its earlier stages.

In order to raise awareness of the links between these various lifestyle factors and visual health, the Department of Health will explore how the importance of visual health, including the need for regular sight testing, can be promoted through the upcoming development of Health Direct²³.

Successful action on dealing with the various public health problems described above will have an impact in reducing the burden of eye disease. However, this can also be used as the basis for a strong message, which can help to influence behaviour changes. Children and young adults do not understand very well that healthy lifestyles may mean not only a longer, healthier life, but will also reduce considerably the risk of sight threatening vision problems in later life.

Commissioners will also want to consider how community based eye care services might help to address health inequalities. This might be achieved by, for example, tailoring services so that they are more likely to be accessed by groups who are at greater risk of eye disease (such as some black and minority ethnic groups) but who may not currently be getting the services they need.

2.3 Community eye care professionals – involvement in prevention

Around the age of 40, people may start to notice a change in their near vision and are more likely, therefore, to visit an optometrist. Some people in this age group may have not seen their GP for many years, as they perceive themselves as being healthy even though they may be at risk of health problems in later life, for example because they are smokers and/or because they are overweight or obese. There may be some potential to train staff in optometric practices to provide additional services to these individuals. For example, in Bedford, one optometric practice has trained a dispensing optician as a smoking cessation adviser. The optometrist informally discusses the risks of smoking and eye disease during the sight test and if the patient is a smoker and he or she is interested in quitting, the option of referral to the in house smoking cessation adviser is offered.

²³ Health Direct will be a healthy living and learning centre available to the public on Internet, digital TV, and via SMS mobile service. It will incorporate the NHS Life Check that was proposed in the Our Health, Our Care, Our Say White Paper.

Another area is that of falls prevention. Optometrists and dispensing opticians can alert the risk of falling to the falls prevention team for follow up, for example, where the patient has reported to them a recent fall.

Summary

- We now have a good understanding of how well known public health risks, such as smoking and obesity, relate to visual health. There are two issues that arise from this. First, it is helpful for PCTs to conceptualise the contribution being made to delivering better visual health holistically; that is, in terms of services being delivered that will impact indirectly on improvements in visual health as well as those which will have a more direct impact. Second, the potential risks of visual health need to be understood and articulated in delivering wider messages about the health risks associated with, for example, obesity and smoking.
- More can be done to increase awareness about visual health and the Department of Health will explore how the proposed development of *Health Direct* can be used for this purpose.

3. Eye Care Pathways

3.1 Cataract, glaucoma, AMD, low vision

Eye care pathways for cataract, glaucoma, AMD and low vision are described in some detail in the Eye Care Services Steering Group report:
www.dh.gov.uk/assetRoot/04/08/09/99/04080999.pdf

Table 3, below, summarises the main differences between these pathways and the traditional (secondary care focused) pathway. Figures 2-4 illustrate the pathways for cataract, glaucoma and low vision.

Since these pathways were developed, some noteworthy work has been carried out under the Do Once and Share programme in developing a glaucoma clinical care pathway and common data set²⁴. The pathway, which was developed collaboratively with a wide range of professional bodies, covers the stages from when the patient presents to the health service through to treatment and monitoring. In doing so it establishes the skills and competencies required in order to meet clinical standards, and essentially serves as a basis for informing local service delivery and organisation.

The evaluation of the chronic eye care pilots (see section 3.2) shows that the evidence in relation to the AMD pathway – though limited to only one pilot site – indicates that this pathway does not yet present a clear case for wider roll out, from the perspective of referral accuracy and costs. However, the issue of rapid assessment of patients with suspected wet AMD so that they can get prompt access to treatment (which is critical to treatment success) remains an important challenge. PCTs may want to consider, with specialised commissioners, how the existing pathway can be improved in order to ensure that there is prompt referral for patients suffering from wet AMD who could benefit from treatment.

24 www.doasglaucoma.org/index.asp

Table 3: The ECSSG eye care pathways – key differences when compared to the traditional secondary care pathway, and benefits for patients

Pathway	Key differences from traditional pathway	Potential benefits for patients
Cataract ²⁵ (see Figure 2)	Community optometrists and OMPs play a more significant role in the diagnosis and preparation for surgery of the patient, and in the postoperative period. Specifically, optometrist or Ophthalmic Medical Practitioner diagnoses cataract as part of sight test and then discusses risks and benefits of surgery with the patient, provides other necessary information, offers patient choice and books appointment. ²⁶ After operation, patient attends for follow up with optometrist/OMP and, where relevant, the second eye is discussed. In some areas, optometrists are able to provide PCTs with pre- and post-operative patient data, stratified by Choice providers, because of their involvement at the start and end of the pathway.	Fewer steps, faster, potentially more convenient
Glaucoma (see Figure 3)	Potential for involvement of community optometrist in carrying out further tests (prior to referral to hospital) which should lead to fewer referrals to hospital. Optometrists can also play a part co managing patients (with HES) who have stable glaucoma. Glaucoma suspects could also be followed up in the community. Some additional training would be required for optometrists.	Potentially faster diagnosis and more convenient.
Age-related macular degeneration	This pathway is based on community optometrists carrying out differential diagnosis (between “wet” and “dry” AMD) followed by rapid referral to the HES (for the potentially treatable “wet” form of the disease) or to low vision services (for “dry” AMD). In the traditional pathway differential diagnosis is carried out in the HES.	Prompter care, potentially earlier diagnosis which may be all important in terms of treatment options.
Low vision (see Figure 4)	The current low vision pathway is fragmented, and there is wide variation in access and quality across the country. The proposed pathway puts the emphasis on low vision services (rather than provision of aids), and is based on a partnership approach between health, social care and third sector, with a single agency being responsible for the delivery of the whole service.	More accessible, timely services that more effectively meet the needs of the person in enabling them to live more independently.

25 The cataract pathway was not piloted because it built on existing good practice guidance (Action on Cataracts); was seen as relatively easy to achieve and the benefits are self evident. The pathway is now in widespread operation across the country.

26 Optometrists are not obliged to offer choice and do not have access to Choose and Book, but they can still offer Choice. PCTs should provide optometrists on their lists with details about the Choice options available. In the absence of access to C&B, booking arrangements will need to be resolved locally.

