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## 9 Sensory impairment

### 9.1 Introduction

#### 9.1.1 Sight loss

It is estimated that over 2m people in the UK are living with sight loss. This includes one in five people aged 75 and over, and half of all adults over 90 years old. In 2013/14, there were around 360,000 people registered as blind or partially sighted in the UK. [1] As the population ages, it is predicted that by 2020 the number of people with sight loss will rise to over 2.25m and double to nearly 4m by 2050. [1]

Sight loss can dramatically increase the risk of ill health from falls, depression and the complication of comorbidities such as dementia. [2] However, around half of all sight loss is preventable. [3]

The annual economic impact of sight loss in adults in the UK is estimated to be £28bn: £3bn in direct healthcare costs and £25bn in indirect costs (such as unpaid carer costs and reduced employment rates). [4]

#### 9.1.2 Hearing loss

There are three main types of hearing loss: sensorineural, conductive and central hearing loss (see Box 1). 'Mixed' hearing loss is a combination of sensorineural and conductive hearing loss. People with hearing loss can experience inequalities in educational attainment, employment and injury rates compared to those without hearing loss. [5] Over 10m adults in the UK are living with hearing loss. This includes two in five people aged 50 and over, and nearly three in four people aged 70 and over. It is predicted that, by 2031, the number of people living with hearing loss will increase by 45%. [5] According to the Global Burden of Disease Study, hearing loss is among the top 10 causes of disability in the UK. [5]

Hearing loss also results in considerable personal, societal and economic cost. The annual cost to the NHS alone is estimated to be £450m, while the UK economy loses £25bn per year due to the impact on productivity and unemployment. [5]

**Box 1: Definitions used in this section**

Refractive error – a very common eye disorder. The four most common refractive errors are myopia (short-sightedness), hyperopia (far-sightedness), astigmatism, and presbyopia.

Glaucoma – a group of eye conditions where the optic nerve is damaged by the pressure of the fluid inside the eye. It can be caused by raised eye pressure or a weakness in the optic nerve.

Orthoptists – healthcare practitioners who investigate, diagnose and manage eye symptoms related to eye misalignment and focusing problems. They usually work in hospital ophthalmology departments.

Optometrists or opticians – practitioners qualified to examine vision, prescribe glasses, detect eye conditions and refer to other health professionals (such as an ophthalmologist). They usually work in high street practices or shops, as well as hospital ophthalmology departments.

Ophthalmologists – specialist eye doctors who diagnose, treat and monitor eye conditions with medication and surgery. They usually work in hospital ophthalmology departments.

Sensorineural hearing loss – damage to the hair cells in cochlea (see below) or damage to the neural pathways of hearing (nerves). In sensorineural hearing loss, it is not always possible to tell whether it is the cochlea or the nerves that are damaged.

Conductive hearing loss – affects the passage of sound between the ear drum and the inner ear.

Central hearing loss – occurs when the structure of the inner ear is deprived of blood supply, for example, during a stroke. There may also be central hearing loss if there is damage along the auditory pathway (between the inner ear and the brain), for example, a tumour or any space-occupying lesion.

Cochlea – a portion of the inner ear that is involved in the process that transmits sound to the brain. The cochlea is essential for hearing.

Deaf affected – patients who are deaf affected include those with profound, severe or inherited hearing loss and those with hearing aids.

## 9.2 Causes and risk factors

### 9.2.1 Sight loss

There are many different causes of sight loss. The leading causes in the UK are uncorrected refractive error, age-related macular degeneration (AMD), cataracts, glaucoma and diabetic retinopathy. [6]

AMD is the leading cause of blindness in the UK. AMD comes in two forms: dry (atrophic) and wet (neovascular). Wet AMD is treatable if detected early, but there is no treatment for dry AMD. [7] Glaucoma can also lead to permanent loss of vision if not detected and treated early on. [8]

Diabetic eye diseases include diabetic retinopathy and cataracts. Diabetic retinopathy is a major cause of permanent sight loss. Cataracts are the most common cause of diabetes-related blindness in developing countries. [9]

The key demographic risk factors for sight loss are summarised below (see Section 9.4 for further detail).

- Advancing age is a major risk factor for sight loss. Older people living in care homes are at particularly high risk of poor eye health. [4] Prevalence of sight loss is also higher among people with dementia, especially those living in care homes. [4]
- Nearly two thirds of people living with sight loss are women; this is linked to longer female life expectancy. [1]
- People from Black, Asian and Minority Ethnic (BAME) groups are at greater risk of some of the leading causes of sight loss. [1] Evidence also suggests that BAME groups have poorer access to eye care services in general. [4]
- Sight loss is also linked to deprivation. [4]

In addition, there are behavioural, clinical and genetic risk factors for sight loss. For example, smoking increases the risk of AMD and there is also an increased risk of AMD in non-smokers exposed to passive smoking. The risk of developing AMD is reduced over a period of years after smoking or exposure to smoke is stopped. [4] For further information on smoking in Hackney and the City, see the 'Lifestyle and behaviour' chapter.

Obesity is a risk factor for four major causes of sight loss: AMD, diabetic retinopathy, glaucoma and cataracts. [10] 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.

Diabetes is one of the leading causes of avoidable sight loss among the working age population in the UK. People with diabetes are 10 to 20 times more likely to lose their sight than those without diabetes, due to increased risk of diabetic eye disease as well as glaucoma and cataracts. [11] Within 20 years of being diagnosed, nearly all people with type 1 diabetes, and almost two thirds of people with type 2 diabetes, will have developed some form of diabetic retinopathy. Evidence points to a lack of awareness of the risk of diabetes to eye health in many of those affected. [4] Please see the 'Diabetes' section of this JSNA chapter for more detail on diabetes in adults in Hackney and the City.

Estimates suggest that around 60% of stroke survivors experience some form of visual problems immediately after their stroke, and that these problems remain for around 20% of people for three months after experiencing stroke. [4] See the 'Cardiovascular disease' section of this chapter for further information on stroke in Hackney and the City.

Finally, adults with learning disabilities are 10 times more likely to be blind or partially sighted than the general population. [1] There is evidence that more than 0.5m people with a learning disability experience refractive error, yet they face particular barriers in accessing sight tests. [4]

## 9.2.2 Hearing loss

The major causes of hearing loss are ageing and noise. Presbycusis, or age-related hearing loss (ARHL), is the most common cause of hearing loss in England. ARHL is thought to result from age-related degeneration of the cochlea with the cumulative effects of extrinsic damage (such as noise) and intrinsic disorders (e.g. systemic diseases). [12] ARHL is one of four leading long-term conditions experienced by older people. [12]

Noise is the most studied and well-documented environmental factor causing hearing loss. However, after a lifetime of noise exposure, it is difficult to distinguish between noise-induced hearing loss and ARHL. [12] Gradual hearing loss in both ears is usually caused by exposure to loud noises over many years. [13]

There are a number of other factors involved in hearing loss. For example, sudden hearing loss in one ear may be caused by earwax, an ear infection, a perforated eardrum, or Ménière's disease<sup>1</sup>. Gradual hearing loss in one ear may be caused by fluid (glue ear), a bony growth (otosclerosis), or a build-up of skin cells (cholesteatoma). [13] However, some hearing loss is genetic, or inherited. [12] One in 1,600 people is born moderately to profoundly deaf because they inherit a genetic mutation. ARHL can have an inherited component as well. [14] Other causes of hearing loss are physical trauma, ototoxic drugs, maternal infection and other congenital causes. [14]

Those whose employment or lifestyle includes higher rates of exposure to noise may be at increased risk of hearing loss. For example, war veterans are exposed to repeated exposure to noisy conditions and blast trauma; ex-service personnel are three times more likely to report hearing loss compared to the general population. [5]

## 9.3 Local data and unmet need

### 9.3.1 Numbers affected – known to services

#### *Sight loss*

In 2017, 254 adult residents (18+) in Hackney were recorded by their GP as registered blind. Fewer than five people recorded by their GP as registered blind live in the City of London.

