

## Visual Impairment: Summary

### How many people are affected and how many receive services?

- RNIB (Royal National Institute for the Blind) estimates suggest there are likely to be 195 children and young people in Greenwich who were supported by schools for their visual impairment; Royal Greenwich is aware of 88 children or young people in its schools who need additional support at school due to, at least in part, sight problems. This means that only 44% of those predicted are identified but this may be because other reasons for the child requiring additional support are recorded as the primary need.
- The National Eye Health Epidemiological Model estimates that in Greenwich there are between 8,746 to 13,139 people with significantly impaired sight resulting from the 4 main causes of impaired vision (Age-related Macular Degeneration (AMD), glaucoma, cataract and low vision related to ageing). This is a maximum estimate as it assumes that people only have one condition.
- The Projecting Older People Information System (POPPI) and Projecting Adult Needs and Service Information (PANSI) estimate that in Greenwich there are 100 adults aged 18-64 with a serious visual impairment, 756 aged 65-74 with moderate or severe impairment and 1,575 aged over 75 with a moderate or severe impairment. A total estimate of 1431 adults. The difference in estimates is likely to be due to the latter being related to moderate and severe sight loss likely to give rise to need for services.
- In 2013 423 adults in Greenwich were registered as blind and 484 as partially sighted, suggesting that 63% of the predicted numbers (907/1431) are identified.
- There has been a steady increase in the number of items prescribed in Greenwich for the treatment of Glaucoma between 2008/09 and 2011/12, rising 13% over this period, and there has been a 9% increase in the number of cataract operations on Greenwich patients performed between 2010 and 2012.

### Risk factors for visual impairment

- Strong risk factors for age-related macular degeneration (AMD) are increasing age, current cigarette smoking, previous cataract surgery, and

family history. Moderate risk factors for AMD are higher body mass index, history of cardiovascular disease, hypertension, and higher plasma fibrinogen

- Factors known to raise the risk of glaucoma are raised intra-ocular pressure, concurrent AMD, pseudo-exfoliation syndrome (PEX)<sup>1</sup> and a higher cup-disc ratio (structural change to the eye due to high intra-ocular pressure). Age and a family history of Glaucoma are also known to be important. There is no evidence at present of behavioural risk factors for glaucoma.
- Diabetic retinopathy occurs as a complication of diabetes mellitus, and therefore the known risk factors for diabetes are relevant.
- Increased risk of cataract is associated with oral steroid use, smoking and diabetes. Alcohol and ultraviolet exposure (e.g. sunlight) also appear to be linked.

## What works?

- Prevention
  - AMD rates could be reduced by intervening on the modifiable risk factors: smoking cessation, weight reduction and physical activity, as well as ensuring high blood pressure is detected and controlled.
  - Among diabetics better control of the condition, reducing blood pressure and hyperglycaemia will help to reduce damage to the eye, as well as other symptoms of the disease. Earlier diagnosis of diabetic retinopathy, achieved through retinopathy screening, is known to benefit outcomes
  - Regular use of multi-vitamins, with particular relation to riboflavin, vitamins C, E, and carotene as well as niacin, thiamine, and iron have been found to reduce the chance of cataract,
- Detection
  - In all types of eye disease, earlier diagnosis is beneficial. Regular eye tests provide an opportunity for problems to be picked up
- Management/re-ablement
  - Continuing care for people with visual impairment should be aimed at addressing the challenges of impaired vision and supporting

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<sup>1</sup> PEX – pseudo-exfoliation syndrome is an aging-related [systemic disease](#) manifesting itself primarily in the eyes and is characterized by the accumulation of microscopic granular amyloid-like protein fibres. The build-up of protein clumps can block normal drainage of the eye fluid called the [aqueous humour](#) and can cause an increase in pressure leading to [glaucoma](#) and loss of vision.

individuals to live as full and independent a life as possible. Several rehabilitative techniques have been developed to maximise use of any remaining visual field and other resources aid mobility such as using a cane, a guide dog

- Addressing the social determinants of handicap experienced by people with disability including visual impairment will ensure full participation and avoid isolation and depression
  - improving the citizenship rights of disabled people
  - employment
  - improvements to access of the built environment
  - better more accessible transport
  - adaptations to housing
  - direct payments

### **Planned Improvements**

A Greenwich Vision Strategy is under development locally, with a wide-range of stakeholders from the third sector, the NHS and Royal Borough of Greenwich as well as blind and partially sighted residents.

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### What do we know about it?

#### Introduction

Visual Impairment refers to a condition where there is a partial or total loss of sight in one or both eyes. Sight loss can impact significantly on a person's quality of life, with links to heightened risk of depression and falls (Access Economics, 2009).