Figure 2: The Cataract Pathway

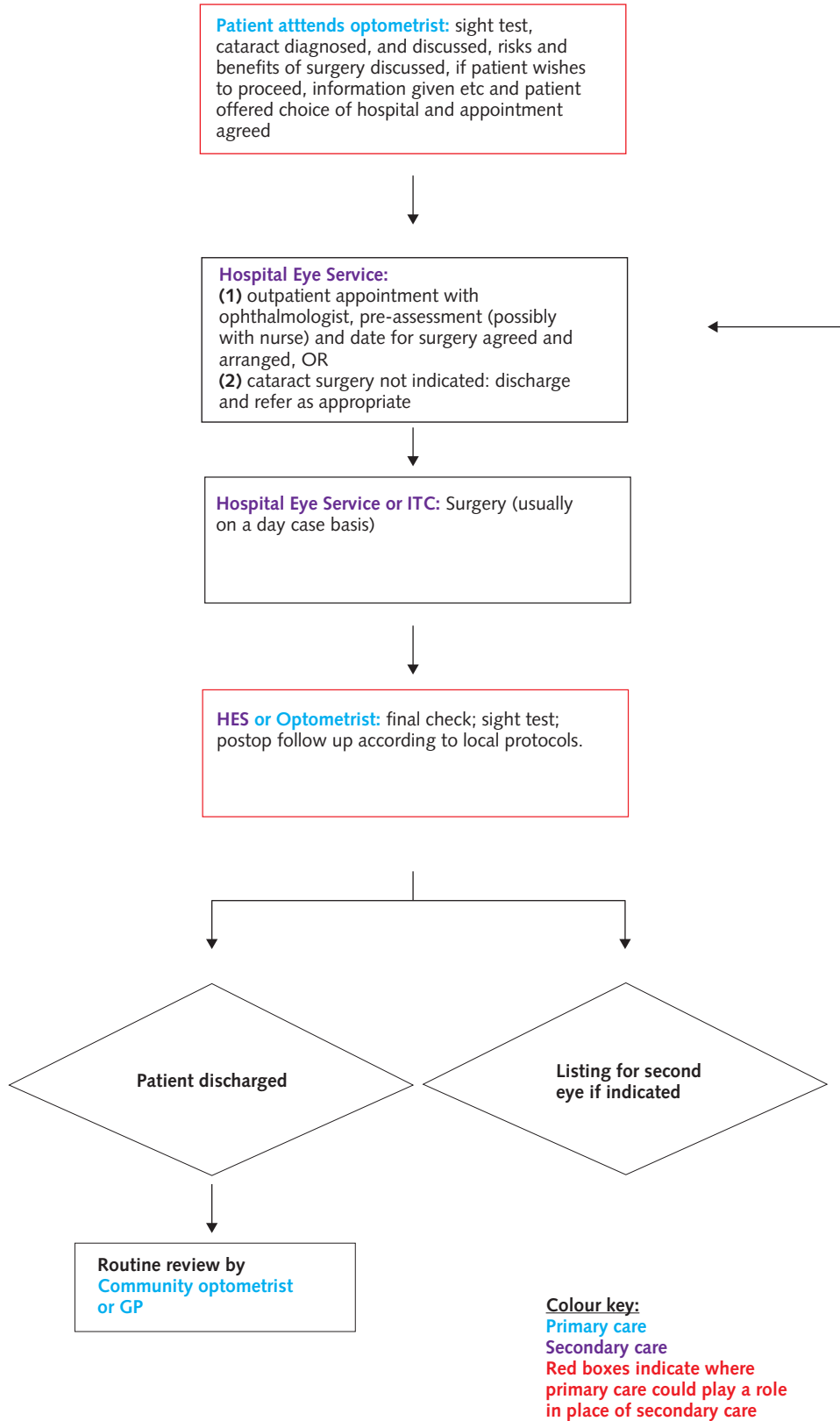
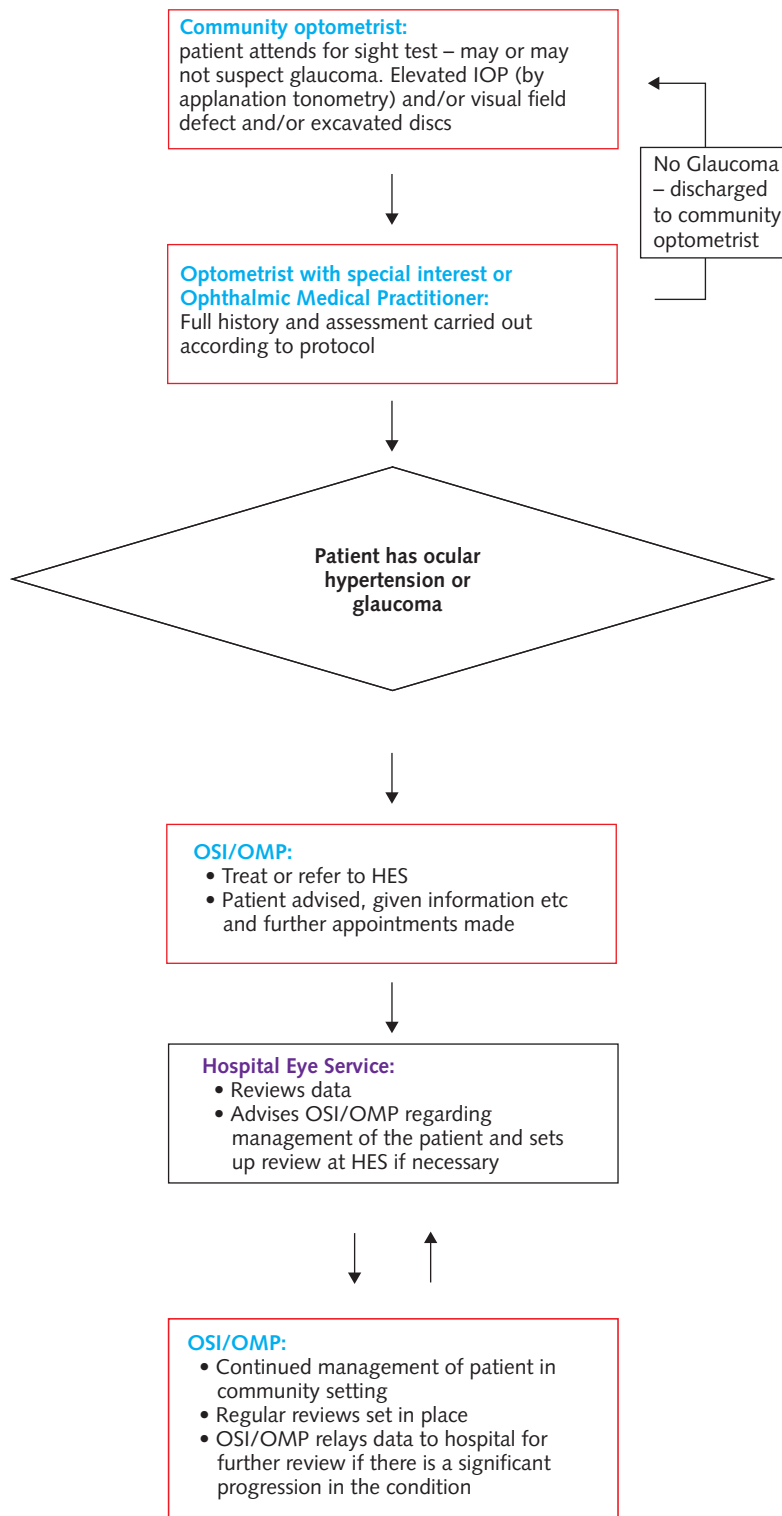
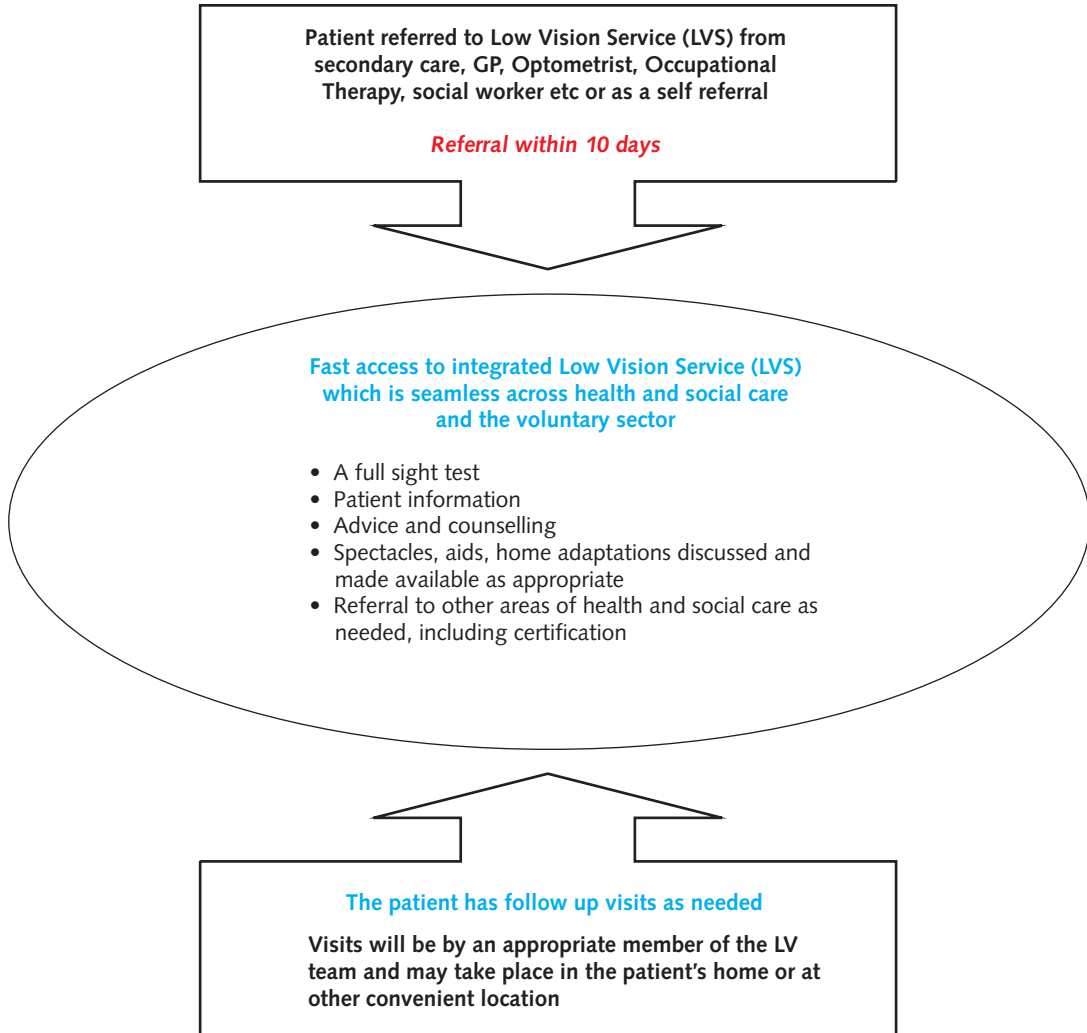


Figure 3: The Glaucoma Pathway



Colour key:
 Primary care
 Secondary care
 Red boxes indicate where primary care could play a role in place of secondary care

Figure 4: The Low Vision Pathway



3.2 Chronic eye care pilot evaluations

The chronic eye care services programme was set up under the auspices of the NHS Modernisation Agency to pilot the introduction of new patient pathways for glaucoma, AMD and low vision. An evaluation of these pilots has been carried out by the University of Birmingham and has now been published.²⁷

The evaluation draws out some important lessons about service redesign in eye care services. Key points include:

- It is challenging and it takes time to change historical working practices, especially when working across traditional primary and secondary care boundaries and when incorporating social services and the third sector.
- During the process of improving service delivery, strong relationships will be a major influence on the success of the project. At the early stages, these will be built on a personal rather than an organisational basis.
- Mapping of current service delivery, future demand, capacity issues, patient engagement and cost benefit analysis all need to be considered during the process of service re-design. In addition, a communication strategy should be put in place to ensure engagement of all potential stakeholders.
- Service configuration must reflect local circumstances.
- For low vision services, voluntary sector organisations are often the most appropriate to take the leading or facilitating role.
- It is advisable to identify the scheme that is likely to have the greatest impact locally and put effort into this. When multiple schemes are developed together there is a risk of diluted project management.
- Services for glaucoma and low vision were very well received by patients.
- One of the glaucoma pilots also found that the new community based service improved accessibility to patients to the extent that the total average round-trip travelling time was reduced by 38 minutes.
- The potential for co-management with optometry in the glaucoma pathway is good. A critical success factor is an effective partnership with consultant ophthalmologists, which is achieved more readily where they have led the process.
- The potential for development of low vision services is good but there are some significant challenges in setting up robust local partnerships – involving health, social care and the voluntary sector – which will be critical to these services being sustainable. Engagement with local voluntary sector organisations was particularly

²⁷ Evaluation of eye care pilots is available at www.eyecare.nhs.uk

important e.g. in offering a venue and in providing leadership, a profile for the new service, referrals.