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<sup>1</sup> Ménière's disease is a disorder of the inner ear that causes episodes in which you feel as if you're spinning (vertigo), and you have fluctuating hearing loss with a progressive, ultimately permanent loss of hearing, ringing in the ear (tinnitus), and sometimes a feeling of fullness or pressure in your ear.

Almost 2,000 (1,756) adult residents in Hackney and 36 residents in the City of London were recorded as having cataracts by their GP. [15]

Over 1,000 (1,171) Hackney adult residents and 57 City adult residents were recorded by their GP as having age-related macular degeneration (AMD) in 2017. [15] In 2014/15, eight Hackney residents aged 65 and over lost their sight due to AMD. [16] Data for the City of London are not available due to small numbers.

In 2015/16, 10 Hackney residents aged 40 and over lost their sight due to glaucoma; in the same year, six Hackney residents aged 12 and over lost their sight due to diabetic eye disease. [16] Data for the City of London are not available due to small numbers.

A Certificate of Vision Impairment (CVI) formally certifies a person as either sight impaired (partially sighted) or severely sight impaired (blind). A CVI can only be completed by a consultant ophthalmologist. Once complete, copies are shared with Moorfields Eye Hospital (where the record of CVIs is maintained) and the local social services team, providing a formal route into social care services for the patient. In 2015/16, 40 Hackney residents (all ages) were issued a CVI. [16] Data for the City of London are not available due to small numbers.

### *Hearing loss*

In 2017, 558 adult Hackney residents were recorded as 'deaf affected' by their GP, and 52 were recorded as profoundly deaf. Six adult City of London residents were recorded as 'deaf affected' by their GP, while fewer than five were recorded as profoundly deaf. [15]

## 9.3.2 Numbers affected – estimates

### *Sight loss*

In 2016, an estimated 4,070 people were living with some degree of sight loss in Hackney and an estimated 200 people in the City of London. Table 1 shows the estimates of residents living with different degrees of sight loss. In total, an estimated 1.5% of the total population of Hackney and 2.3% in the City were living with sight loss (the average for England was 3.1%). [17]

*Table 1: Estimated numbers of residents living with sight loss (2016)*

Local authority	Mild sight loss	Moderate sight loss	Severe sight loss
Hackney	2,670	930	480
City of London	130	50	30

Source: Sight loss data tool, Royal National Institute of Blind People [17]

By 2030, it is predicted that there will be 5,820 people in Hackney living with sight loss (an increase of 43%). In the City of London, 290 people are predicted to have sight loss by this date (an increase of 45%). [17] This reflects the predicted ageing of the local populations. In addition, sight loss is strongly linked with certain medical

conditions such as diabetes and lifestyle factors including obesity – the rates of which are both going up. This means that, without action, the numbers of people with sight problems in the UK are likely to increase dramatically over the next 25 years. [1]

### *Hearing loss*

An estimated 24,674 people in Hackney were living with some hearing loss in 2017, and 2,430 people were living with severe hearing loss (aged 18 and over). By 2030, it is expected this will increase to 33,900 people with some hearing loss and 3,308 with severe hearing loss.

In the City of London, 1,323 people are estimated to be living with hearing loss in 2017 and 126 people with severe hearing loss. This is projected to rise to 1,781 with some hearing loss and 177 with severe hearing loss by 2030. [18]

Again, the projected increases in the number of adults with hearing loss reflect the predicted ageing of the local populations.

### **9.3.3 Unmet need**

From the data available, it is not possible to draw any conclusions about the extent of unmet need in relation to sight loss or hearing loss in Hackney and the City. Comparison of the numbers known to services and those estimated to have some degree of sight loss or hearing loss is not meaningful here due to the different definitions used.

## **9.4 Inequalities**

### **9.4.1 Age**

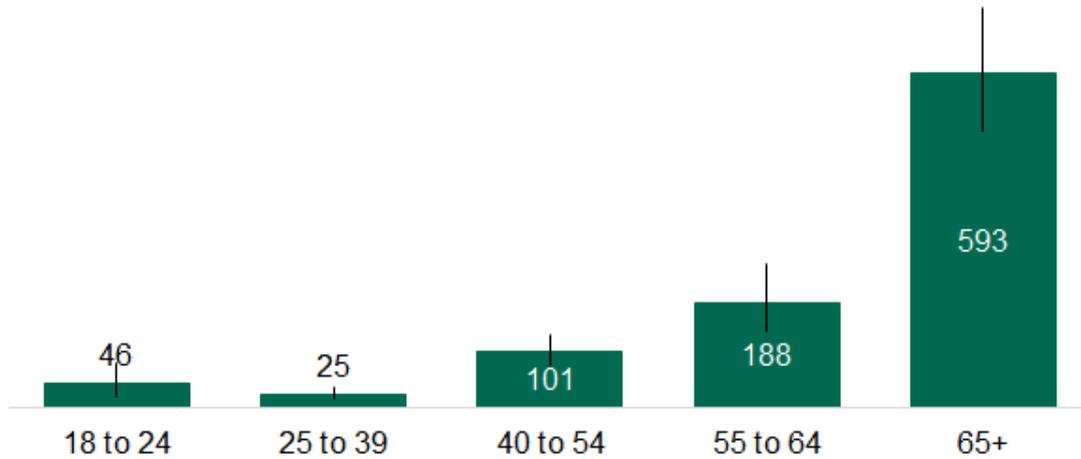
Advancing age is a major risk factor for sight loss and hearing loss.

Nearly four out of every five people living with sight loss are over the age of 64. Those aged 85 and above are at greatest risk; one in every three people in this age group is living with sight loss. [4]

Older people living in care homes are at particularly high risk of poor eye health, with almost half of this group estimated to have some form of sight loss. [4] Prevalence of sight loss is higher among people with dementia, especially those living in care homes. Sight loss may exacerbate confusion caused by some forms of dementia. [4]

In line with national evidence, most registered blind patients and patients recorded as 'deaf affected' living in Hackney and the City of London are age 65 or over (Figure 1 and Figure 2).