#### *Adults*

The primary causes of visual impairment in the UK among adults are age-related macular degeneration (AMD), glaucoma, diabetic retinopathy and cataract.

**Age-related macular degeneration** is an eye disease which damages the macula, the part of the retina which supports central vision and perception of detail. AMD thus causes sight to be lost in the centre of the visual field. During 'early AMD' yellow deposits ('drusen') form under the macula. In the more advanced 'late AMD', the phase during which sight begins to deteriorate, the disease takes two forms, Wet and Dry AMD. Dry AMD is slow in progressing but untreatable. Wet AMD causes sight loss at a much faster rate but is amenable to various interventions. Rates of AMD increase significantly with age, and among older age groups are much higher among non-black populations.

**Glaucoma** refers to a group of diseases which develop when eye fluid (aqueous humour) is unable to drain properly from the eye, causing an increase in pressure. This damages the optic nerve resulting in progressive vision loss, starting from the edges of the visual field (peripheral sight loss) and moving inwards. Glaucoma can develop in each eye separately but will most often affect both eyes. The most common form is 'Chronic open-angle glaucoma' which progresses slowly, meaning that people often do not notice that they are losing sight. 'Primary angle-closure glaucoma' can occur when the drainage from the eye is more severely blocked and is a medical emergency requiring immediate laser surgery to protect sight.

**Diabetic retinopathy** is a problem which can develop among people with diabetes mellitus. High blood sugar levels can damage the veins supplying blood to the retina, causing them to leak or become blocked. This starves the retina of the blood it requires. Though initially asymptomatic, retinopathy can eventually lead to blindness and other visual disruptions.

**Cataract** develops when a patch of the eye's lens becomes cloudy as proteins clump together. The patch may grow over time, impacting on quality of vision as light is unable to pass through the lens as easily. The most common form of cataract is age-related, although other processes such as inflammation and injury may also lead to cataract formation.

### *Children and young people*

There is a paucity of data on the scale and causes of visual impairment among children and young people. A study published in 1998, and drawing on even older data, indicates that the main causes of visual impairment among children and young people are congenital cataract, cortical visual impairment, and optic atrophy, alongside disorders of the retina and congenital ocular anomalies (Rahi, 1998). Risk factors suggested include genetic disorders, prenatal infection, prenatal exposure to teratogens (drugs, alcohol) and hypoxia. Research by RNIB suggests that there may be around 25,074 under-18s in England being supported in schools by visual impairment services, a prevalence of 0.3% (RNIB, 2012).

### **National Strategies**

In 2003 the World Health Organisation launched *Vision 2020*, a global initiative for the elimination of avoidable blindness, to provide strategic concept for service development. In the UK, stakeholders developed a UK Vision Strategy inspired by the WHO's initiative. The aims of the UK Vision Strategy are to:

- Improve the eye health of the people of the UK
- Eliminate avoidable sight loss and deliver excellent support to those with a visual impairment
- Enhance the inclusion, participation and independence of blind and partially sighted people (Vision 2020, 2013a)

'Seeing it my way' is a UK wide initiative endorsed by the UK Vision Strategy Advisory Group which sets out a range of outcomes that blind and partially sighted people have reported as most important to them. The purpose of 'Seeing it my way' is to influence how services are delivered to ensure that blind and partially sighted people benefit from these outcomes (Vision 2020, 2013b).

A Greenwich Vision Strategy is under development locally, with a wide-range of stakeholders from the third sector, the NHS and Royal Borough of Greenwich as well as blind and partially sighted residents.

## **Facts and figures**

When trying to establish the number of blind and visually impaired people in Greenwich, estimated figures based on prevalence rates and local data may both be drawn on. Estimates suggest numbers are significantly higher than any local records indicate.

### **Children and Young People**

#### *Estimated number*

Based on the RNIB work a prevalence of 0.3% among under-18s would suggest 195 children and young people in the borough would be supported by schools for their visual impairment (RNIB, 2012).

#### *Local data*

As at 28/02/2013 there were 17 under-18s registered as blind and 21 registered as partially sighted, based on the lists generated by applications for Certificates of Visual Impairment (CVI) (RBG FWI, 2013).

The January 2012 School Census shows that there are 81 pupils aged 5-17 in Greenwich maintained schools with a Special Education Need (either Primary or Secondary need) of Visual Impairment. An additional 7 pupils have a need of Multi-sensory Impairment, which would include Visual Impairment. These figures only cover those with a statement or at School Action Plus (a range of interventions for children whose progress has been limited) (data provided by RBG Performance Analysis Service).

Royal Greenwich is thus aware of 88 children or young people in its schools who need additional support at school due to, at least in part, sight problems.

