Sight loss: A public health priority

RNIB supporting blind and partially sighted people
“Our special senses are a remarkable gift that have evolved over millions of years. Like much of our biological inheritance we take them for granted until they are threatened. One of the down sides of the remarkable increase in life expectancy over the past 30 years has been the increase in the threat of loss of vision in later life. Yet we know that much of this is avoidable if we look after ourselves better and have ready access to good quality medical and ophthalmic care.

“In raising the profile of the prevention of blindness in recent years, RNIB has led the way. By securing the measurement of new cases of blindness with the public health common dataset, RNIB and partners, through the UK Vision Strategy, have ensured that we now have a bench mark against which to measure our preventative efforts. We must now work together to realise the goal of better eye health and reduce blindness, especially in later life.”

Professor John R Ashton, CBE, President of the Faculty of Public Health of the UK Royal Colleges of Physicians
1. Preventing avoidable sight loss: a public health priority

1.8 million people are living with significant sight loss in the UK and 50 per cent of this sight loss is avoidable. By 2050 the number of people with sight loss is set to double to four million as the impact of an ageing population makes itself felt [1].

The major sight conditions in the UK [1]

<table>
<thead>
<tr>
<th>Condition</th>
<th>Breakdown of people with sight loss (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age-related macular degeneration (AMD)</td>
<td>16.7</td>
</tr>
<tr>
<td>Cataracts</td>
<td>13.7</td>
</tr>
<tr>
<td>Diabetic retinopathy</td>
<td>3.5</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>5.3</td>
</tr>
<tr>
<td>Uncorrected refractive error</td>
<td>53.3</td>
</tr>
<tr>
<td>Other</td>
<td>7.4</td>
</tr>
</tbody>
</table>

- **AMD** – estimated prevalence of 2.45 per cent among population aged 50+.
- **Glaucoma** – mean estimated prevalence rate of 1.47 per cent for people aged over 30.
- **Cataract** – there is a wide range of case definitions of cataract prevalence in the various epidemiological studies varying from 1.88 per cent to 6.77 per cent in people aged over 40 [2].
- **Diabetic eye disease** – estimated prevalence among people diagnosed with diabetes is 28 per cent with background diabetic retinopathy; 2.5 per cent with non-proliferative diabetic retinopathy; 0.7 per cent proliferative diabetic retinopathy and 7 per cent with diabetic maculopathy [3].

RNIB’s free sight loss data tool provides estimates of the number of people living with these conditions and how this will change over time for each local authority in England. Visit [rnib.org.uk/datatool](http://rnib.org.uk/datatool)
The Public Health Outcomes Framework

The Government has recognised that more needs to be done to prevent avoidable sight loss. The Public Health Outcomes Framework – Healthy lives, healthy living: Improving outcomes and supporting transparency – includes a preventable sight loss indicator. Prioritising the prevention of avoidable sight loss will have significant benefits:

Reduce health expenditure – in England, NHS commissioners spent on average £40,900 per 1,000 head of population on vision problems in 2010–11; a total cost of £2.14 billion that year [4]. The savings could be more significant when factoring in health and social care complications that are sustained or exacerbated as a direct result of sight loss.

Improve outcomes for people with or at risk of sight loss – people with sight loss are significantly more likely to suffer from depression [5] and have an increased risk of sight loss-related conditions, such as falls [6]. Effective eye care pathways can help reduce unnecessary sight loss among at-risk communities and, for conditions that cannot be treated, effective social care support can help individuals successfully adapt to a life with sight loss.

Improving eye health can improve other health outcomes – improved detection and treatment of eye health conditions can have a positive effect on other health outcomes, including reducing social isolation and falls [6] and improving stroke rehabilitation through earlier discharge [7].

RNIB’s support for public health professionals

To ensure that eye care investment is effective, evidence-based pathways need to be built around the needs of the local population. This guide outlines the resources available to help public health professionals accurately understand and commission primary and secondary eye care services based on local need and shows how improving eye health can improve outcomes for a broad range of health priorities.

This document focuses on the Public Health Outcomes Framework in England, but RNIB in Wales, Scotland and Northern Ireland is working in partnership at a national and local level to ensure sight loss prevention is a public health priority. For more information visit rnib.org.uk/healthprofessionals
2. The preventable sight loss indicator

The Public Health Outcomes Framework sets out the Government’s priorities for the new public health system. The framework’s health indicators seek to increase healthy life expectancy, reduce differences in life expectancy and decrease health inequalities.