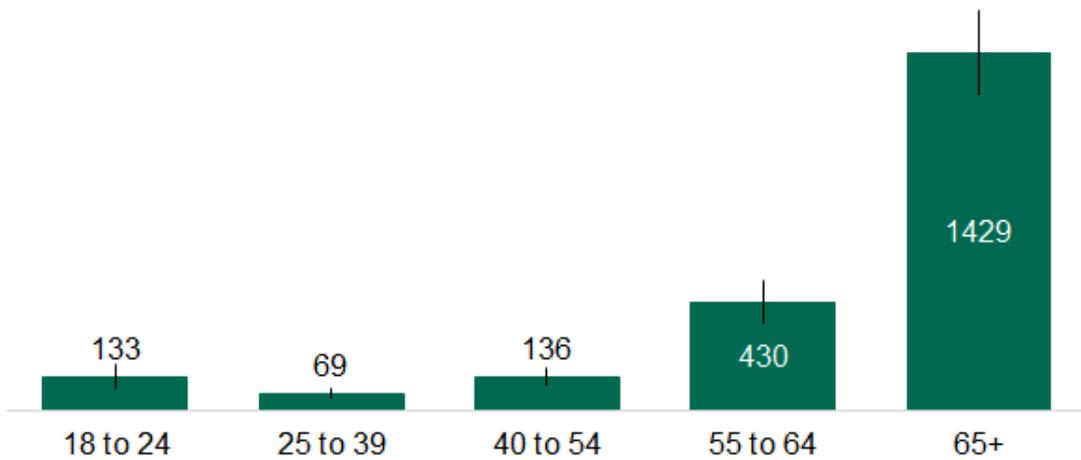
Figure 1: Rate of GP patients registered blind in Hackney and the City of London, by age (per 100,000 aged 18+, 2017)



Source: Extracted from the local GP register by Clinical Effectiveness Group (CEG), Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

Figure 2: Rate of GP patients recorded as 'deaf affected' in Hackney and the City of London, by age (per 100,000 aged 18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

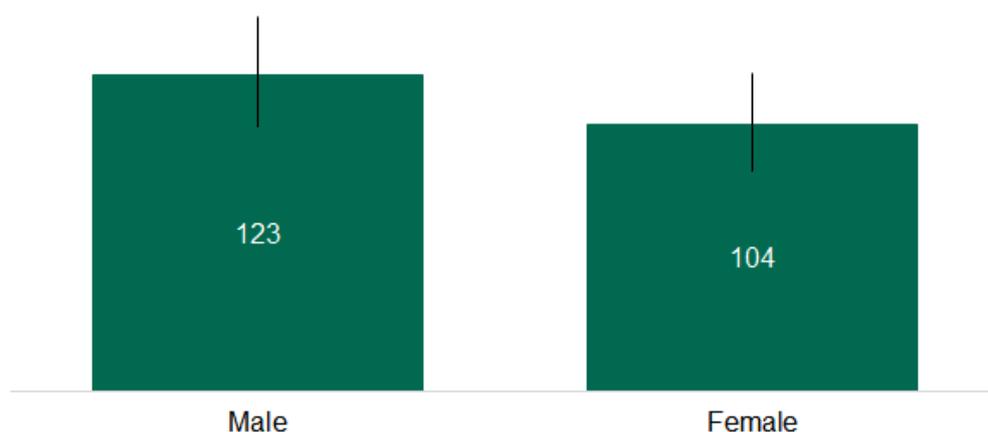
Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

### 9.4.2 Gender

Nationally, nearly two thirds of people living with sight loss are women, which is linked to longer female life expectancy. [1] Locally, there is no statistically significant gender difference in patients recorded by their GP as registered blind (Figure 3).

In Hackney and the City of London, there is no statistically significant gender difference in 'deaf affected' patients (Figure 4).

*Figure 3: Rate of GP patients registered blind in Hackney and the City of London, by gender (per 100,000 aged 18+, 2017)*



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

*Figure 4: Rate of GP patients recorded as 'deaf affected' in Hackney and the City of London, by gender (per 100,000 aged 18+, 2017)*



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

### 9.4.3 Ethnicity

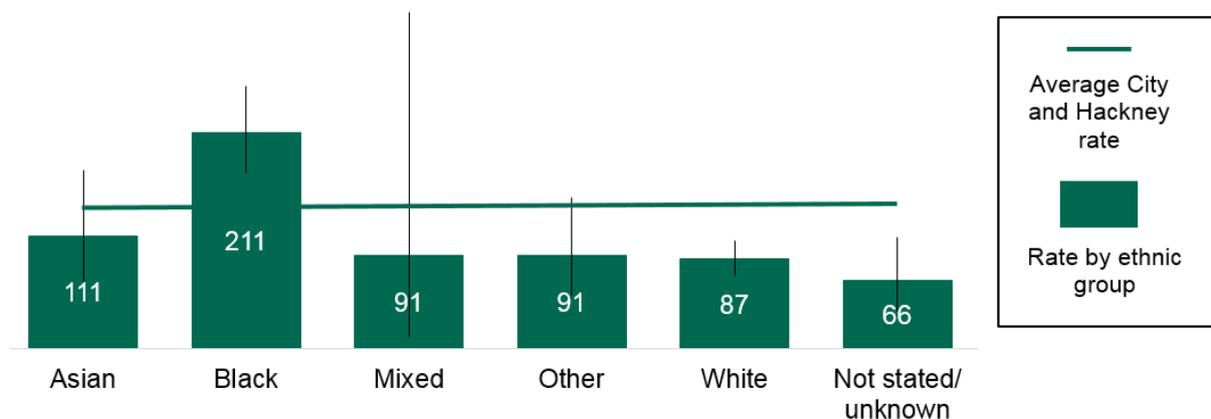
BAME groups are at greater risk of some of the leading causes of sight loss. [1] Black African and Caribbean people are four to eight times more likely to develop certain forms of glaucoma compared to White people. Black African and Caribbean people are also at a higher risk of diabetic eye disease, as are South Asian groups (the risk of diabetic eye disease is around three times greater in South Asian people compared to White people). However, AMD is more prevalent among the White population. [4]

Evidence also suggests that BAME groups have poorer access to eye care services in general. [4]

Locally, Black adult residents are significantly more likely to be recorded by their GP as registered blind compared to all other ethnic groups (apart from those of Mixed ethnicity) (Figure 5). This is in line with national evidence that shows BAME populations to be at higher risk of sight loss compared to White populations.

The rate of Black patients who are ‘deaf affected’ is significantly lower than that of Asian and White ethnicity patients (Figure 6).

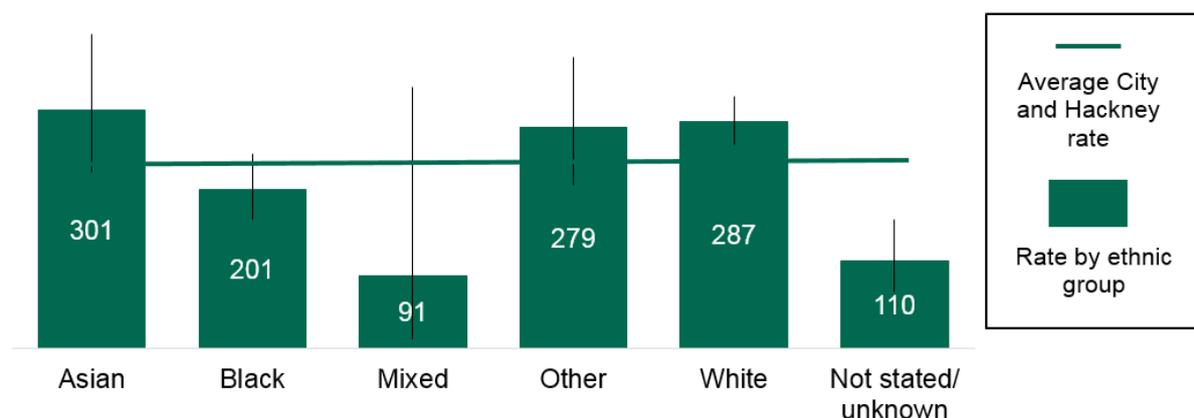
Figure 5: Rate of GP patients registered blind in Hackney and the City of London, by ethnicity (per 100,000 aged 18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

Figure 6: Rate of GP patients recorded as 'deaf affected' in Hackney and the City of London, by ethnicity (per 100,000 aged 18+, 2017)



Source: Extracted from the local GP register by CEG, Blizzard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

#### 9.4.4 Sexual identity

There is insufficient information on sensory impairment by sexual orientation or identity to draw meaningful local inference.