When comparing Greenwich with other areas it is only possible to look at a pupil's primary need, as data on secondary needs are not published nationally. In secondary schools, the proportion of all children with special needs in Greenwich whose primary need was visual impairment is around double that in London, England, and SE London. The rate of children with a SEN of visual impairment is also higher in Greenwich secondary schools than in IMD comparator areas, with around 2.6 per 1,000 pupils statemented or at School Action Plus compared to around 1.1 per 1,000 in comparator areas. There is not such a pronounced difference in primary schools, where the proportion is similar to these comparators.

## Adults

### *Estimated number*

The National Eye Health Epidemiological Model has produced estimated rates for AMD, Glaucoma and Cataract, as well as for 'Low Vision' which was defined as a best corrected visual acuity of less than 6/18. This suggests that in Greenwich there are between 8,746 to 13,139 people with significantly impaired sight resulting from the 4 main causes of impaired vision (AMD, glaucoma, cataract and low vision related to ageing).

**Table 1. Estimated numbers of Greenwich residents with eye health conditions**

<b>Condition</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>AMD (aged 50+)</b>	1,564	1,588	1,613
<b>Glaucoma (aged 30+)</b>	2,492	2,479	2,700
<b>Cataract - High estimate (aged 40+)</b>	6,067	6,137	6,311
<b>Cataract - low estimate (aged 40+)</b>	1,674	1,696	1,729
<b>Low Vision (aged 50+)</b>	3,016	3,071	3,133
<b>High estimate total</b>	13,139	13,275	13,757
<b>Low estimate total</b>	8,746	8,834	9,175

Source: National Eye Health Epidemiological Model, GLA population projections 2011

The Projecting Older People Information System (POPPI, 2012) and Projecting Adult Needs and Service Information (PANSI, 2012) data portals, run by Oxford Brookes University and the Institute of Public Care, also produce estimates of visual impairment. For Greenwich this indicates there are 100 adults aged 18-64 with a serious visual impairment, 756 aged 65-74 with a moderate or severe visual impairment and 1,575 aged over 75 with a moderate or severe visual impairment (a total of 2,431). The difference in estimate from that produced by the National Eye Health Epidemiological Model is likely to be due to the PANSI/POPPI estimates being related to moderate and severe sight loss likely to give rise to need for services

#### *Local data*

As at 28/02/2013, 423 adults in Greenwich were registered as blind and 484 as partially sighted (RBG FWI, 2013) (a total of 907; which represents 63% of the PANSI/POPPI estimate).

### **Trends**

The tables below outline the trends in Visual Impairment in Greenwich estimated by the PANSI and POPPI data. These show a very small predicted rise in adults aged 18-64 years from 100 to 114 people with serious visual impairment between 2012 and 2030 and a 22% rise from 3144 to 4079 in adults over 65 years.

**Table 2. Greenwich persons aged 18-64 predicted to have a serious visual impairment, by age, projected to 2030**

<b>Age range</b>	<b>2012</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>18-24</b>	15	15	14	15	17
<b>25-34</b>	28	29	30	29	29
<b>35-44</b>	24	24	25	27	28
<b>45-54</b>	20	21	21	21	22
<b>55-64</b>	13	14	16	18	18
<b>Total 18-64</b>	100	103	107	110	114

Source: PANSI 2012

**Table 3. Greenwich persons aged 65 and over predicted to have a moderate or severe visual impairment by age group, and people aged 75 and over predicted to have registerable eye conditions, projected to 2030**

Age group	2012	2015	2020	2025	2030
<b>Aged 65-74 predicted to have a moderate or severe visual impairment</b>	756	784	823	890	1,053
<b>Aged 75 and over predicted to have a moderate or severe visual impairment</b>	1,575	1,612	1,649	1,848	1,996
<b>Aged 75 and over predicted to have registrable eye conditions</b>	813	832	851	954	1,030
<b>Total aged 65+</b>	3144	3228	3323	3692	4079