- The evaluation for the AMD pathway was limited by the patient numbers in the two sites involved. However, it indicated there is not yet sufficient evidence to support the viability of the proposed pathway because of a high number of false positives for wet AMD. This meant that there was an ongoing need for a fast-track doctor-led clinic to confirm the diagnosis. Nonetheless, the pilot highlights the fact that rapid assessment of patients with suspected wet AMD remains an important challenge and proposes that optometrists with a special interest may have a role in promoting the skills needed by referrers to trigger referrals for rapid assessment in secondary care.
- Training, audit and skills maintenance are critical issues in all pathways. Audit arrangements need to be decided clearly from the outset of the project.
- The need to maintain fully booked clinics is essential to long term financial viability of the pathways. When commencing a project it is advisable to have a supply of patients/clients already identified, and not to overestimate the number of service providers that will be required in the initial phases.

3.3 Acute eye care pathways

The ECSSG did not look at acute eye care pathways, but this is an area where there is clear potential for developing community based services and may be particularly relevant in areas where access is an issue, for example because the area served is rural. The Primary Eyecare Acute Referral Scheme (PEARS) in Wales provides an example of how this sort of scheme operates. Patients can directly refer themselves to a high street optometrist (who has to be accredited with the scheme) if they have an acute eye care problem, such as a red eye. The optometrist provides an appointment slot within 24 hours; if the patient requires urgent treatment they are referred to the HES. Otherwise, the optometrist manages the condition, although referral to the patient's GP may be required if drug treatment is required so that the prescription can be made. The optometrist is paid a fee for this service of £40. A similar scheme is the Glasgow Integrated Eyecare Scheme (GIES). Referral to GIES is via GP. Figure 5 illustrates a typical pathway for this type of scheme.

Another variant of this scheme is the Shipley Ophthalmic Assessment Programme (SOAP). This scheme, which is optometry led but based in a GP clinic, effectively functions as a referral assessment, or triage, service. Optometrists or GPs refer into the scheme rather than the HES for patients whose conditions require further assessment (to see if they can be managed in the community). SOAP optometrists carry out a wide range of tests, according to local clinical protocols, and refer on to the HES only where necessary.

3.4 The evidence base for acute eye care schemes

Acute eye care schemes have not been subject to formal evaluation to assess their cost effectiveness. PEARS is currently being evaluated by the University of Cardiff. GIES and Shipley has been subject to audit. The GIES scheme audit reveals that:

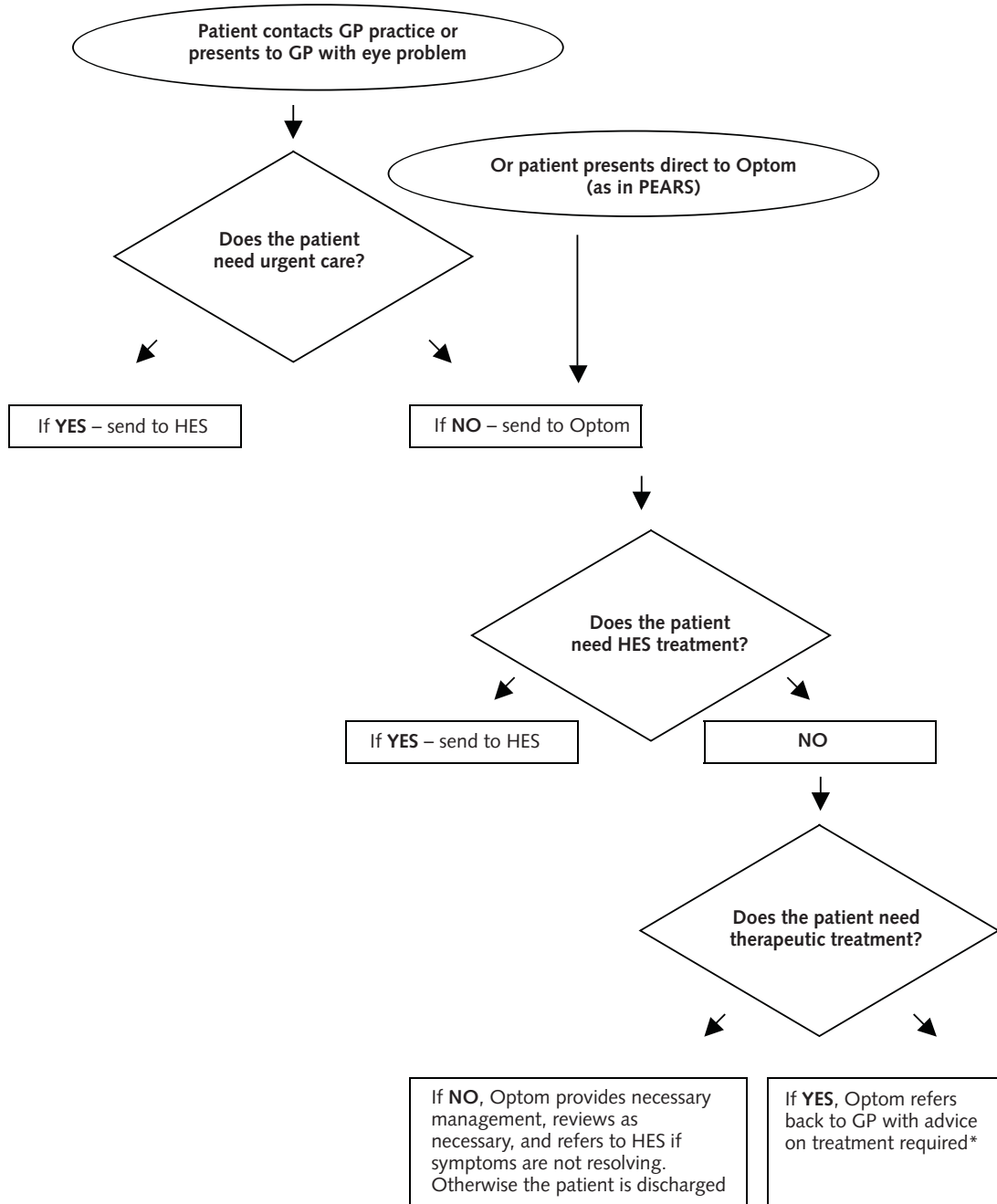
- All referrals are seen within 2 weeks and 90% within 4 days.
- 77% of patients are retained and safely managed in primary care.
- All referrals to the HES have been considered appropriate by the receiving ophthalmologist.
- There has been an 80% reduction in topical antibiotic prescribing.
- There has been a high patient and professional satisfaction rating.

Key findings from Shipley are:

- Waiting time is two weeks.
- Currently, around 75% of patients do not need to be referred to the HES.
- An audit of the first 100 patients revealed that the 60 patients who were not referred on to hospital, did not go on to have any complications related to their initial consultation (based on follow up 2 years later).
- The scheme makes some modest cost savings.
- There is a high satisfaction rating amongst patients and GPs.

These schemes raise an important consideration in relation to the service model. The Shipley scheme is provided through a GP clinic. GIES and PEARS are provided through optical practices. There are benefits and dis-benefits to both types of service model. The centralised clinic makes it easier to deal with practical issues (such as IT, clinical governance, prescribing) but may carry greater set up and overhead costs e.g. for equipment and buildings. The optical practice model potentially provides wider choice and access to patients but presents challenges in relation to the practical issues mentioned above. The choice may partly be driven by the types of professionals involved in delivering the service.

Figure 5: Acute Eye Care Pathway



* this stage could be omitted in some cases if independent prescribing by optometrists becomes developed

Summary

- It is clear that there is scope for redesigning traditional eye care pathways, with a shift towards more provision in the community. There is a reasonably good consensus for this view among professional groups, although there are a range of factors to consider if these services are to be commissioned (see section 4).
- The evidence base for the various pathways is developing. Although the evidence base for acute eye care schemes is more limited, there are potential benefits for patients in providing these services, and some of the audit data are promising. In addition, the ECSSG pilots have provided some important lessons about the potential for developing community based services for glaucoma and low vision and the challenges involved in establishing these services.

4. Commissioning community based eye care services

4.1 The commissioning framework

Health Reform in England: Update and Commissioning Framework – published in July 2006²⁸ provides a detailed framework primarily aimed at the commissioning of secondary care services. The second stage of the commissioning framework, which is due to be published shortly, will address how to commission effectively for improved health and well-being across both health and social care. This includes an enhanced role for the third sector i.e. voluntary organisations, social enterprises and not-for-profit organisations. It will build on the recent Strong and Prosperous Communities local government White Paper²⁹, which promotes the value of a more integrated approach to local service provision.

There are a number of important aspects to the July framework, which relate directly to the commissioning of eye care services.

- An explanation of the key components of an effective commissioning cycle (see figure 6 below)
- An emphasis on Practice Based Commissioning (PBC) as a driver for change. PCTs are encouraged to offer additional cash releasing incentive schemes above the Directed Enhanced Service (which ends in any case after March 2007), to facilitate provision of services in more convenient settings to patients. PCTs are also able to give pump priming loans to develop services re-provided from secondary care. Recent PBC guidance reiterates³⁰ the Department's commitment to develop strong practice based commissioners, ensuring that they have the tools, levers and incentives to redesign services and improve quality, responsiveness and value for money.
- A description of how incentives might also be needed in order to establish new services – recognising that there can be significant risks in getting these off the ground. Incentives could include, for example, payment of a supplement to cover set up costs.