#### 9.4.5 Disability

Adults with learning disabilities are 10 times more likely to be blind or partially sighted than the general population. [1] This is reflected in GP data in Hackney and the City of London, which show that approximately 1% of patients with a learning disability are recorded by their GP as registered blind compared to 0.1% of the general patient population.

There is evidence that, nationally, more than 0.5m people with a learning disability experience refractive error, yet they face particular barriers in accessing sight tests. [4]

#### 9.4.6 Socio-economic disadvantage

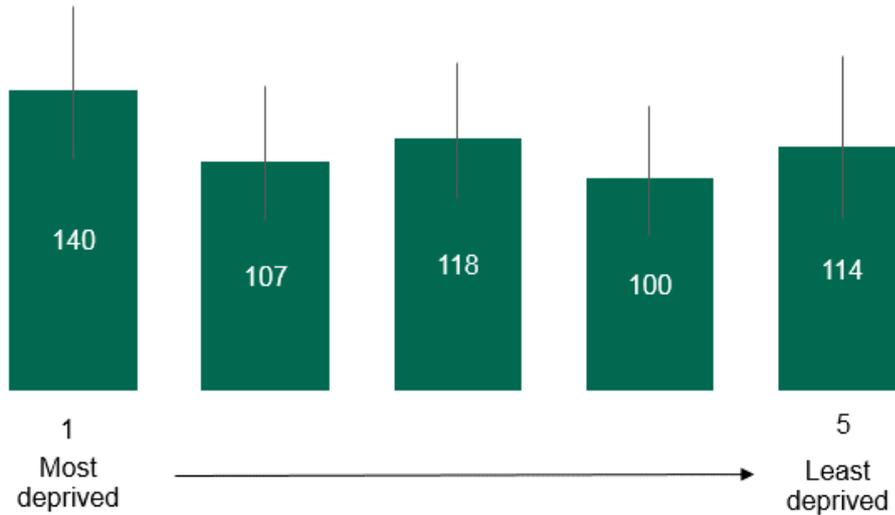
Nationally, evidence shows that there is a link between low income, or living in deprived circumstances, and sight loss; three out of four blind or partially sighted people are living in poverty or on the margins of poverty. People living in poverty are less likely to have regular sight tests, despite being eligible for free NHS-funded eye tests. Barriers include concerns about the cost of glasses and difficulties travelling to an optometrist. [4]

Nationally, 66% of registered blind and partially sighted people of working age are not in paid employment. People registered as blind or partially sighted are nearly five

times more likely than the general population to have been out of paid employment for five years or more. [2]

There does not appear to be a clear relationship between deprivation and sensory impairment in Hackney and the City (Figure 7 and Figure 8).

*Figure 7: Rate of GP patients registered blind in Hackney and the City of London, by local IMD<sup>2</sup> quintile (per 100,000 aged 18+, 2017)*

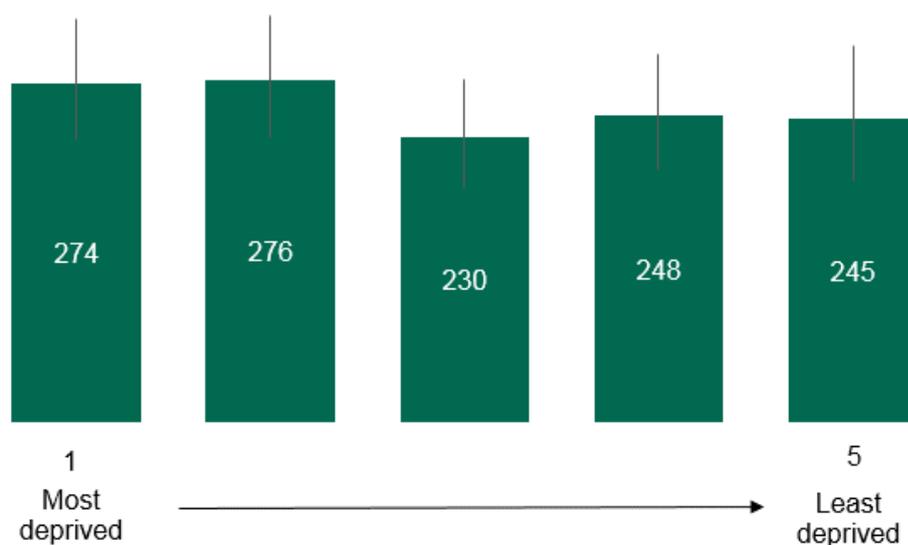


Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

<sup>2</sup> Deprivation is defined using the Index of Multiple Deprivation 2015 (IMD). IMD is a measure of relative deprivation for small areas that combines 37 separate indicators each reflecting a different aspect of deprivation experienced by individuals living in an area.

Figure 8: Rate of GP patients recorded as 'deaf affected' in Hackney and the City of London by local IMD quintile (per 100,000 aged 18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

## 9.5 Comparisons with other areas and over time

The following subsections compare the rates of sight loss<sup>3</sup> in Hackney due to different types of disease with other areas and over time. Comparable data for the City of London are not available.

There is no available trend or area comparison data for hearing loss.

### 9.5.1 Sight loss due to AMD

The crude rate<sup>4</sup> of sight loss due to AMD in Hackney does not differ significantly from most of its 'statistical peers' (see Figure 9). The crude rate in London is significantly lower than the rate in England, which may be due to the relatively young population profile in London.<sup>5</sup> The rate of sight loss due to AMD in Hackney is also significantly lower than the national rate.

Nationally and within London, the crude rate of sight loss due to AMD has remained broadly stable over time (Figure 10). The rate in Hackney has varied since 2010/11,

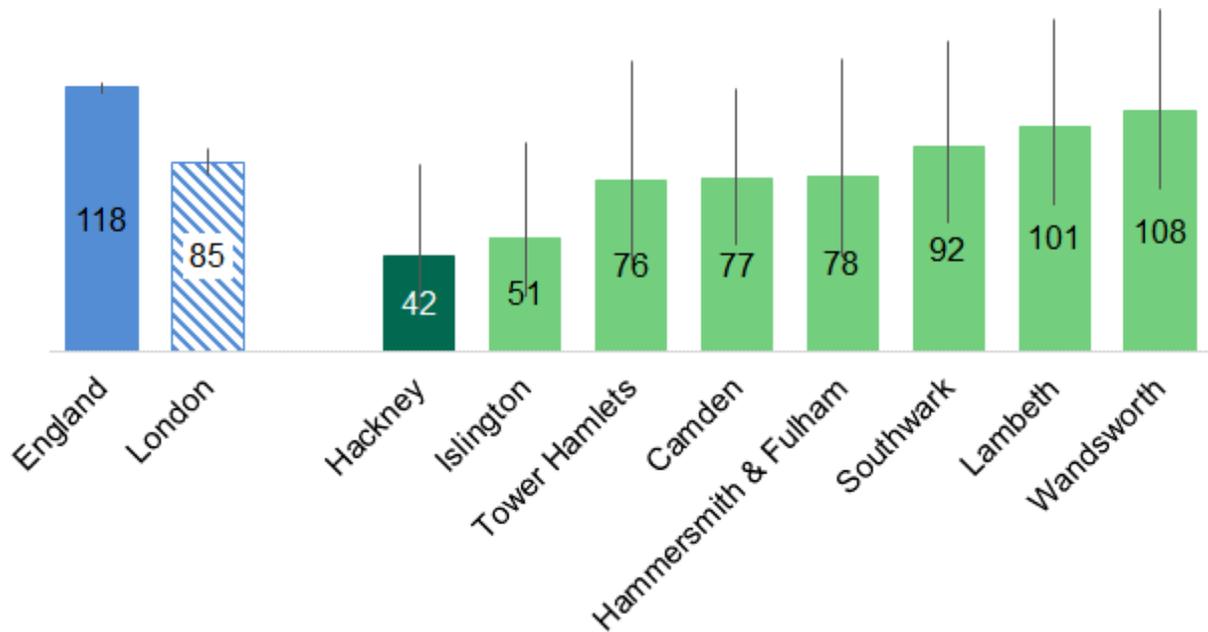
<sup>3</sup> Sight loss is counted when there is a completion of a CVI (Certificate of Visual Impairment) by a consultant ophthalmologist. The CVI initiates the process of registration with a local authority and leads to access to services.