Source: POPPI 2012

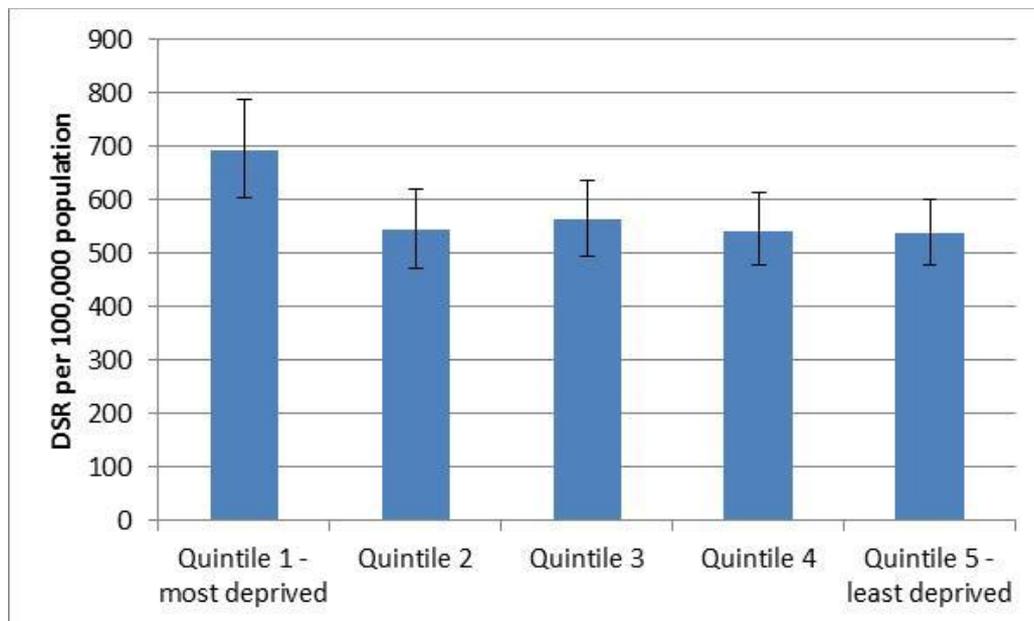
### *Treatment of Conditions*

There has been a steady increase in the number of items prescribed in Greenwich for the treatment of Glaucoma between 2008/09 and 2011/12, rising 13% over this period (SUS, 2013). There has also been a 9% increase in the number of cataract operations performed between 2010 and 2012 (SUS, 2013).

### **Health inequalities**

There are limited data available to directly investigate the impact of deprivation on either the prevalence or treatment of visual impairment in Greenwich. The chart below shows the rate of cataract operations by local quintile of deprivation (adjusted for age structure). The increased rate in the most deprived quintile may result from a greater experience of risk factors in this group (see details in Cataract prevention below). It is reassuring however that the cataract removal operation is being delivered to this group.

**Figure 1. Cataract operations by local quintile of deprivation, Greenwich, 2011/12**



Source: SUS

## What works?

### Prevention

#### AMD

Age-related macular degeneration (AMD) is a progressive eye disease which damages the macula, the part of the retina which supports central vision and perception of detail. "Increasing age, current cigarette smoking, previous cataract surgery, and a family history of AMD showed strong and consistent associations with late AMD. Risk factors with moderate and consistent associations were higher body mass index, history of cardiovascular disease, hypertension, and higher plasma fibrinogen" (Chakravarthy et al, 2010).

This would suggest that AMD rates could be reduced by intervening on the modifiable risk factors: effectively promoting smoking cessation, weight reduction and physical activity as well as ensuring high blood pressure is detected and controlled.

The sooner that AMD is identified, the sooner treatment can begin, where possible, to arrest any sight loss in Wet AMD, and monitor for the onset of Wet AMD in cases of Dry AMD. Programmes and policies to increase detection of AMD are therefore likely to help reduce total rates and severity of sight loss.

## **Glaucoma**

In glaucoma pressure rises within the eye (ocular hypertension) prior to damage being done to the optic nerve. If this hypertension is identified before damage is caused, various topical medications can be used to control the pressure and reduce the chance of losing vision. Since ocular hypertension is normally asymptomatic until sight loss sets in, this is only practicable if ocular hypertension is checked for opportunistically, e.g. by opticians during regular sight tests. Details of these treatments are available in the Treatment section below.

Factors known to raise the risk of glaucoma are intra-ocular pressure, concurrent AMD or pseudoexfoliation and a higher cup-disc ratio (structural change to the eye due to high intra-ocular pressure) (Le, 2003). The Baltimore Eye Study also identified race and systemic blood pressure as risk factors for Glaucoma (Sommer A, 1996). Age and a family history of Glaucoma are also known to be important. There is no evidence at present of behavioural risk factors for glaucoma.

## **Diabetic Retinopathy**

Diabetic retinopathy occurs as a complication of diabetes mellitus, and therefore the known risk factors for diabetes are relevant by extension. Among diabetics better control of the condition, reducing blood pressure and hyperglycaemia will help to reduce damage to the eye, as well as other symptoms of the disease. Earlier diagnosis of the retinopathy, achieved through implementation of the Diabetic Retinopathy Screening Programme, will benefit outcomes (WHO, 2012). Regular diabetes check-ups will also be important in maintaining best control and thus reducing chances of retinopathy developing. See Treatment section below.