28 Commissioning Framework (July 2006): www.dh.gov.uk/assetRoot/04/13/72/30/04137230.pdf

29 Strong and Prosperous Communities: The Local Government White Paper:
www.communities.gov.uk/index.asp?id=1503999

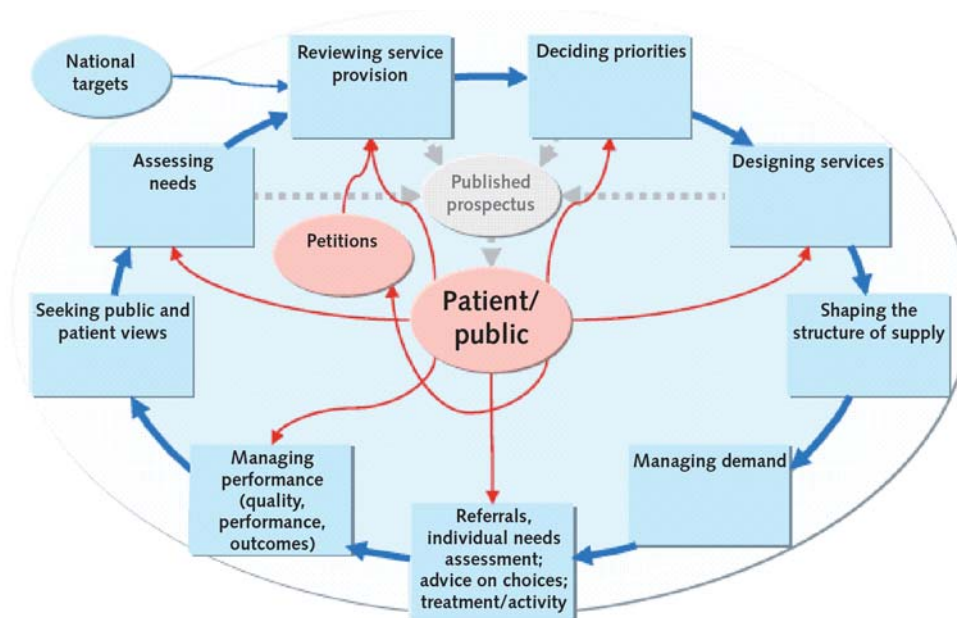
30 PBC Practical Implementation (December 2006):
www.dh.gov.uk/assetRoot/04/14/09/40/04140940.pdf

- An expectation that PCTs will need to work with existing and potential providers to ensure that they understand the services required by the local population and the opportunities to develop new services to meet unmet needs, or to improve the quality of service on offer. The PCT prospectus (the first version of which will be produced in 2007/8) will provide a mechanism for this. The prospectus will be developed as a proactive method of communicating with patients and the public and could provide a focus for debate on local needs, performance of local services and priorities for improvement. In setting out the PCT's forecast requirements, the prospectus will also provide a signal to providers on the services they may wish to develop and the likely demand they can expect.
- An expectation that patients will have a central role in influencing commissioning to ensure that health and social care services are matched to their needs and preferences. This will include mechanisms such as the community petition, which will be a mechanism to oblige PCTs to review service provision based on the demand for a new service or dissatisfaction with an existing one.

4.2 The commissioning cycle

The July commissioning framework illustrated the key stages of effective commissioning:

Figure 6: The Commissioning Cycle



Although this toolkit focuses specifically on the commissioning of community based eye care – rather than on the entire range of eye care services described in Table 1 – the stages illustrated above are still relevant. Table 4, below, provides a more detailed breakdown of the issues and questions that commissioners will want to consider at each stage of the commissioning cycle.

Table 4: The commissioning cycle – step-by-step guide

Stage of commissioning cycle	Issues to consider	Questions to ask
Assessing needs	DEMOGRAPHICS AND DISEASE PREVALENCE	<ul style="list-style-type: none"> • What is the demographic profile of the local population (age; gender; socio-economic status; ethnicity)? • What is the prevalence of eye disease in each of the main eye disease categories considered in this toolkit? How does this compare with other PCTs? • How is the population profile likely to change over time, and how will this affect the prevalence of eye disease? • How many people are registered as blind or partially sighted?
	ACCESS ISSUES	<ul style="list-style-type: none"> • Proportion of people living in rural/urban settings • Is there evidence of inequalities in outcomes for specific groups within the population served?
Reviewing service provision	EXISTING RESOURCES AND CAPACITY	<ul style="list-style-type: none"> • How are eye care services currently organised? What services, if any, are already provided in community settings? • Is there duplication or overlap in services as a result of service reconfiguration? • Are services for certain eye care problems, e.g. low vision, effectively integrated across health and social care? • What do patients, carers and the local community think about eye care services e.g. about their accessibility? Is there any evidence that some groups of people are not accessing services? • Are there any specific gaps in the services provided against the identified needs? • Are there any capacity deficits in secondary care that will impact on achievement of the 18 weeks target locally?
	HOSPITAL EYE SERVICES	<ul style="list-style-type: none"> • What is the degree of specialisation in particular eye conditions? • How is the HES positioned in relation to Choice? E.g. some providers may be actively seeking to release capacity in some services in order to attract patients through Choice for other eye care services.
	WORKFORCE PROFILE AND SKILLS	<ul style="list-style-type: none"> • What is the profile of the eye care workforce locally? • What competencies exist within this workforce? Which professionals have the required competencies to work in community based eye care services e.g. optometrists; dispensing opticians; orthoptists; GPSIs; ophthalmic nurses; ophthalmologists who could be employed directly in the community? • What are the likely future workforce trends?

	<p>CURRENT PATTERNS OF UTILISATION</p>	<ul style="list-style-type: none"> • What is the current local demand for sight tests (NHS and non-NHS)? What proportion of sight tests result in referral to hospital³¹? • How many GP consultations relate to eye problems? How many of these end up with a referral to hospital and how many are managed in primary care? • What is the pattern of outpatient utilisation in ophthalmology (including first appointments; % discharged after first appointment; follow ups; DNAs)? • What data/information is available on the quality of referrals from primary care? • How do these data break down for different eye conditions? • What is the pattern of utilisation for acute and urgent eye problems? • What measures are available about how well these services meet the identified needs?
<p><i>Deciding priorities</i></p>	<p>IMPACT</p> <p>COSTS</p> <p>HOSPITAL SERVICES</p>	<ul style="list-style-type: none"> • What changes would patients like to see? • What will have the biggest impact on the population served? • Which groups of people are we failing to reach effectively? • What can we learn from the eye care pilot pathways? (see also section 3.2) • What is the likely cost of new services? • Is there potential to achieve better value for money? • What are the current and future plans for configuration of secondary care services? • What is the likely impact on hospital eye services if traditional secondary pathways are redesigned? • What are the biggest challenges for ophthalmology in terms of 18 weeks? Would the development of community based services help to release capacity?
<p><i>Designing services/ Shaping the structure of supply</i></p>	<p>ENGAGEMENT WITH PROFESSIONALS</p>	<ul style="list-style-type: none"> • What is the level of interest amongst the local optical sector to participate in delivering enhanced NHS services? • Are there likely to be sensitivities in the local optical sector if certain opticians are contracted to provide an enhanced service (which potentially provides them with “access” to patients who might normally go elsewhere for their sight test)? • Has the local optical committee been consulted about how these sensitivities are best dealt with? • Is there engagement from the secondary care sector? • Is there a local eye health group or equivalent mechanism that can provide advice? (see also section 5.3) • Have views been sought from the LMC and PEC? • What is the scope for enhancing involvement of the third sector in the delivery of services? Could more be done to promote third sector innovation e.g. in delivery of low vision services?

31 Estimates from the optical sector suggest that 4% of sight tests result in referrals to GPs or hospitals (Optics at a Glance, FODO available at www.fodo.com/fckextras/File/OAAG%202005%20FINAL.PDF).

	<p>SERVICE MODEL</p> <p>COSTS</p> <p>WORKFORCE AND TRAINING (see also section 6.2)</p> <p>IT (see also section 6.4)</p>	<ul style="list-style-type: none"> • Which service model best fits local needs and priorities for delivering community based services i.e. optical practices contracted to provide the service or centralised clinics? (see also section 3.4) • Does the service model provide an appropriate balance between the number of providers and number of likely patients (so that practitioners see enough patients to maintain their skills, and also so that the service is cost effective)? • Have patients been consulted about the potential service models? • What are the likely set up costs of any new services? (see also section 6.1) • Can the new pathway be reliably modelled – in terms of likely patient numbers – so that costs can be predicted? • Is the new service likely to yield cost savings over the current pathway? • If so, is there potential to recoup set up costs over time? • If not, are there other benefits (in terms of reduced costs in other areas of expenditure; improved services for patients)? • How will prices be set for new services that are delivered outside of tariff? • How will any new service be funded? • What are the training needs for delivering the new service? • How will training be refreshed and competencies maintained? • Who will deliver this training? • How will the training be funded? • Where a pathway requires supply of medicines to the patient, is there a requirement to train optometrists for increased prescribing responsibilities (see also section 6.3)? • Will any new staff need to be recruited to provide the full range of skills needed to deliver the pathway e.g. rehabilitation workers for low vision services • Will the new service be linked into existing IT systems? • If not, how will patient data be shared securely? • Is there scope to provide N3 connections through commercial network aggregators?
<p><i>Managing demand</i></p>	<p>WIDER PROGRAMMES</p> <p>MAXIMISING EXISTING RESOURCES</p>	<ul style="list-style-type: none"> • What more could be done to shift the balance towards prevention in eye care services? • Is it clear how other programmes and services will link to improving visual health? (see also section 2) • Are patients receiving the most appropriate services to meet their eye care needs? • Is this care being delivered in the right setting in terms of making good use of the resources and skills available for delivering these services, but also in terms of what is best and more convenient for patients?