<sup>4</sup> A crude rate is the number of occurrences of an event (disease, death, etc) in a population in a given geographical area during a given period of time, per unit of the same population during the same period. The crude rate does not adjust for age or any other variables.

<sup>5</sup> As of the 2011 Census, 11% of London's population was over the age of 65 compared to 16% of England's population.

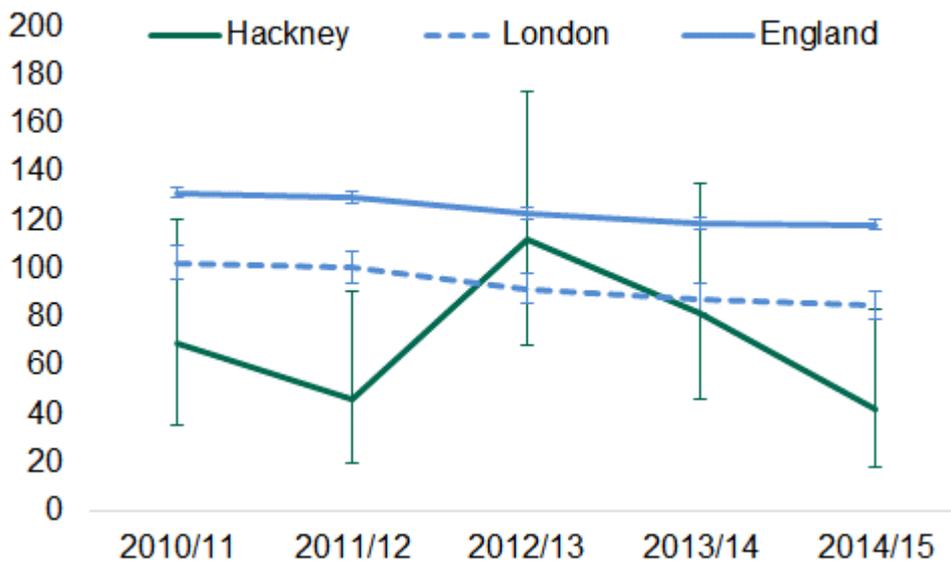
but in the most recent year of available data (2014/15) it was lower than the London average.

Figure 9: Crude rate of sight loss due to AMD (per 100,000 population aged 65+, 2014/15)



Source: Public Health England, Public Health Outcomes Framework

Figure 10: Crude rate of sight loss due to AMD over time (per 100,000 population aged 65+, 2010 – 2015)



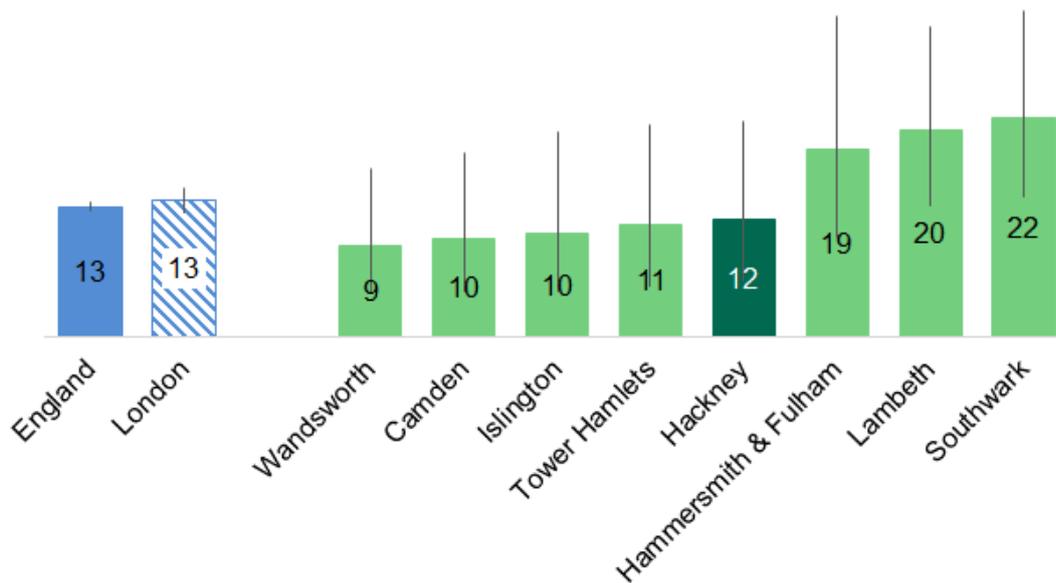
Source: Public Health England, Public Health Outcomes Framework

### 9.5.2 Sight loss due to glaucoma

The rate of sight loss due to glaucoma in Hackney does not differ significantly from rates in England, London or similar areas (Figure 11).

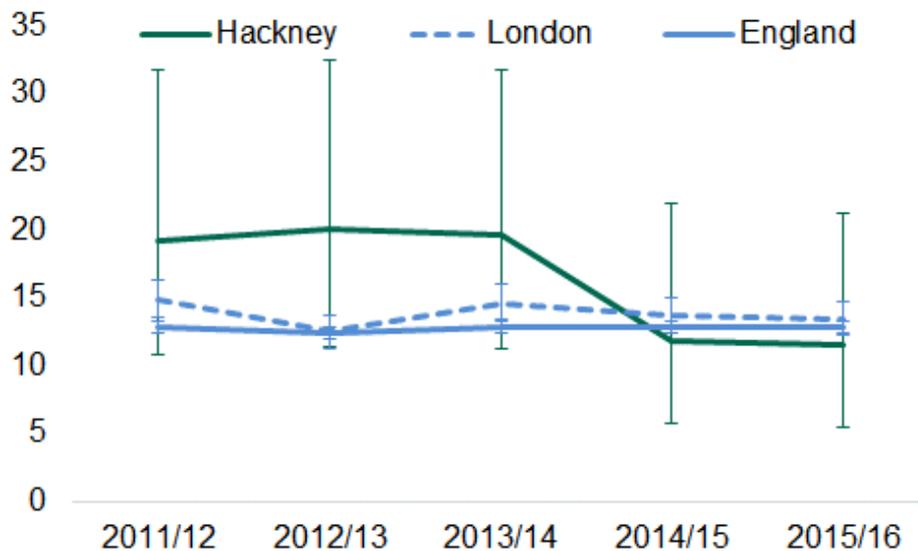
As for England and London, the crude rate of sight loss due to glaucoma in Hackney has remained relatively stable in recent years (Figure 12).