## **Cataract**

Various factors appear to influence the likelihood of developing cataract. Among the modifiable factors, regular use of multi-vitamins, mainly riboflavin, vitamins C, E, and carotene as well as niacin, thiamine, and iron have been found to reduce the chance of cataract, while oral steroid use, smoking and presence of diabetes increase risk of cataract (Leske et al, 1991). Use of alcohol

and ultraviolet exposure (e.g. sunlight) also appear to be linked to cataract (Seddon et al, 1995).

Services and interventions impacting on these risk factors can be expected to reduce rates of vision loss due to cataract. Promotion of sun safety, despite the focus on skin exposure, may also have a positive impact on cataract by encouraging reduced time in the sun.

### **Universal issues**

In all types of eye disease, earlier diagnosis is beneficial with regular eye tests providing an opportunity for problems to be picked up earlier rather than later. It is important for eye tests to be made available to people who may need reasonable adjustments to be put in place to enable them to access services.

## **Treatment**

### **AMD**

The slow progressing Dry AMD is not treatable. For people with Wet AMD however, which leads to much faster sight loss, various options are available which may help to arrest deterioration. Photodynamic therapy, where abnormal veins are destroyed using a combination of a drug and laser treatment may be appropriate in 20% of cases of Wet AMD (NHS Choices, 2012a). Treatment with vascular endothelial growth factor (VEGF), using the NICE approved drug Ranibizumab, induces new blood vessel formation to help stop the abnormal blood vessels found in Wet AMD from forming. Administration requires an injection into the eye, and was found to slow progression of sight loss in around 90% of eligible patients (NICE, 2008).

Research is in progress into other possibilities for treating AMD, including the role of vitamins and minerals, implantation of artificial lenses and macular translocation (a complex surgery with significant risks) (NHS Choices, 2012a).

## **Glaucoma**

All treatments for glaucoma centre on reducing, and maintaining a reduction in, pressure within the eye. In Chronic Open-Angle Glaucoma various drugs, delivered through eye drops, may control eye pressure. Prostaglandin analogues help to increase the rate at which fluid flows out of the eye. Betablockers are believed to slow the production of the aqueous humour. Sympathomimetics are thought to work through both these mechanisms. There are side effects associated with all three groups of medication.

Two forms of laser treatment are available. Laser trabeculoplasty increases the amount of humour which can flow through the drainage tubes from the eye by clearing blockages. In cyclodiode laser treatment, some of the parts of the eye which produce aqueous humour are destroyed by a laser.

Surgery can also be employed. Trabeculectomy removes some of the eye's network of drainage tubes to increase the flow out. Rarer procedures are viscocanalostomy, deep sclerectomy operations and implantation of an aqueous shunt. All these procedures focus on improving drainage from the eye.

Acute angle-closure glaucoma, the much more urgent form of glaucoma, requires immediate intervention. The eye drop medications outlined above may be used, as may be drugs injected directly into the bloodstream, or an alternative laser treatment called laser iridotomy where holes are made in the iris to allow fluid to flow out. Trabeculectomy is also used for acute angle-closure glaucoma.

## **Diabetic Retinopathy**

In its initial stages, Diabetic Retinopathy can be combated by controlling the underlying diabetes as well as possible. The damage to the retina is caused by high blood glucose levels, so blood sugar levels should be controlled as effectively as possible as part of overall management of diabetes. The eyes should be regularly examined to monitor changes in the condition.

As Diabetic Retinopathy progresses, further more active treatment options may be considered. If there is a significant amount of bleeding from vessels in the eye, laser treatment (photocoagulation) may be recommended, where a

laser is used to seal damaged blood vessels. VEGF injections, normally used for AMD (see above), are starting to be employed for Diabetic Retinopathy. When a large amount of blood collects in the eye, or there is a great deal of scar tissue formation, a surgery called vitrectomy may be used. In this procedure some of the jelly-like substance behind the lens (vitreous humour) is removed and replaced with a temporary artificial replacement. The body will regenerate new humour as the artificial substitute is absorbed away. (NHS Choices, 2012b)

## **Cataract**

In earlier stages of cataract, vision may be corrected with stronger glasses and brighter lights for reading. When this is no longer sufficient, a simple operation known as 'intraocular implant' is available. The clouded lens is removed surgically from the eye and an artificial plastic one put in its place. The lens is usually set to focus at distance, meaning reading glasses will be required. Adjustable lenses are available privately, but are not routinely offered as an NHS treatment.

## **Care**

Beyond the specific treatment options for the various major causes of sight loss, continuing care for people with visual impairment should be aimed at addressing the challenges of impaired vision and supporting individuals to live as full and independent a life as possible.