<p><i>Referrals, individual needs assessment, advice on choices, treatment, activity</i></p>	<p>CLINICAL PROTOCOLS PATIENT INFORMATION</p>	<ul style="list-style-type: none"> • Are there agreed clinical protocols or guidelines in place to support decision making within the patient pathway? • Is information available to patients in a format that is appropriate to the needs of patients? • Are patients clear about how they access services? • Are there protocols in place to offer and discuss choice of hospital for patients referred by optometrists or other community based services e.g. in the cataract and glaucoma pathways? (see also section 6.4) • Is information communicated to other professionals involved in patient/client care e.g. GPs, optometrists, social services, family and carers with appropriate prior consent from the patient?
<p><i>Managing performance</i></p>	<p>QUALITY ASSURANCE (see also section 6.2) PERFORMANCE MEASURES</p>	<ul style="list-style-type: none"> • What will be the clinical governance framework for the new service? • How will the service be audited? • How will patient outcomes be measured? • Is it clear how failure to achieve the required standards will be dealt with? • How will we know whether the new service meets the anticipated need? • With new acute eye care pathways, how can impact on hospital referral patterns and outcomes be monitored and assessed? • Is there any evidence of duplication of services with the hospital eye services? • Is the new service providing a comparable or better standard of care than the equivalent service in the HES? • How much is the new service costing? How do costs compare against the previous pathway?
<p><i>Seeking public and patient views</i></p>	<p>PREVENTION PATIENT EXPERIENCE</p>	<ul style="list-style-type: none"> • How informed is the public about eye health risks and the importance of regular eye examinations? • Is there a good understanding of the patient experience of eyecare pathways? Are there effective ways of getting this information? • Are third sector organisations engaged in helping to ensure that patients and the public are involved in the different stages of the commissioning cycle? Can they help in particular to reach groups of people who we know are not accessing services as they should be? • Where local eye health groups exist, is the patient voice properly represented? (see also section 5.3) • What will be the arrangements for collecting, analysing and acting upon patient and carer views about services on an ongoing basis so that they can effectively inform the development of services? • Is information about patient experience regularly made available to practices?

Summary

- The commissioning framework published by the DH in July 2006 provides important guidance about how the commissioning role will help the NHS to deliver best value for patients and taxpayers. The commissioning of eye care services needs to be considered within this framework – and also within the wider commissioning strategy of the PCT.
- The degree to which commissioners want to develop community based eye care will depend on a range of local factors, including current and future local needs, existing service provision and economic factors. There is, however, clear potential for the development of community based eye care where these local factors indicate, for example, that:
 - service accessibility for patients needs to be improved.
 - demographic trends point to the need to develop new capacity.
 - there is a need to increase capacity to meet the 18 weeks target.
 - changes in HES provision mean that capacity needs building in primary care.
 - there is potential to deliver services that provide better value for money.

5. Building commissioning capacity for eye care services

5.1 The role of practice based commissioning

There are inherent incentives and opportunities within practice based commissioning (PBC) to support the development of community based eye care services because of the potential that PBC creates for service redesign, shifting traditional referral patterns and reshaping primary care more generally.

PBC can stimulate the development of community based eye care pathways in two ways, first, by the direct provision by practices of eye care services. Second, the clinical engagement in commissioning that PBC fosters can help to redesign services more generally across the PCT. PBC commissioning groups are ideally placed to provide advice on the scope for service redesign. The Improvement Foundation, through its PBC development programme³², is working with four PCTs on the redesign of eye care pathways through PBC.

Practice based commissioning: Practical Implementation³³ sets out the latest guidance on PBC. It includes guidance on procuring services through practice based commissioning and makes it clear that tendering will not normally be required for re-designed services (except where a service monopoly is proposed) and that tariff prices will not apply to new services provided within primary care. It also makes it clear that, although patient choice currently applies to consultant-led services, the principle of fostering choice should be extended to the development of enhanced primary care services through PBC and that PCTs should seek to establish a range of providers – who meet the requisite quality standards – from which patients can choose, driving up quality through contestability.

5.2 Payment by results

Although the scope of the national tariff in ophthalmology covers services that have traditionally been provided in hospital settings, such as cataract surgery and treatment for glaucoma, it does provide a mechanism that allows resources to be released to fund new pathways that involve shifting services outside of hospital.

32 Improvement Foundation PBC Development Programme: www.improvementfoundation.org/View.aspx?page=/topics/health/practice/resources/howtoparticipate.html

33 PBC – Practical Implementation: www.dh.gov.uk/assetRoot/04/14/09/40/04140940.pdf

Where ‘like for like’ services are being provided in alternative settings (e.g. mobile cataract units) then the relevant national tariff may be applied. The recent PBC guidance³⁴ provides a definition of ‘like for like’ services. For most of the services we are concerned with in relation to community based eye services, it will be necessary to negotiate a local price, such as where alternative services are provided in primary care settings or where the service is designed to treat only routine cases

The Department of Health will shortly publish proposals for consultation on the Future of Payment by Results: 2008/09 and beyond. This will include an invitation for proposals from commissioners and providers to pilot currencies and funding models for community services to be evaluated as potential exemplars for the national programme.

5.3 Sources of advice for PCTs

Through the course of the GOS review, it has become evident that eye care professionals working in primary and in secondary care often do not have a forum for interaction. As a consequence, the scope for communication and for learning about each other’s professional skills and interests is limited. This situation arises in part because optometry has traditionally been on the periphery of the core NHS family. PCTs often have a limited knowledge about the wider range of eye care professionals, what skills they have to offer, and the range of services they can potentially provide. It is noteworthy that, where community based eye care schemes have become established, it is often from the bottom up, for example where there is a particularly active local optical committee (LOC), or cross-membership between the LOC and the professional executive committee.

This all points to the need for PCTs and practice based commissioners to get better advice about eye care services. This could involve the establishment of a local eye health group (which would need to interact effectively with the LOC) and mechanisms to secure advice directly from eye care professionals (e.g. an optometric adviser and ophthalmologists).

Local eye health groups

Some PCTs have already established local eye health groups (sometimes called eye care modernisation or strategy groups) to provide advice and offer solutions about the way in eye care services are provided. These groups can be an effective way of engaging professionals and pooling expertise to provide advice to PCTs about the commissioning of eye care services. The core purpose of these groups is likely to be to:

- Improve communication between eye care professionals across secondary and primary care.

34 *Ibid*

- Share ideas and knowledge about eye care services and the potential to redesign pathways for the benefit of patients.
- Share local knowledge and data about needs and current patterns of service delivery and use.
- Provide hands-on advice and solutions to commissioners in relation to service reviews, service redesign and the practical issues involved in commissioning new eye care services.
- Consider how best to implement changes in the light of recommendations, advice and national and SHA planning guidance.

Key success factors for local eye health groups are listed in the box below.

Local Eye Health Groups – Success Factors

- Need to ensure appropriate representation from the range of eye care professionals in primary and secondary care (including ophthalmologists, optometrists, dispensing opticians, ophthalmic medical practitioners, GPs with a special interest, orthoptists, ophthalmic nurses etc.) from PBC, from optical businesses, from Low Vision Services Committees, from the sponsoring PCT or PCTs from the voluntary sector, from the local authority, and from patient groups.
- But... should not become so large that it is difficult for them to function effectively. As the group develops, it may be that additional sub-groups need to be formed (e.g. to focus on specific areas) and these could co-opt additional expertise as required.
- Should include a sufficient degree of cross membership with the LOC.
- Should not operate in isolation. They should be linked to other advisory and commissioning structures within the PCT, including whatever form the future PEC takes.
- Need a clear and concise terms of reference – and clarity about how their recommendations will feed into the commissioning process.
- Should actively engage with patients and patient representative groups.
- Need to be appropriately funded by the PCT(s).
- Should ideally be reviewed against how they are delivering on the terms of reference with (possibly) an annual report of activity.

Local eye health groups might encompass more than one PCT and could be SHA wide. The former West Yorkshire SHA established an SHA wide network – the West Yorkshire Eye Care Network. The network is currently continuing within the West Yorkshire patch, with the intention to develop it across the whole of the new SHA in the future. The network has a wide membership from eye care managers and clinicians including the Clinical Leads and Business Managers in ophthalmology from the various hospital trusts, PCT managers, GP representatives, optical businesses, LOC members, optometrists and orthoptists. The purpose of the network is to:

- Review existing work on eye care pathways and the 18 week referral to treatment target.
- Identify local issues and take a collaborative approach to meeting the challenges and solving problems.
- Share learning and best practice – and more generally to be a forum for exchanging information.
- Find workable models of eye care in the community.

Optometric advisers

Most PCTs contract sessional input from an optometric adviser (OA) to provide them with independent advice. The role carried out by an OA often relates specifically to the management of the GOS contract. OAs can also provide advice and support in relation to the commissioning of eye care services more generally, including the redesign of existing care pathways. Commissioners will also need to ensure input from other professionals, in particular local ophthalmologists, especially where there is no local eye health group in existence.

Commissioning Services Framework

The Commissioning Services Framework will be set up by the Department of Health to provide PCTs with a route for the procurement of management and support services, as required, to support them in meeting their commissioning responsibilities.