Figure 11: Crude rate of sight loss due to glaucoma (per 100,000 population aged 40+, 2015/16)



Source: Public Health England, Public Health Outcomes Framework

Figure 12: Crude rate of sight loss due to glaucoma over time (per 100,000 population aged 40+, 2011 – 2016)



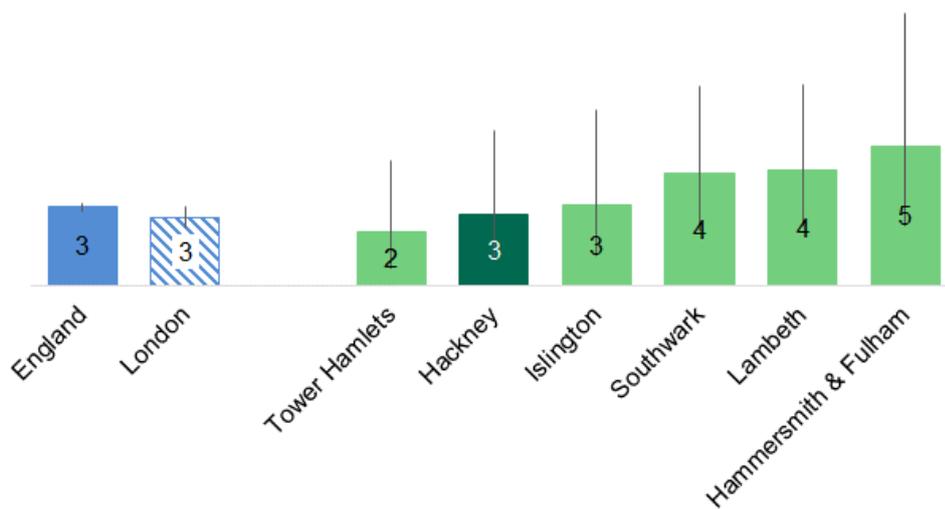
Source: Public Health England, Public Health Outcomes Framework

### 9.5.3 Sight loss due to diabetic eye disease

The crude rate of sight loss due to diabetic eye disease in Hackney does not differ significantly from the rates in England, London or similar areas (Figure 13).

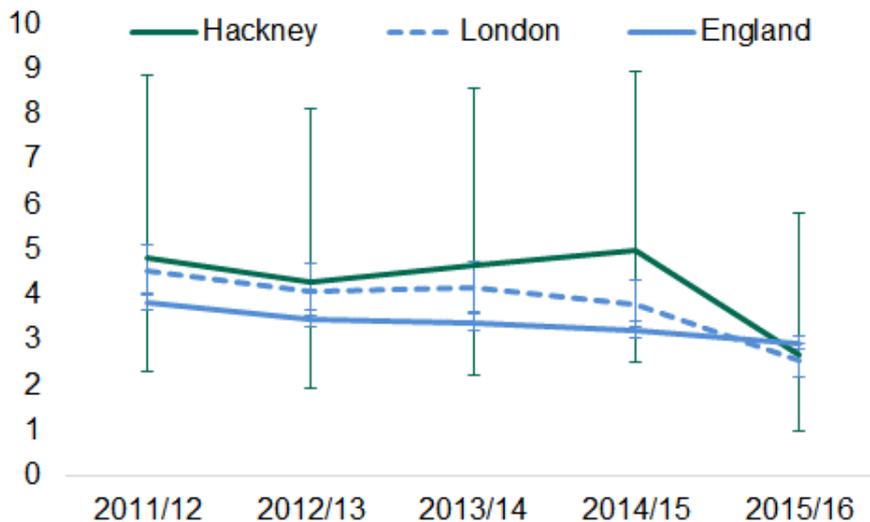
As for England and London, the crude rate of sight loss due to diabetic eye disease in Hackney has remained relatively stable in recent years, with a suggestion of a slight downward trend (Figure 14).

Figure 13: Crude rate of sight loss due to diabetic eye disease (per 100,000 population aged 12+, 2015/16)



Source: Public Health England, Public Health Outcomes Framework  
 Note: Data for Camden and Wandsworth are not available.

Figure 14: Crude rate of sight loss due to diabetic eye disease over time (per 100,000 population aged 12+, 2011– 2016)



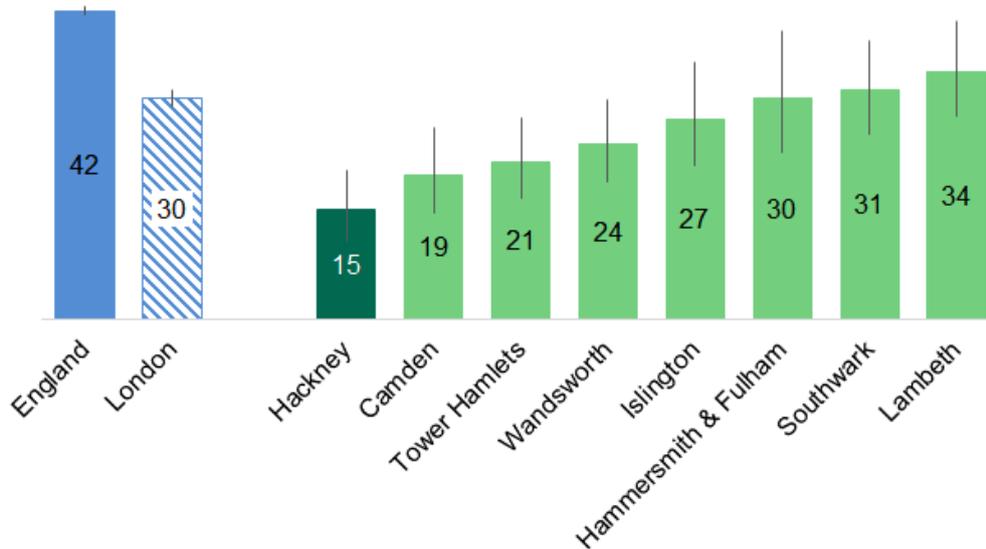
Source: Public Health England, Public Health Outcomes Framework

### 9.5.4 Sight loss certifications

In 2015/16, Hackney had the lowest crude rate of sight loss certifications of all its statistical peers (Figure 15). The rate in Hackney (as for London as a whole) is significantly lower than the national rate.

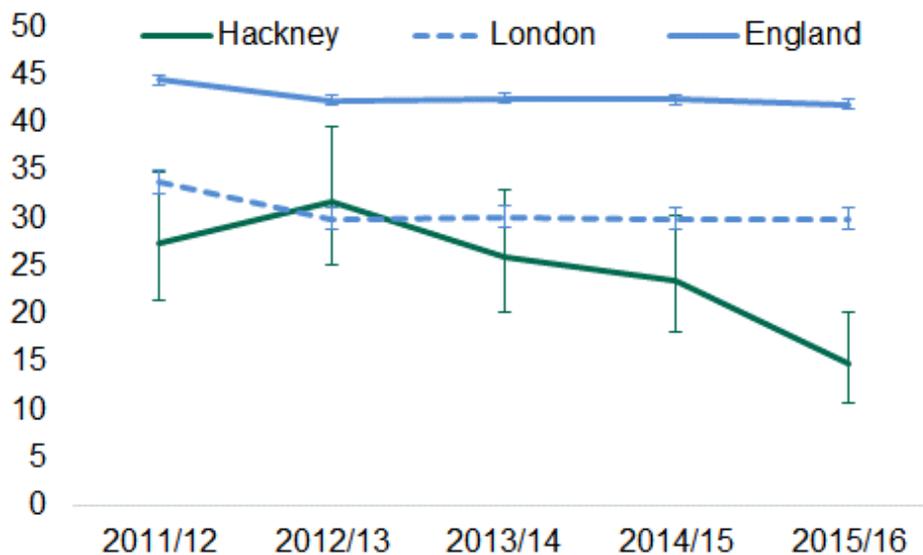
The crude rate of sight loss certifications has been decreasing in Hackney since 2012/13, so that it is now significantly below the London average (Figure 16).