The inclusion of the preventable sight loss indicator is designed to ensure that avoidable sight loss is recognised as a critical and modifiable public health issue. The following indicators benchmark the rate of sight loss in every local authority in England:

- **AMD** – crude rate of sight loss due to AMD in persons aged 65+ per 100,000 population.
- **Diabetic eye disease** – crude rate of sight loss due to diabetic eye disease in persons aged 12+ per 100,000 population.
- **Glaucoma** – crude rate of sight loss due to glaucoma in persons aged 40+ per 100,000 population.
- **Certification** – crude rate of sight loss certifications per 100,000 population.
How the sight loss indicator is measured

When an individual’s eye sight deteriorates below a set level, that individual is eligible to be certified as sight impaired (partially sighted) or severely sight impaired (blind). Certification takes place when a Consultant Ophthalmologist completes a Certificate of Vision Impairment (CVI). It is the data from the CVI that is used to monitor progress against the preventable sight loss indicator. The CVI also provides a reliable route for someone with sight loss to be formally registered with social care.

Improving the data set

Research has identified several barriers to the timely certification and registration of eligible patients, including a limited awareness of the benefits of being certified, uncertainty of when to certify patients and a misconception that eye clinics should aim for low CVI rates [8]. By ensuring ophthalmology colleagues follow the Royal College of Ophthalmologists’ guidance on certification, local areas will ensure that more people are certified and registered at the most appropriate time. This will increase the CVI’s rigour as a source of epidemiological data and ensure more people with sight loss are formally brought to the attention of social care; helping patients access a wider range of additional services that can help them adapt better to a life with sight loss and reducing the risk of sight-related injuries and conditions.

Advocate for an ECLO

Eye Clinic Liaison Officers (ECLOs), or similar early intervention support staff, are normally based in the eye clinic or the sensory team of social services. Over 96 per cent of ophthalmologists report that an ECLO is beneficial to both patients and eye clinic staff for supporting the certification and registration process [9].

To find out more about the benefits of the ECLO, and how to appoint one locally, visit rnib.org.uk/healthprofessionals
Sight loss: A public health priority
3. Tackling sight loss

To improve performance against the preventable sight loss indicator, eye care pathways need to be built around the needs and experiences of the patient. Public health professionals should work closely with Local Professional Networks (LPNs) to undertake eye health equity profiles. This will identify unmet need and inequalities in the provision, uptake and outcomes of eye care services. Key areas to focus on for reducing avoidable sight loss will include:

1. Sight loss and smoking

Promote the link between sight loss and smoking – in addition to the well-known health risks associated with smoking, it also doubles the chances of developing AMD, the UK’s biggest cause of blindness [10]. Studies have shown that health campaigns that highlight the link between sight loss and smoking increase the number of people who quit [11].

Actions:
- Integrate eye health messages into smoking cessation activity to create a more compelling case for quitting.
- Visit rnib.org.uk/eyehealth for key eye health messages.

2. Uptake of routine eye tests

Tackle uncorrected refractive error – severe uncorrected refractive error accounts for over 50 per cent of avoidable sight loss in the UK (where refractive error is so serious it equates to partial sightedness when left uncorrected) [1]. Increasing uptake of eye tests can help address this form of avoidable sight loss.

Tackle perception of cost as a barrier – many people, particularly people living in socio-economic deprivation, ration eye test attendance due to concerns about the cost of glasses, or delay attendance until they experience symptoms [12]. This can prevent early detection and timely referral.

Actions:
- Run eye health campaigns to educate people about the importance of routine eye tests, entitlements to free eye tests and help with the cost of glasses.
- Providing eye tests in health settings rather than retail settings may encourage people on low income to attend more regularly.
- Visit rnib.org.uk/eyehealth for eye health information.

3. Care homes residents need routine eye tests

Ensure care home residents attend routine eye tests – 20 per cent of people aged over 75 years and 50 per cent of people aged over 90 have significant sight loss and for many people correctly prescribed glasses could rectify this situation [11]. When eye conditions go undiagnosed and untreated they can reduce independence and confidence and increase the risk of injury [6].
Acknowledging sight loss in dementia care programmes – it is estimated that over 100,000 people in the UK have both sight loss and dementia, and this figure is set to rise as the population ages [13]. Effectively supporting people with a dual diagnosis requires specialist care programmes.