A Low Vision Service has been defined as “a rehabilitative [relearning tasks] or habilitative [learning new skills] process, which provides a range of services for people with low vision to enable them to make use of their eyesight to achieve maximum potential”. These services might provide instruction in specialist techniques such as 'eccentric viewing' (looking off centre in order to use the best part of the visual field and 'steady eye' (keeping the head still and moving the reading material into the best visual field rather than scanning with the eyes) methods which can improve reading ability in people with AMD, or help with using a cane. A systematic review of the efficacy of such services was undertaken by the Low Vision Service Model Evaluation (LOVSME) project on behalf of the RNIB. This found good evidence that these services can increase clinical functional reading ability and that the low vision aids which are supplied are valued by the users. Some evidence was found that the services

improved overall functional ability, and there was mixed evidence regarding their ability to improve quality of life (RNIB, 2009).

Perhaps the most well-known aid used by people with visual impairment is the guide dog. Guide dogs have been trained and supplied in the UK by Guide Dogs, a charity for over 70 years. Since 2002 Seeing Dogs Alliance has also been providing guide dogs in the UK on a small scale, with less than twenty dog-human partnerships so far established.

Various kinds of equipment may be used to help people with visual impairment tackle day to day tasks independently. These include magnifiers, equipment that can alert users when cooking pots boil or containers are full and specialised tele-communications technology.

### **Changes to the environment and policies (applying the social model of disability)**

The social model of disability identifies that much of the handicap experienced by people with a disability is as a result of social changes in the environment and in policy not having been made in order to minimise the impact of the disability. The social model requires:

- improving the citizenship rights of disabled people
- employment
- improvements to access of the built environment
- better more accessible transport
- adaptations to housing
- direct payments

Addressing these structural and policy issues will ensure that people who are blind or visually impaired can participate fully in society and reduce the likelihood of isolation and depression.

## **Improving the citizenship rights of people with visual impairment and employment**

The Equality Act 2010 is designed to protect people with disabilities from unfair treatment and to create a more equal society. The Act brings together a range of anti-discrimination laws that have been passed over the last 40 years to make it easier to understand the rights of people with disability so that they can more easily challenge discrimination (RNIB).

Under the Act there is a duty on services and employers to make reasonable adjustments in 3 areas:

- Provisions, criteria or practices - including company policies.
- Physical features, such as the layout of and access to shops
- Provision of auxiliary aids - including providing information in an accessible format such as braille, large print or email. For example, when a bank sends statements to its customers, it is providing information. Reasonable adjustments for blind or partially customers could include providing statements in accessible formats such as large print or braille

## **Improvements to access of the built environment and better access to transport**

There are a number of adjustments to the public realm that councils can make including ensuring that safe crossing places are marked with tactile paving; that street furniture is reduced to a minimum; use of tactile maps; addition of tactile road crossing alerts; use of contrast for hazards and good lighting. Bus companies can follow the “stop for me; talk to me” code of practice proposed by the RNIB whereby bus drivers stop for people with a cane and let them know what bus number they are.

## **Adaptations to housing**

New houses should be built with disability in mind – ensuring good lighting; wide doorways; use of hand rails on stairs etc. Existing housing can be adapted after assessment by social services (see below under services section).

## **Direct payment**

Direct payment for services is available within Greenwich but take-up is currently quite low (see services section below).

### **Local assets**

There are several third sector organisations active in Greenwich providing assistance to people with visual impairment. Blind Independence Greenwich, the Royal London Society for the Blind and Action for Blind people all have offices within the borough. Other national bodies such as Royal National Institute for the Blind and the Thomas Pocklington Trust play a role in supporting local blind people, as well as contributing to the development of the Greenwich Vision Strategy.

## **What do we know about local services?**

### **Health care**

#### **AMD**

A number of health services are of relevance to prevention of AMD. The details of Greenwich's extensive stop smoking, physical activity and diet improvement provision are available [here](#).

High blood pressure (hypertension) is controlled with anti-hypertensive drugs and GP Practices are monitored on their performance through the Quality and Outcomes Framework. The chart below (in the Performance section) shows that the proportion of patients known to have hypertension who are receiving this treatment has been steadily increasing.

Greenwich patients with AMD will be offered Ranibizumab treatment as appropriate, in line with NICE guidelines. In the period from March 2012 – April 2013, 7 Greenwich registered patients were treated for AMD using Ranibizumab at South London Healthcare NHS Trust.

### **Diabetic Retinopathy**

Details on Greenwich's provision for diabetic people is available [here](#).

The National Screening Programme for Diabetic Retinopathy aims to provide a yearly check for all diabetics over the age of 12, to identify retinopathy as soon as possible. Greenwich commissions this service jointly with Bromley and Bexley, and the checks are offered at 4 sites in Greenwich, including the Queen Elizabeth Hospital in Woolwich. Uptake of this service has recently increased, as detailed in the Outcomes and Performance section below.