Figure 15: Crude rate of sight loss certifications (per 100,000 population, 2015/16)



Source: Public Health England, Public Health Outcomes Framework

Figure 16: Crude rate of sight loss certifications over time (per 100,000 population, 2011– 2016)



Source: Public Health England, Public Health Outcomes Framework

## 9.6 Evidence and good practice

### 9.6.1 Prevention

#### *Sight loss*

There are a number of behavioural and lifestyle factors that can be encouraged to achieve good eye health.

Stopping smoking is critical to preventing advanced AMD, diabetic eye diseases and sight loss. [7] [9]

A healthy diet including dark green, leafy vegetables and foods containing yellow pigments, and which is low in sugar, is recommended to maintain a healthy retina. [7] A healthy diet, along with exercise and avoiding excessive weight gain, is also key to preventing the onset of type 2 diabetes and for good diabetic control. [9] Furthermore, it is critical to diagnose and treat diabetes and hypertension early as delay can cause long-term damage to eye health. [19]

Increasing the uptake of routine eye tests is key to reducing preventable sight loss. Routine eye tests can tackle uncorrected refractive error, which equates to over 50% of avoidable sight loss in the UK. This is particularly important for those at higher risk of sight loss such as people with learning disabilities. [19]

It is important to tackle the perception of cost as a barrier to good eye health, in particular among people living in socio-economically deprived circumstances (who are at increased risk of sight loss). Effective action includes raising awareness of the importance of routine eye tests, as well as entitlement to free eye tests and help with the cost of glasses. Providing eye tests in health settings rather than retail settings may also encourage those on low incomes to attend more regularly. [19]

#### *Hearing loss*

Preventing exposure to noise is one of the key actions to preventing hearing loss. This can include ensuring recreational and environmental noise is reduced, wearing ear protection, headphones or ear plugs to block out noise. [13] Workplaces should improve compliance with the Control of Noise at Work Regulations 2005. Damaging exposure to noise for workers must be reduced as much as possible. [5]

As a general preventative measure for hearing loss, it is important to avoid inserting objects into ears including fingers, cotton buds, cotton wool and tissues. [13]

## 9.6.2 Identification and early intervention

### *Sight loss*

Systematic screening for sight-threatening diabetic retinopathy for those age 12 and older has been implemented across the UK. GPs should register all patients with diabetes in order for retinopathy screening to be carried out as soon as possible after diagnosis. Diabetes care plans should be reviewed as soon as retinopathy is first diagnosed, to optimise care and prevent progression. [9]

Self-monitoring devices have been shown to be successful in enabling early detection of AMD to prevent vision loss. [7]

The secondary care referral process must be prompt as many eye conditions progress very quickly and sight that has already been lost usually cannot be regained. Ensuring that people referred to secondary eye care receive timely appointments and treatment is critical, as appointment delays can lead to unnecessary permanent sight loss. [19]

Falls are the most common cause of hospitalisation among older people and it is estimated that nationally 9,500 serious falls every year are caused by sight loss. One study found that only half of falls clinics assessed vision. To prevent potential falls, sight loss needs to be identified at the earliest opportunity. When visual impairment is actively addressed as part of a falls reduction plan, falls can be reduced by up to 14%. [19] [20]

Given the high risk of vision problems as a result of stroke (see Section 9.2), eye health and sight loss support is a key component of stroke rehabilitation. Early involvement of an orthoptist as part of a multi-disciplinary stroke treatment team leads to improved detection of visual impairment, which may enable earlier discharge. [19]

### *Hearing loss*

All people with hearing loss should be diagnosed early, particularly high-risk groups such as older people and those whose employment or lifestyle exposes them to frequent loud noises. [5] Hearing loss should be considered within the context of local strategies for older people, people with dementia, and other sensory impairment.

There should be a seamless transition from screening into diagnostic and treatment services. [5]

## 9.6.3 Treatment, care and support

### *Sight loss*

Many eye conditions have complex treatment regimes that demand exact compliance to be effective. Eye care patients may struggle to correctly comply with their medication. For example, glaucoma treatment can involve daily eye drops and

non-adherence to treatment as a result of running out of drops is reported to be more common in those with poorer vision. [21] As a result, people may still lose their sight despite the condition being detected and treated. Patients need support and advice about how to manage their condition and comply with treatment to increase its effectiveness. [19]

Sight loss advisers (also known as eye clinic/care liaison officers) work within hospital ophthalmology services and provide emotional and practical support for patients, and are often the first point of contact for the patient in their sight loss journey. Research by the Royal National Institute of Blind People (RNIB) estimated that integrating a sight loss adviser into a hospital ophthalmology service could deliver a financial return to health and social care budgets of £10.57 for every £1 invested. Sight loss advisers also play a key role in ensuring the effective administration of certification. [20]

Vision rehabilitation is a key reablement service for older blind and partially sighted people. Securing specialist vision rehabilitation support gives people with sight loss confidence, makes them feel safer and helps maintain independence. It also offers cost savings in terms of preventing loss of independence and reliance on other services. [20]

It is important to ensure blind and partially sighted people have access to emotional support and rehabilitation services from the point of diagnosis. Reducing the risk of social isolation among this population, through befriending schemes and access to social networks, is also critical for positive health and wellbeing, particularly for older people. [19] [7]

The majority of registered blind and partially sighted people of working age are not in employment; the more severe someone's sight loss the less likely they are to gain employment. It is important for blind and partially sighted people to have access to employment support (such as information, guidance and training schemes) to help them gain and retain employment. [19]

### *Hearing loss*

Some types of hearing loss can be treated with medicine or through a simple procedure, such as the removal of ear wax. [13]

There are a number of treatments and services that can support those with permanent hearing loss to make the most of their remaining hearing - such as hearing aids, implants, and using sign language or lip reading. [13]

Those with hearing loss can face barriers in carrying out normal day-to-day activities and when accessing services and leisure activities. They may need active support, in addition to innovative health technology, to achieve their potential. Support can take the form of rehabilitation strategies and personal coaching. These can reduce the inequalities in educational attainment, employment and injury rates experienced by people with hearing loss. [5]

Those with hearing loss should have their mental health needs assessed; and those with mental health problems or cognitive impairments should have their hearing needs assessed. Through the continued development of mental health and older people's services, individuals should be supported to effectively self-manage any other long-term conditions they may have. [5]

Hearing is a major factor in maintaining independence and achieving healthy ageing, helping to achieve the national Government's ambition to support older people to remain in their own homes for longer, avoiding unnecessary admission to hospital or entry into care. [5]

## 9.7 Services and support available locally

### 9.7.1 Prevention

#### *Sight loss*

Optometrists are commissioned by NHS England to provide advice, testing and treatment for some vision impairment and sight loss. Routine eye tests are offered to prevent potential sight loss and maintain eye health. Vision correction services are also offered to correct refractive error. There are 47 optical practices in Hackney and the City of London.<sup>6</sup> [22]

Routine eye tests are paid for by the NHS for:

- those aged 60 years and over
- those with close relatives diagnosed with glaucoma
- children under 16 (or under 19 if attending full-time education)
- those receiving Income Support, Job Seeker's Allowance and other qualifying benefits
- those with a valid HC2 or HC3 certificate<sup>7</sup>
- those suffering from diabetes or glaucoma
- people registered blind or partially sighted
- those issued with complex lens vouchers<sup>8</sup>.