The framework will provide PCTs with a number of potential suppliers who have specific skills and competencies in assessment and planning, contracting and procurement, performance management, patient and public engagement. These commissioning functions are provided across eight key service segments including areas such as planned and unplanned acute health and primary care.

These arrangements will enable PCTs to buy in high value improvements and innovations to the commissioning activity, particularly in areas where they have limited capacity. The exact nature of accountabilities and responsibilities will be agreed between the individual PCTs and relevant supplier at call-off stage.

5.4 Third sector involvement

Another source of local knowledge and expertise will be third sector organisations involved in eye care. This might take the form of:

- Ensuring that patients/users are incorporated into the decision making bodies on the PCT and that their voices are heard.
- Informing local commissioning decisions.
- Awareness raising about eye care services, and eye health more generally.
- Supporting the development of innovative service provision.
- Acting as a facilitator between different eye care sectors.
- Providers of eye care services, either as sole providers or by working in partnership with others.

The low vision service established through the Gateshead service demonstrates very well the role that the third sector can play, in this case in the delivery of the service. A particular strength of the service has been the partnership with a local voluntary sector organisation, Sight Service. Sight Service has been important in raising the profile of the new service and has provided the base for the project, within a local community hospital. This base has facilitated links with other services, predominantly for older people, such as with the diabetes clinic.

Summary

- System reform policies such as PbR, Choice and PBC create a set of incentives and levers that, over time, should encourage the development of a wider range of community based eye care services.
- One factor that needs to be addressed, however, is the knowledge and awareness among commissioners to enable them to commission eye care services effectively. PCTs may need to seek advice through the establishment of local eye health groups.
- Where pathway redesign is being considered, PCTs and practice based commissioners should also secure independent advice from specialists such as ophthalmologists and optometric advisers. The third sector can also provide valuable input in terms of user engagement, practical advice, and involvement in service delivery.

6. Practical issues

As sections 4 and 5 have noted, system reform introduces a range of incentives that should encourage the commissioning of a wider range of eye care services. However, there are a range of practical issues that need to be overcome, which are outlined below. Although these can be significant, and can create a barrier to the development of specific schemes, they should not be regarded as “showstoppers”. The case studies work (www.primarycarecontracting.nhs.uk/87.php) will describe in more detail how individual schemes have dealt with these implementation issues. The case studies will go live from 2 February 2007.

6.1 Set up costs

As with any new service, there will be costs associated with setting up and running the service e.g. training, quality assurance, equipment and IT costs, and opportunity costs of staff time (such as ophthalmologists delivering training).

With services that produce direct cost savings, there is the potential to recoup these costs over time. Where this is not the case, commissioners will need to develop robust costings for setting up and running a service, and assess whether the benefits that the new scheme produces (e.g. because of gains in patient experience or access) are sufficient to warrant the investment. This assessment should also consider the potential for indirect cost savings (e.g. reduced healthcare expenditure further down the line because of the preventive effectiveness of the new service – such as low vision services impact on well being and mental health, or on reduced falls). However, these costs are often very difficult to attribute and quantify.

Another important aspect, in relation to set up costs, is risk management. One of the key questions here is, if the new service proves to be unsustainable, what proportion, if any, of the set up costs could be recouped?

6.2 Training and quality

A key part of any newly commissioned service will be the quality assurance framework under which it is delivered. One element of this is the training and competencies of the practitioners delivering the service. The second is the arrangements for ensuring that the services are of high quality, with appropriate mechanisms to ensure that quality is controlled i.e. clinical governance. Both of these elements need to be appropriately funded and agreed locally.

Training

Optometrists and dispensing opticians are trained to a very high standard and will have the core competencies to take on a range of extended work. But they may need specific training in relation to a particular eye care scheme. The General Optical Council has a potential role here because it can designate a specialism, set the required competencies for that specialism, and then maintain a list of optometrists who meet the requirements, and hence who can carry out work in that area. As yet, the GOC has not designated specialities in any area other than prescribing; but it plans to do so in the future. The British and Irish Orthoptic Society³⁵ has produced competency standards and professional practice guidelines for extended roles by orthoptists, which include glaucoma diagnostics and monitoring.

Any locality developing a new eye care scheme needs to consider what training requirements are necessary for accreditation by the participating professionals. This will require the local engagement of professionals working in eye care and in particular ophthalmologists, who may be involved in delivering training and/or in determining the existing training modules that need to be completed (such as postgraduate training modules in the optometric management of glaucoma or the College of Optometrists diplomas in glaucoma). Local eye health groups, where they exist, could be the conduit for these discussions. As the ECSSG pilots also highlighted, this local engagement is critical to creating the right level of skills in the practitioners, and in generating confidence among the health professionals involved. Consideration will also need to be given to skills maintenance, for example, through periodic re-accreditation and requirements to see minimum caseloads in order to maintain accreditation.

Another important aspect of quality assurance is in the use of clinical protocols for decision making within a particular patient pathway. Again, it is critical that these are agreed and signed up to locally.

Quality

For any new service, the assumptions made in its planning must be tested carefully. For example:

- does it meet the anticipated need?
- is it reducing pressure on the HES, or is it uncovering previously unmet demand?
- is there any evidence of duplication of work with the HES?
- is it generating inappropriate referrals into the HES?

35 www.orthoptics.org.uk

- is it providing a comparable or better standard of care than the equivalent service in the HES?
- what is the patient (and carer) view?

For shared care schemes, there should be a common governance structure that covers both the new service and the hospital eye service into which it links. This should allow audit of referrals between the primary eye care service and the HES, audit of shared care arrangements, the risk management strategy, the process for developing and refining care pathways, clinical incident review, complaints review, user satisfaction surveys.

It may also be necessary to phase implementation of a new pathway – with the earlier stages effectively piloting the new arrangements but involving greater oversight from ophthalmology (as is often the case with glaucoma shared care) before sufficient expertise and confidence has been built to roll out the full pathway. In the Hinchingsbrooke glaucoma scheme (which will be one of the featured case studies: www.primarycarecontracting.nhs.uk/87.php) the intention is to roll out the glaucoma shared care pathway in three phases: pilot, referral refinement and finally fully shared care.

Another important mechanism for quality control is peer review, where practitioners get together on a regular basis to discuss the management of particular cases. Schemes such as the Essex Integrated Eye Care Scheme (which will be a featured case study: www.primarycarecontracting.nhs.uk/87.php) ensure that the establishment of peer review groups are a prerequisite of involvement.

6.3 Prescribing

There have been some recent changes to prescribing responsibilities for optometrists which should, over time, enable closer participation in the delivery of eye care services. The Department of Health and the Medicines & Healthcare Products Regulatory Agency have consulted on proposals that will, if supported by the Commission on Human Medicines (CHM), enable suitably qualified optometrists to prescribe medicines – with implementation during 2007. This would help enable more treatment to be delivered in a primary care setting by allowing optometrists to take on the additional responsibilities envisaged in, for example, the glaucoma pathway. The government has already enabled optometrists to become supplementary prescribers in July 2005. Supplementary prescribing is not yet sufficiently developed, however, and will not support the much broader development of new care pathways involving optometrists. The box below summarises the difference between independent and supplementary prescribing.

Independent and supplementary prescribing

- **independent prescribing** is prescribing by a practitioner (doctor, dentist, nurse, pharmacist, or, subject to CHM agreement, optometrists) responsible and accountable for the assessment of patients with undiagnosed or diagnosed conditions and for decisions about the clinical management required, including prescribing.
- **supplementary prescribing** is a voluntary prescribing partnership between the independent prescriber (doctor) and supplementary prescriber (e.g. nurse, pharmacist, optometrist), to implement an agreed patient-specific Clinical Management Plan, with the patient's agreement.

As part of the contract for any new services involving prescribing, commissioners will want to specify contractual requirements around appropriate qualifications, skills, expertise and the quality assurance framework to prescribe effectively and safely. Optometrists will have to undertake additional training to become independent prescribers and be registered as such with the GOC. NHS funding (through SHA training funds or from PCTs who wish to fund this as a local priority) will be available for this and NHS bodies will be able to put forward individuals for prescribing training. Optometrists or their employers may also choose to fund their training where it is clear that doing so will open up new opportunities including for participating in NHS work. People who undertake training at NHS expense should only do so where they will be able to take on prescribing responsibilities as soon as they qualify, both in terms of it being part of their job and also in terms of having access to a prescribing budget to meet the costs.

Although these new arrangements will provide the mechanisms to enable greater participation by optometrists in delivery of new eye care pathways, it is worth noting the existing powers that optometrists have for supplying medicines.

- Provided it is in the course of their professional practice, registered optometrists may already sell or supply medicinal products on a General Sale List and medicines classified as Pharmacy (P) medicines under the Medicines Act 1968.
- Provided it is in the course of their professional practice and in an emergency, registered optometrists may also sell or supply certain prescription only medicines (POMs).
- Optometrists who undergo additional training and are accredited by the General Optical Council (as “additional supply optometrists”) will be able to sell, supply or write an order for an extended range of medicines.

These arrangements allow flexibility for optometrists to provide patients with the relevant medication for a wide range of routine eye conditions but any such sale or supply would be on a private rather than an NHS basis unless PCTs devise a mechanism to reimburse the cost of the medication to optometrists.

Supply of medicines outside the scope of current provision rely on engaging medical staff locally either through multi-disciplinary approach that is part of the glaucoma pathway or by referral to the GP – which might be necessary with an acute eye care scheme. Patient group directives (PGDs), and supplementary prescribing, when it becomes more developed, will help to some degree in these pathways. The case studies (www.primarycarecontracting.nhs.uk/87.php) will highlight the use of PGDs in Northumberland.