**Actions:**

- Ensure all care homes routinely refer residents for eye tests and that those with significant sight conditions attend a low vision clinic once a year.
- Care programmes for people with sight loss and dementia need to acknowledge the specific needs of a dual diagnosis.
- Find out about services to support people with sight loss and dementia, including consultancy services for pathway redesign – visit [rnib.org.uk/learningdisability](http://rnib.org.uk/learningdisability)

4. Stroke

Provide stroke survivors with sight loss support – almost 70 per cent of people who experience strokes will also experience some form of vision dysfunction [14], yet 45 per cent of stroke services provide no formal vision assessment for stroke patients [15]. Involving orthoptists with stroke survivors early on leads to improved detection of visual impairment, which may enable earlier discharge [7].

**Action:**

- Ensure eye health is incorporated into stroke rehabilitation programmes. Orthoptists are critical in providing rehabilitation and are crucial to effective rehabilitation programmes.

5. Referral processes

Ensure referral processes are effective – many eye conditions progress very quickly and whilst it is possible to stop the progression of sight loss in conditions such as wet AMD, diabetic retinopathy and glaucoma, any sight that has already been lost usually cannot be reversed. Ensuring that people referred to secondary eye care receive timely appointments and treatment is critical, but in some areas of the UK, appointment delays have meant people permanently losing sight unnecessarily [16].

Make appointment systems more flexible – many patients find the eye care system to be fragmented and confusing, with patients struggling to attend all their appointments because there is a lack of flexibility in the system.

**Actions:**

- Ensure eye care pathways are patient-centered, and include a positive non-attendance policy.
- Access research into the barriers and enablers around effective eye care pathways and information about effective eye care commissioning – visit [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals)
6. Treatment concordance

**Improve treatment concordance** – many eye conditions have complex treatment regimes that demand exact compliance to be effective. This means eye care patients may struggle to correctly comply with their medication. In the case of glaucoma, up to 50 per cent of patients fail to correctly comply with their treatment [17]. As a result, people still lose their sight unnecessarily 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.

**Actions:**

- Ensure eye clinics provide patients with appropriate treatment advice and support. Many eye clinics report not having sufficient time to support patients, but an ECLO can work to relieve this pressure [18]. Alternatively, other health professionals in primary care, such as pharmacists, may be in a position to support treatment concordance in the community.

- Visit [rnib.org.uk/eclo](http://rnib.org.uk/eclo)

7. Diabetes

**Improve prevention of diabetes** – investment in health promotion programmes tackling obesity will ultimately reduce avoidable sight loss that results from diabetic eye disease.

**Improve diagnosis of diabetes** – diabetes can cause a number of diabetic eye conditions, including diabetic retinopathy. Delays in the diagnosis and treatment of diabetes can cause long term damage to eye health.

**Increase uptake of diabetic retinopathy screening (DRS)** – if diabetic retinopathy is identified early and treated appropriately, blindness can be prevented. There is significant geographical variation in screening uptake. In 2011 the percentage of the diabetic population receiving screening for diabetic retinopathy ranged from 7.4 per cent to 91.8 per cent [19].

**Support patients to manage their condition** – research has shown that people find diabetes a difficult condition to manage, especially scheduling in a relatively large number of separate appointments [12]. A flexible appointment system can help people manage their appointments more effectively.

**Actions:**

- Run effective programmes for reducing obesity.

- Ensure local programmes diagnose diabetes at an early stage and treat diabetes long term, including effective programmes to increase uptake of routine DRS.

- Implement an integrated and patient-centred diabetes service to improve uptake of appointments and provide patient advice and support to improve self-management.

- For advice about improving treatment pathways, screening uptake and self-management visit [diabetesuk.org.uk/professionals](http://diabetesuk.org.uk/professionals)
Sight loss: A public health priority
4. Tackling eye health improves performance against other public health priorities

Improving eye health can improve performance against 10 other indicators in the Public Health Outcomes Framework.

1. Adults with a learning disability are in stable and appropriate accommodation (Framework reference 1.6) – this indicator focuses on improving safety and reducing the risk of social exclusion among the target group. People with learning disabilities are 10 times more likely to have serious sight problems than other people, yet when learning disability is the main condition, sight loss is often overlooked [20].