### **Glaucoma**

Control of high blood pressure (a risk factor for glaucoma) via primary care in Greenwich is improving.. Greenwich also operates a Glaucoma Referral Service pathway where accredited optometrists are used to assess possible cases of glaucoma and avoid unnecessary referrals to secondary care.

Spend on prescriptions for Glaucoma has increased slightly between 2008/09 and 2011/12, as detailed in the Outcomes and Performance section below.

### **Cataract**

Cataract Assessment is offered to Greenwich residents. Individuals will be referred if they have symptoms of cataract and are willing to consider surgery. If surgery is not preferred for any reason, sight will be corrected as well as possible using spectacles. Patients are self-presenting as there is no cataract screening programme in place. In 2011/12 1,341 cataract operations were performed for Greenwich residents, with 60% of them on women (SUS, 2012). These numbers are more in line with the low estimates for visual impairment given above but since the risk factors for cataract are high in Greenwich there may be considerable unmet need for cataract surgery.

## General

When children first start attending primary school, they are offered the School Entry Health Check by the School Nursing Service. This includes a vision assessment, and on the basis of this parents may be advised to make an appointment with an ophthalmologist to further investigate any problems.

### *Costs (programme budget)*

The total spend in Greenwich on 'Problems of the Eye' was £7.86m in 2010/11. 61% of this was in Secondary care (£4.79m) of which £1.29m was inpatient elective/day cases and £1.97m outpatient. 27% was in Primary care (£2.14m), 5% community care (£0.41m) and 3% was on urgent/emergency care (£0.26m).

### *Outcomes and performance*

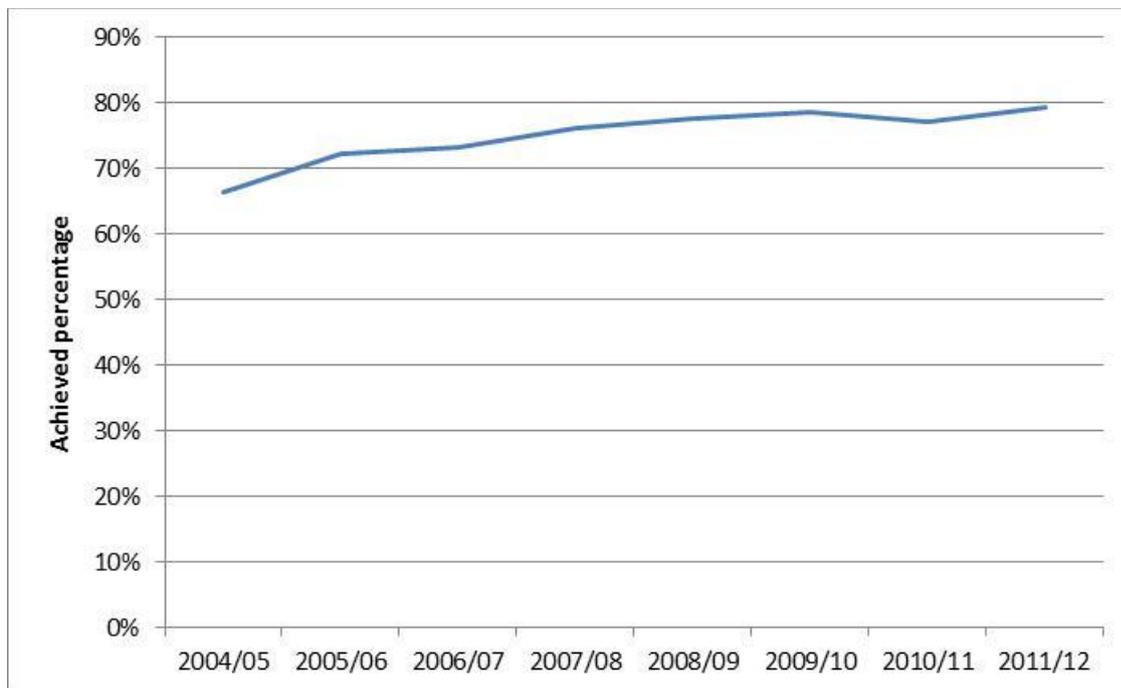
#### Primary care

General Practice performance is monitored through the Quality and Outcomes Framework. The chart below shows that the proportion of patients known to have hypertension who are receiving treatment with anti-hypertensive drugs from their GP to control the condition has been steadily increasing.

#### Opticians

Opticians play a vital role in maintaining the health of their patients and in early diagnosis. Information specific to Greenwich will be added to the JSNA when available from NHS England.