There are a number of lifestyle and behaviour services that can help prevent sight loss through stopping smoking, maintaining a healthy weight, and preventing or controlling diabetes. For further information on smoking and healthy living services in Hackney and the City, see the 'Lifestyle and behaviour' chapter of the JSNA. Please see the 'Obesity' and 'Diabetes' sections of this chapter for more detail on adult weight management and diabetes services in Hackney and the City.

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<sup>6</sup> The majority of those who take up NHS eye tests in the City are non-residents.

<sup>7</sup> Available to those on a low income, the HC2 certificate offers full help with health costs and HC3 certificate offers limited help with health costs.

<sup>8</sup> Complex lens vouchers are for lenses that are either -10/+10 dioptres or more, or prism-controlled bifocal lenses. Complex lens vouchers are a contribution towards the cost of these lenses. The vouchers are only available to those who meet the clinical criteria and aren't eligible for one of the main optical vouchers.

## 9.7.2 Identification and early intervention

### *Sight loss*

Homerton Hospital offers residents of Hackney and the City of London diabetic eye screening through the North East London Diabetes Eye Screening Programme. This is part of the national NHS Diabetic Eye Screening Programme for diabetic retinopathy, which aims to reduce the risk of loss of vision for people with diabetes. According to local GP data, in 2017, over 13,000 GP patients in Hackney and the City were screened as part of this programme. [15]

Homerton Hospital assesses vision within its falls clinic.

The Homerton Hospital stroke multi-disciplinary team does not have direct access to an orthoptist. The team refers to the ophthalmology team that works between Homerton and the Royal London Hospital.

City and Hackney CCG commissions a minor eye conditions service from local, accredited optometrists who provide assessment, diagnosis and treatment for a wide range of minor eye conditions. They can provide further assessment for suspected conditions such as glaucoma and cataracts. GPs can refer City and Hackney patients to this service.

Homerton Hospital provides an outreach clinic for Moorfields Eye Hospital, where eye conditions are diagnosed and initially managed. A consultant ophthalmologist issues a Certificate of Vision Impairment if sight loss is identified, indicating a patient's level of vision. The CVI is sent to the local authority sensory team (see Section 9.7.3). If further investigation or surgery is needed, patients are referred to the appropriate Moorfields clinic.

Moorfields Eye Hospital offers an ophthalmology service where general eye problems are diagnosed and treated and specialist referrals are made. GPs or opticians can refer patients to the general ophthalmology service. Moorfields Eye Hospital also offers a 'low vision' clinic where patients can be assessed. If good vision cannot be achieved with spectacles or contact lenses, low vision devices may be needed. GPs or opticians can refer patients to the low vision clinic.

### *Hearing loss*

GPs can examine ears and do simple hearing checks. There is also a community ear, nose and throat (ENT) service operating from the Nightingale Practice and the Lawson Practice, providing more complex hearing diagnosis and treatments. Homerton Hospital has an ENT service that provides general and specialist services.

In addition, City and Hackney CCG commissions an audiology service for ARHL patients. This includes hearing loss assessments, hearing aid fittings, and aftercare.

The Royal London Hospital provides a complex audiology service identifying and treating vertigo and tinnitus. The service also provides more complex hearing aids and rehabilitation.

### 9.7.3 Treatment, care and support

#### *General sensory impairment services*

The Sensory Team is a small service within Hackney Council made up of occupational therapists and social workers, providing support for people who are visually impaired, deaf or hard of hearing. The team offers advice and suitable adaptations to living space or equipment to people with a sensory impairment who are eligible for adult social care. The team also holds and maintains the local sensory impairment registers (certification by a consultant ophthalmologist is required for visual impairment registration).

The total number of people receiving support from the Sensory Team has remained stable between 2011 and 2014 (around 1,000 people). The number of clients with a learning disability has increased, from fewer than five in 2011 to around 20 in 2014. The majority of these clients were recorded as being blind or severely sight impaired. (The increase in numbers is likely due to improved recording of learning disability among these clients, rather than a marked increase in the number of learning disabled clients accessing the service.)

The City of London does not have a sensory team, but individual social workers assess and support eligible needs, for example, the use of individual budgets to provide support for hearing impaired people. Similarly, occupational therapists in the City of London may assess someone with sensory impairment and then obtain further specialist assessments if required.

The Hackney Learning Trust provides Hackney's education function. The Inclusion and Specialist Support Team within Hackney Learning Trust provides specialist teaching and intervention for young people with visual impairment and those who are deaf or have partial hearing.

There are also a number of support services provided by local community and voluntary organisations, as follows.

- DeafPLUS offers a local information, advice and advocacy service to support residents with hearing and sight loss to access services and entitlements. In addition to advice, it provides peer support, courses, social activities and training.
- St Mary's Secret Garden offers an accessible open community garden where people with support needs can get hands-on experience of gardening. The programme aims to address social isolation and to support people to develop skills and acquire qualifications. The types of initiatives delivered through the garden include therapeutic wellbeing placements for adults with sensory impairments.

#### *Sight loss*

Moorfields Eye Hospital offers various patient support services for those affected by sight loss, including:

- counsellors offering emotional support, information and advice for patients and their relatives

- eye clinic liaison officers providing practical information and rehabilitation advice on living with sight loss
- the CVI team, which gives information and advice about formal registration of visual impairment.

There are a number of local community and voluntary organisations providing support to people with sight loss, as listed below.

- East London Vision is an umbrella organisation with voluntary sector, user-led representation. The organisation ensures that vision-impaired residents access the support and services they need.
- SeeAbility provides support for people who are visually impaired and also have other disabilities, such as mental health problems, mobility impairment or learning disabilities.
- The Hackney Advice Service, provided by the Royal Society for Blind Children, offers vision-impaired young adults (aged 16 and over) with consultations on housing, benefits, employment, registering as visually impaired, accessing transportation, and disability rights.
- Foresight (Hackney) helps to reduce social isolation among blind and partially sighted residents.
- Social Eyes 4Life offers a signposting and brokerage service for visually impaired people in Hackney.

### *Hearing loss*

Free NHS hearing aids are available through GP referral. They are also available through selected opticians.

As mentioned in Section 9.7.2, the CCG commissions an audiology service for ARHL patients. This includes hearing loss assessments, hearing aid fittings and aftercare. There are also walk-in hearing aid clinics across Hackney and the City of London that provide:

- tubing and battery replacement for hearing aids
- advice on how to use and maintain hearing aids
- information on hearing loss and support services available.

Action on Hearing Loss offers hearing aid support sessions providing information, support and repair services for Hackney and the City residents. They also offer social meet-ups to reduce social isolation among those with hearing loss.

## 9.8 Service gaps and opportunities

There are opportunities locally for integrating the prevention of sensory impairment into other programmes and pathways, such as smoking cessation, diabetes prevention, and healthy eating and physical activity strategies.

There are also opportunities for educating residents on the causes of, and risk factors for, sensory impairment. Evidence shows that many people are not aware of the links between sensory impairment and certain risk factors, such as smoking and

diabetes. A lack of understanding may disproportionately affect BAME groups and those living in areas of high relative deprivation.

The available evidence suggests that there are a number of barriers for certain groups in accessing sensory impairment services, such as perceived costs. It is critical to tackle these barriers and ensure equitable access to services, treatment and support.

There may also be opportunities to build relationships with local employers to ensure that workplace environments consider and minimise occupational risks for hearing loss.

## 9.9 References

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