**Action:** Ensuring patients with a learning disability are referred for routine eye tests and that their environment is adapted around their sight loss can increase independence, reduce behavioural problems and minimise injury. RNIB’s Visual Impairment and Learning Disability service (VILD), provides consultancy and professional training to create seamless eye care services for people with learning disabilities. Visit [rnib.org.uk/learningdisability](http://rnib.org.uk/learningdisability)

2. Employment for those with long-term health conditions including adults (1.8) – 66 per cent of registered blind and partially sighted people of working age are not in employment and the more severe someone’s sight loss the less likely they are to gain employment [5]. Investing in eye health locally could reduce the severity of individual patients’ sight loss and thereby decrease the number of people who leave or are unable to secure employment as a result of their sight condition.

**Action:** Ensure blind and partially sighted people have access to employment support. RNIB can provide information, guidance and training schemes to help blind and partially sighted people gain and retain employment. Visit [rnib.org.uk/employment](http://rnib.org.uk/employment)

3. Social isolation (1.18) – there is a clear link between loneliness and poor mental and physical health. It is well documented that people with sight loss are more likely to be single, unemployed and suffer from depression than the UK average and 43 per cent of registered blind and partially sighted people say they would like to leave their home more often than they do [5]. Reducing sight loss will reduce the number of people at risk of social isolation.

**Action:** Work with RNIB to implement local solutions that can reduce isolation among blind and partially sighted people, including tele-befriending and accessing RNIB’s network of 3,000 volunteers. Visit [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals) for more information.

4. Smoking prevalence – adults (over 18s) (2.14) – smoking doubles the chances of developing AMD, the UK’s biggest cause of blindness [10]. Health campaigns that highlight the link between sight loss and smoking increase the number of people who quit [11].

**Action:** Integrate eye health messages into smoking cessation activity to create a more compelling case for quitting. Visit [rnib.org.uk/eyehealth](http://rnib.org.uk/eyehealth) for key eye health messages.
5. Recorded diabetes (2.17) – this indicator measures the number of adults, 17 and over, with diabetes. The indicator specifically references the impact of diabetic complications including eye diseases, because they “have a detrimental impact on quality of life”. Diabetic retinopathy screening can help limit the development of diabetic complications.

**Action:** Ensure there are effective programmes for early detection of undiagnosed diabetes and referral for treatment of care. For advice about improving recording processes and treatment pathways visit diabetesuk.org.uk/professionals

6. Access to non-cancer screening programmes (2.21) – diabetic retinopathy is the first condition referenced by this indicator, reflecting its role as the leading cause of preventable sight loss in working-age people in the UK [21]. Early detection through screening halves the risk of blindness [21].

**Action:** Ensure there are effective programmes so that all diabetic patients routinely attend diabetic retinopathy screening.

People with diabetes often find it a complex condition to manage, particularly attending all the separate health care appointments that are required. An integrated patient-centred diabetes service can significantly improve uptake of appointments and supporting patients to improve self management can enhance health and wellbeing significantly. For advice about improving treatment pathways, screening uptake and self management visit diabetesuk.org.uk/professionals

7. Self-reported wellbeing (2.23) – people with higher wellbeing have lower rates of illness, recover more quickly and for longer, and generally have better physical and mental health. Blind and partially sighted people are nine times more likely to feel worthless than people without sight loss, so reducing avoidable sight loss is likely to improve rates of self-reported wellbeing [22].

**Action:** Ensure blind and partially sighted people have access to emotional support and rehabilitation services from the point of diagnosis onwards. RNIB has a range of products, services and advice to help people adapt to living with sight loss and improve their long-term wellbeing. Visit rnib.org.uk/healthprofessionals

8. Injuries due to falls in people aged 65 and over (2.24) – falls are the largest cause of emergency hospital admissions for older people, and have a significant impact on long-term outcomes, including being a major cause of people moving into long-term nursing or residential care. When visual impairment is actively addressed as part of a falls reduction plan, falls can be reduced by up to 14 per cent [23].