**Figure 2. Percentage of patients with high blood pressure having blood pressure controlled in Greenwich**



Source: QMAS and NHS Information Centre

### Community services

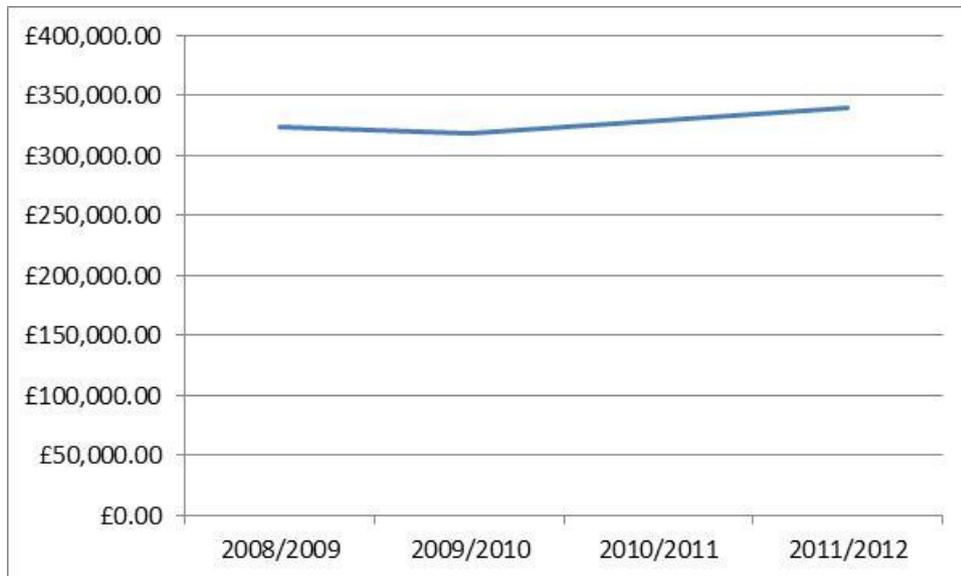
As stated above, the School Nursing Service provides a vision assessment for all children starting primary school via the School Entry Health Check. On the basis of this assessment parents may be advised to make an appointment with an ophthalmologist to further investigate any problems.

### Secondary care

In 2011 100% of eligible patients were offered diabetic retinopathy screening, and of those 81% took it up. This was an increase from 78% take up in 2009, although there is scope for further improvement, with Bromley and Bexley performing better, achieving 89% and 87% respectively.

## Prescribing

**Figure 3. Total spend on prescriptions for treatment of Glaucoma in Primary care, Greenwich 2008/09 – 2011/12**



Source: PCT ePACT, 2012

### Royal Borough of Greenwich

People may access adult social care services through a number of routes. Young people approaching the age of 18 will be assessed and supported by the Transitions Team. Some people may be referred to social services following a stay in hospital. Typically they will be referred to an Occupational Therapist and/or a Community, Assessment and Rehabilitation (CAR) team. These interventions will usually be one-off or short-term interventions aimed at supporting people back to independence. Should someone require longer-term or specialist support then they will be referred on to a Specialist Social Work Team (SSWT). People that approach the Council directly to request a service will first be assessed by an Information and Contact Officer (ICO). The ICO will determine whether or not people are likely to qualify for a service and refer them on to either the CAR or SSWT as appropriate.

Social Care services are provided according to the needs of the individual. A package of care will be developed based on an assessment of the person's needs that may include accommodation, personal care, the provision of equipment, day-time activity and respite. There are no block-purchased services for visually impaired people. Clients may rely on social work teams to arrange a care package for them, but all clients have the opportunity to request

a personal budget such that they can arrange their own package of care. People who choose to take up a personal budget can take complete control of organising their care or they can request support to do this.

Adults with sensory impairments (i.e. hearing loss and sight loss) are sub-sets of the Adults with a Disability client group. Data for the numbers of people that accessed social care services in 2011/12 demonstrates that for adults aged 18 – 64, only 20 received services specifically as a result of their visual impairment. This is reflected for older people too; only 41 of adults aged 65+ that received a service in 2011/12 received support specifically because of a visual impairment. However, this does not mean that other people in receipt of services do not have significant visual impairments. Many people with a sensory impairment will have other needs that are considered the primary reason for accessing services, e.g. another physical disability, a mental health problem or a learning disability.

### **Planned improvements**

Early identification of AMD and Glaucoma can help prevent or reduce sight loss. Regular self-presented sight tests provide an excellent opportunity to spot these conditions in their early stages. Greater promotion of the importance of these tests could help to reduce unnecessary loss of vision. Targeting of higher risk populations, such as BME for Glaucoma, or smokers for AMD may also be advisable. A Greenwich Vision Strategy is under development locally, with a wide-range of stakeholders from the third sector, the NHS and Royal Borough of Greenwich as well as blind and partially sighted residents.

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