6.4 IT

An important aspect of any new service is the way in which information – particularly clinical information about the patient – is used and shared. For this reason, interoperability between different healthcare information systems is seen as an important enabler for participating in the delivery of NHS services. For example, enhanced IT could help to facilitate optometric participation in community based eye care services.

IT needs for optometry are largely driven by the information required for supporting enhanced clinical services – from the perspective of facilitating referral (choose and book), sharing information and participating in audit. Potentially, some or all of this could be delivered by the National Programme for IT (NPFIT) that is being delivered by NHS Connecting for Health. This could include:

- Access to relevant parts of the National Care Record Service. For example, access to data on medication to support prescribing (particularly when independent prescribing is rolled out).
- N3 (the new national broadband network service for the NHS).
- Choose & Book (to support Choice).

The NPFIT could include optometry, over time. However, planning and delivering NPFIT is an enormously complex task and work is required to specify the requirements for a common ophthalmics clinical system before a realistic timescale for its integration into the Programme is drawn up. The Department of Health intends to do some further work, involving stakeholders, systems suppliers and NHS Connecting for Health to develop a common specification for an ophthalmic information system that could interoperate with other elements of the NPFIT.

Until then, other ways must be found to facilitate the involvement of optometry in the delivery of community based eye care. Previous solutions have included:

- The use of bespoke *IT systems* for managing particular conditions eg glaucoma (case studies on Huntingdonshire and Northumberland will feature this: www.primarycarecontracting.nhs.uk/87.php). However, this adds to set up costs and the system may become redundant if it is not compatible with the NPfIT.
- The use of *low tech local solutions* – which might include paper based communication e.g. fax, or use of secure email. However, this may be inefficient (because of time taken to share information) and there may be information security issues.

A further potential solution is the use of commercial network aggregators to supply (at relatively low cost) N3 connections to local contractors. A number of network aggregators have been approved by NHS CfH to supply N3 connections to local pharmacy contractors as part of the Electronic Prescription Service implementation, though they will be able to offer their services more widely to other primary care based providers including optometrists. Subject to agreement, an N3 connection would allow optometrists to gain a secure NHS Mail email address, which would enable the secure transmission of clinical data to other NHS Mail users.

The issue regarding choice arises in particular with the direct referral for cataract pathway. Optometrists are not obliged to offer choice as there is an acceptance that non-GP referrals may not have access to Choose & Book. It is of course desirable to do so, particular as optometrists are well placed to discuss the issues with patients and hence enable them to make an informed choice. PCTs should inform optometrists of the choice menu and should publicise the fact that choice options by specialty for each PCT are also available on nhs.uk. Optometrists can then either refer patients to the GP or to a booking centre (where one exists) so that the booking can be made, or they can make the referral outside the Choose & Book system i.e. on paper.

Summary

- There are significant practical issues that need to be resolved where new community based eye care services are being developed. Overcoming these issues requires considerable commitment from commissioners and providers, including financial commitment. However, none of the issues raised create insurmountable barriers. Where there are strong reasons to commission the new service these will provide the incentives for finding local solutions.
- Local resolution of some of the practical issues raised will often be critical to the sustainability of a new care pathway. For example, a successful shared care scheme for glaucoma relies on a multi-disciplinary approach, with the local partners and patients all assured and confident about the quality assurance framework under which services will be delivered.
- In the longer term, issues relating to IT are likely to be best addressed by creating a functional IT specification for optometry that could, in time, allow interoperation with other elements of the National Programme for IT. But there is a range of interim local solutions, including use of commercial network aggregators to supply N3 connections to local contractors.
- The case studies (www.primarycarecontracting.nhs.uk/87.php) will provide some useful examples of how some of the practical problems mentioned in this section are being considered locally when they are published on 2 February 2007.

Appendix A

– Common eye conditions

Glaucoma

Glaucoma is the name of a group of eye diseases in which the optic nerve is damaged at the point it leaves the eye. Like a football, the eye needs to have a positive pressure or it would collapse, but too high a pressure damages optic nerve fibres, leading to progressive damage to the field of vision if left untreated. Although it is rare for glaucoma to cause complete blindness, it can cause someone to fail the visual standard for driving even though they may have little awareness that they have a problem. Glaucoma is more common in old age, affecting about two in every hundred people over the age of 40. This increases over the age of 70 to one person in ten.

The two main types of glaucoma are:

- open angle glaucoma (or chronic glaucoma), and
- acute angle closure glaucoma (or acute glaucoma).

Open angle is by far the most common type of glaucoma. It usually develops slowly and the loss of sight is gradual and painless. The nerve fibres that are used to see objects in the periphery of your sight are affected first causing a loss of outer (peripheral) vision, which can be hard to notice. Central vision is not usually affected until the later stages.

Acute angle closure glaucoma is less common. Fluid (aqueous humour) in the eye drains away at the angle between the root of the iris (the coloured part of the eye) and the back of the cornea (the clear window at the front); if the drainage angle becomes obstructed, the pressure increases rapidly to a very high level. The eye is usually red and painful and the vision becomes impaired. Emergency treatment is required to reduce the pressure in the eye, otherwise permanent damage to the vision is likely. Angle closure glaucoma usually occurs in people whose drainage angles are naturally crowded (for instance in people who are highly long-sighted) and most people's eyes are not capable of developing it.

Occasionally, glaucoma can develop from other eye conditions that cause an increase of pressure in the eye. This is called secondary glaucoma, and may happen as a result of eye injuries or inflammatory eye disease, for example.

Congenital glaucoma is identified in very young children. It is due to a structural abnormality of the eye that does not allow the aqueous humour to drain freely.

Although raised pressure in the eye is an important sign of glaucoma, the optic nerve can sometimes be damaged at levels of pressure that are only slightly above normal, or even within the normal range. This is referred to as normal tension glaucoma.

In open angle glaucoma the first-line treatment is eye drops to reduce the pressure inside the eye; if successful they are required for life. If drops fail to reduce the pressure inside the eye to an adequate level, and in other types of glaucoma, surgical or laser procedures may be indicated. Accurate measurement of intraocular pressures and visual fields, and optic nerve imaging over substantial periods of time are necessary to establish whether or not the condition is stable.

Cataracts

The symptoms associated with cataract are increasingly blurred and cloudy vision, and glare. Cataract occurs when the lens inside the eye, which is used to fine focus the image, becomes cloudy, or is disrupted by fluid clefts that form within it. They are a common problem in older people (but can occur at any age) and about 400,000 operations are undertaken annually in the UK. Cataracts may develop in one eye only or in both eyes at the same time.

The loss of vision due to cataract tends to be gradual and many people may not realise they have one. Patients often attend optometrists and ophthalmic medical practitioners expecting to be told that they need a change of glasses, only to be told that it is the cataract that is responsible for their symptoms. Surgery tends to be indicated when the vision loss is causing the patient problems in their everyday life, e.g. watching TV, doing daily chores, crossing the road or driving a car.

Surgery is usually performed as a day case, the lens in the eye being removed and replaced with a plastic intra-ocular lens implant.

Community optometrists and ophthalmic medical practitioners may be involved in the direct referral to eye clinics of patients with cataract, and may undertake some of the post-operative checks so that patients do not have to re-attend the hospital.

In general, cataract surgery is a highly successful procedure for restoring clarity of vision. However, many elderly patients with cataract also have other eye problems such as age-related maculopathy, in which case, cataract surgery may give a limited improvement in vision.

Age-related macular degeneration (AMD)

Age-related macular degeneration is a painless disorder that affects the macula, the central part of the retina, causing progressive loss of central and detailed vision. It can occasionally occur in younger people, but is much more common in older people and is very common in very elderly people. AMD can be restricted to one eye, in which case it may go largely unnoticed, or may affect both eyes simultaneously. It is the most common reason for people in the UK to be registered sight impaired (partially sighted) or severely sight impaired (blind).

It is rare for the condition to progress to total blindness, but those with the condition find it increasingly difficult to read and do tasks such as shopping and cooking, to recognise people and see the TV clearly, or to drive. Because the peripheral retina is unlikely to be affected, people with AMD are still able to move around fairly freely in their own home and in places they are familiar with.

Broadly speaking, there are two types of AMD, usually referred to as 'wet' and 'dry'. 'Wet' AMD is linked to the proliferation of, and subsequent leakage of fluid from, new blood vessels forming under the macula. This tends to be more rapidly progressive than the 'dry' form and in 'wet' maculopathies the vision can deteriorate in a matter of a few weeks. However, most AMD sufferers (about 85-90% of them) have the 'dry' form of the disease, in which the vision may slowly deteriorate or may remain quite stable for long periods.

It is important that those with the early stages of macular degeneration are properly assessed to see if they have the 'wet' or 'dry' form of the disease. The most important symptom of "wet" AMD is progressive distortion of central vision. Some types of 'wet' AMD are amenable to treatment and it is important that services are structured in such a way that possible cases are assessed quickly to see if treatment is possible, as there may be a limited time within which treatment is effective.

AMD is more prevalent in women and in smokers. Long-term exposure to sunlight and hereditary factors may contribute to the development of the condition in some people. Dietary supplementation of certain vitamins may confer some degree of protection in people who are at high risk of developing AMD.

Patients with bilateral AMD make up the majority of those being referred for low vision services (see next section).

Low vision

Low vision is described as “impairment of visual function where full remediation is not possible by conventional spectacles, contact lenses or medical intervention, and which causes restriction in that person’s everyday life”.

As noted in the section on AMD (above), the majority of those with low vision are older people. Three quarters of those registered sight impaired and severely sight impaired are aged over 70.

Most people with low vision retain some sight – 95% are able to see light through a window; 75% are able to read newspaper headlines. Their vision can be maximised to enable them to live as independently as possible if appropriate low vision services are in place. In England, there are approximately 306,500 people who are registered blind or partially sighted (ONS 2000). It is estimated that the number of people in England with vision poor enough to cause them problems with doing everyday tasks is about 1 million. There is a strong association between low vision and impaired quality of life, which may express itself as depression. There is also a correlation between falls and low vision.³⁶

The care of people with low vision should include accurate clinical assessment of the cause of low vision (to ensure that any treatable aspects of the visual problem are treated adequately), appropriate optical correction, the prescription of optical aids such as magnifiers or additional illumination where appropriate, social and psychological support as necessary.

Diabetic retinopathy

Diabetic retinopathy is a complication of diabetes that can lead to significant loss of sight and even blindness. High blood sugar levels damage blood vessel walls and can cause many complications of diabetes. In the eye, damage to capillaries either causes them to leak or to close off. Leakage of blood vessels in the retina near the centre of the vision can cause progressive impairment of vision (diabetic maculopathy) and extensive closure of capillaries can lead to the uncontrolled growth of new blood vessels (proliferative retinopathy), followed by major haemorrhage and retinal detachment if untreated. It is important that the signs of diabetic eye disease are recognised and assessed for their likely impact on vision and any treatment required is offered promptly. Tight control of blood sugar, blood pressure and avoidance of smoking are important measures in the prevention of diabetic retinopathy.

There is a locally-delivered, national diabetic retinopathy screening programme in which digital images are assessed by qualified screeners.

36 For a review see Table 4 of Evans B, Rowlands G, (2004) Correctable visual impairment in older people: a major unmet need; *Ophthal Physiol Opt* 24(2)161-180

When testing sight, community optometrists and ophthalmic medical practitioners may identify patients with signs of sight-threatening diabetic eye disease; their work in this regard is not part of the national screening programme, but is important because they assess the eye for signs of other disease in addition to diabetic retinopathy and because diabetic retinopathy can occasionally be the first presenting sign of diabetes.

External eye conditions

Blepharitis

Blepharitis is usually a chronic condition in which the eyelid margins are inflamed. It can give rise to discomfort because it disturbs the quality of the tear film. Treatment consists of cleaning the lid margins on a regular basis and the use of artificial tear substitutes. Occasionally it may be necessary to use short courses of antibiotics if there is evidence of infection.

Dry eye

The inability of the tear glands to produce enough tears, or tears of good enough quality, resulting in dry, gritty eyes that can affect vision, especially in direct sunlight. Patients with dry eye are often prescribed tear supplements.

Infective conjunctivitis

An infection of one or both eyes often characterised by the eye(s) looking red, being light sensitive, feeling gritty with a discharge which tends to be watery in viral infections, and sticky in bacterial infections. Antibiotic eye drops are appropriate in bacterial infections and occasionally in viral infections when the cornea is implicated.

Allergic conjunctivitis

Often seasonal in nature, with many cases linked to hay fever, the eye(s) are watery, sensitive to light and feel itchy. Anti-histamine and anti-inflammatory drops might be required.

Iritis

Iritis is an inflammation inside the eye (it is often unilateral), which gives rise to pain and a dislike of bright lights. The eye might look red and can be watery. Emergency referral to an ophthalmologist is indicated for treatment to reduce the pain and for possible treatment with steroid eye drops and drops to dilate the pupil. Although iritis often occurs in people who are otherwise fit and well, it can be associated with a variety of diseases and it is often necessary to investigate for possible underlying causes.

Keratitis

Keratitis means inflammation of the cornea (the front window of the eye). Symptoms include pain, redness, reduced vision and sensitivity to light. Some forms of keratitis present a threat to vision and most cases require urgent referral to an ophthalmologist. Causes include bacterial or viral infection, blepharitis, contact lens wear and allergic conjunctivitis.

Children's vision problems

Squint (strabismus)

Squint is the name given to a condition in which one eye views an object, but the other looks away to a different point. If the eye that is looking away is looking inwards this is termed a convergent squint, outwards a divergent squint, and up or down a vertical squint. Convergent and divergent squints can be combined with a vertical squint. Squints affect about 5% of children at the age of 5.

Amblyopia (lazy eye)

If a squint appears before the age of about 8, the brain tends to suppress input from the squinting eye to avoid the sensation of double vision. The part of the brain that serves the squinting eye may fail to develop fully and therefore the vision in this eye is poorer than the fellow eye, even when corrected with glasses. This reduction in vision is called amblyopia and it can vary from very mild impairment to severe impairment. Its prevalence has been estimated at 2.4-6.1% of children. Amblyopia can also result from one eye being significantly more short- or long-sighted than the other (anisometropic amblyopia), because the brain tends to use the image from the eye it can more easily focus.

Treatment of amblyopia involves forcing the brain to use the lazy eye – usually by patching the good eye for a length of time each day. The visual part of the brain continues to develop until the age of about 8, so amblyopia can usually be reversed up to this age. It is important that amblyopia is identified early because it is more easily and quickly reversed in younger children. Correction of any significant refractive error is also an important part of treatment. Treatment is usually supervised by an orthoptist, but an optometrist who has an interest in children's vision problems could also undertake the treatment.

In the case of both squint and amblyopia, it is important that children are screened for vision problems in early childhood and it is recommended that this is undertaken by an orthoptist, or similarly qualified person, in the child's first year at school. Any case of squint or reduced vision in a child needs to be fully investigated to exclude the possibility of physical disease of the eye.

Appendix B

– Eye care professionals

Ophthalmologists undergo five years of undergraduate medical training followed by a number of years of postgraduate training in general medicine and surgery and extensive period of ophthalmology. They examine, diagnose and treat diseases and injuries of the eye. They can prescribe a wide range of medicines, perform eye surgery and typically work in the Hospital Eye Service. At October 2005, there were 1623 career grade ophthalmologists and about 900 trainees in the UK.

Optometrists undertake three years of undergraduate training followed by a year of training in optometric practice and in the hospital eye service. They are trained to test sight, give advice on visual problems, and prescribe and dispense glasses, contact lenses and low vision aids. They usually work in community settings but may also work in the Hospital Eye Service. There are about 10000 qualified optometrists in the UK.

Specialist optometrist. The review of the regulation of non-medical healthcare professionals defined post-registration specialist qualifications at a level substantially beyond basic registration, and this helps to define the specialist optometrist. At present the only registerable specialisms for optometrists are in therapeutic prescribing – additional supply and supplementary prescribing – but it is anticipated that optometrists will be given independent prescribing rights within the next year or so, and this will be a further registerable specialism. Other registerable specialisms may follow in due course, possibly in the management of stable glaucoma.

Dispensing opticians train for a minimum of three years and are qualified to advise on and supply all types of spectacles and low vision aids. There are around 5000 dispensing opticians in the UK, around a third of whom hold a specialist qualification to fit contact lenses. In addition, some dispensing opticians have taken additional qualifications in the field of low vision.

The majority of optometrists and dispensing opticians work in local optical practices. As with GPs, dentists and pharmacists, these are non-NHS businesses³⁷ that contract with the NHS to provide services to NHS patients, as well as offering services to private patients.

37 Optical businesses incorporated as limited companies have to be registered (as “bodies corporate”) with the General Optical Council in order to provide NHS services. A requirement of registration is that the majority of the companies’ directors have to be registered optometrists or dispensing opticians. Companies registered with the General Optical Council are bound by the General Optical Council’s Code of Conduct for Business Registrants. This parallels the General Optical Council’s similar code for individual practitioners.

They range from independent practitioners, through to family-owned businesses and regional companies, to large national and international companies. Some will be privately-owned businesses, others will be publicly-owned and quoted companies.

Orthoptists diagnose and treat defects of vision and abnormalities of eye movement. They are usually part of a hospital care team looking after people with eye problems especially those related to binocular vision, amblyopia (lazy eye) and strabismus (squint). Many orthoptists play a role in the assessment and management of patients with glaucoma, cataract and low vision. They also provide a diagnostic and therapeutic role in patients with stroke, multiple sclerosis and space occupying lesions. There are about 900 registered orthoptists in the UK.

Ophthalmic medical practitioners (OMPs) are medically qualified and have undertaken at least two years of postgraduate training in ophthalmology. OMPs are able to issue NHS prescriptions for spectacles in the same way as optometrists. Some OMPs work full time in community practice, though many also work in the hospital eye service or in general practice. There are around 250 whole-time equivalent OMPs in the UK.

Ophthalmic nurses have undertaken general nursing training with varying amounts of specialist training in hospital eye departments and other settings. Many have developed extended professional roles in areas such as pre-operative and post-operative and assessment of patients undergoing ophthalmic surgery, ophthalmic measurement and imaging, minor surgery and the management of patients presenting to ophthalmic emergency departments. Ophthalmic nurses manage the care of patients with conditions such as glaucoma, cataract and low vision, AMD and ocular plastic problems in nurse led and shared care outpatient clinics.

General practitioners with a specialist interest in ophthalmology. There is not yet a nationally recognised training scheme for GPs who wish to develop an interest in ophthalmology, though a number of GPs have managed to combine general practice with a career in ophthalmology, either by working part time within the hospital eye service, or by undertaking OMP work, or by providing primary ophthalmic services from within general practice. There are very few GPs with a special interest in ophthalmology.



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