**Action:** Ensure plans to tackle sight loss are built into falls prevention strategies. For advice about fall prevention strategies, and to access a model for calculating the number of falls attributable to sight loss in your local area, visit rnib.org.uk/healthprofessionals
9. Health-related quality of life for older people (4.13) – this indicator provides a greater focus on preventing ill health, preserving independence and promoting wellbeing – three areas that are fundamentally undermined by sight loss. The number of “oldest old” (over 85 years) has doubled in the past decade [21]. As 20 per cent of people over 75 years old and half of people over 90 years old are blind or partially sighted, tackling sight loss can help improve all three elements of this indicator [11].

**Action:** Ensure older people strategies acknowledge the prevalence of sight loss in this patient group and include solutions that are specific to blind and partially sighted people. RNIB has a range of services to help improve independence and wellbeing, including our free Quality of Life Assessment, which provides tailored advice about adapting to life with sight loss, including emotional support and accessing rehabilitation services. Visit [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals)

10. Hip fractures in people aged 65 and over (4.14) – hip fractures are a debilitating condition. Reduced avoidable sight loss has been proven to reduce the risk of falls, of which hip fractures, especially among the elderly, are a very real threat [23].

**Action:** Ensure plans to tackle sight loss are built into fall prevention strategies. For advice about fall prevention strategies, and to access a model for calculating the number of falls attributable to sight loss in your local area, visit [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals)
5. Resources to help public health professionals address eye health needs

RNIB is committed to helping public health professionals reduce avoidable sight loss in their local area. Pivotal to addressing this issue is the need to understand the eye health needs of the local population to inform the commissioning of effective primary and secondary eye care services.

RNIB, our partners in the eye health sector and Public Health England have created a range of resources to help understand local population needs and to commission relevant eye care services. All the resources outlined below are available at [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals)

**Public Health Outcomes Framework data tool**

Public Health England provides the data tool which allows you to compare your local authority against other authorities in the region and benchmark your local authority against the England average. The Public Health Outcomes Framework data tool is available at [phoutcomes.info](http://phoutcomes.info)

**RNIB’s sight loss data tool**

To map local prevalence of blind and partially sighted people and communities most at risk of sight loss, we have developed a sight loss data tool, which provides factual information about sight loss for each region and local authority in England. Examples of information that can be found using the sight loss data tool include:

- estimated number of people living with sight loss in your local area in 2011 and how this will change by 2020
- number of eye clinics in your local area, and what proportion have some form of early reach support in place
- estimated number of people living with AMD in your local area.

Access the tool at [rnib.org.uk/datatool](http://rnib.org.uk/datatool)

**Eye health JSNA guidance**

In conjunction with partners across the eye health sector, RNIB has launched Joint Strategic Needs Assessment (JSNA) guidance to support effective commissioning. The guidance, known as the JSNA template, is available at [commissioningforeyecare.org.uk](http://commissioningforeyecare.org.uk)

Newcastle has produced an excellent JSNA, including a strong profile of local eye health needs. Although more should be included around primary prevention, the modelling of sight loss and the links to learning disability and falls makes this a good model to emulate. Access the Newcastle JSNA at [newcastlejsna.org.uk](http://newcastlejsna.org.uk) under the “Sensory Impairment” section.
Commissioning guidance

“The commissioning for eye care website is an excellent resource.”

Ben Dyson, Director of Policy, Commissioning and Primary Care Commissioning Development Directorate, Department of Health

This commissioning guide is designed to support the commissioning cycle for eye care and sight loss prevention and to deliver against QIPP (Quality, Innovation, Productivity and Prevention) by:

- identifying potential local efficiency savings that can be made by focusing on eye care commissioning
- increasing the quality of patient care through innovative service design and integration of pathways for eye health and sight loss
- achieving outcomes defined in the NHS Outcomes Framework
- building productive working relationships with health and social care professionals across the eye care and sight loss sector
- making rapid progress on eye care issues important to local communities, key influencers and the media.

Visit commissioningforeyecare.org.uk
6. RNIB’s work to develop evidence about effective sight loss prevention interventions

Stopping people losing their sight unnecessarily is a key priority for RNIB. The development of seamless eye care pathways and an evidence base about what works in relation to sight loss prevention lies at the centre of this priority.

To this end, RNIB, in partnership with local health services, has developed five Community Engagement Projects (CEPs) across England, Northern Ireland, Scotland and Wales. Each CEP is piloting a range of eye health interventions to understand how effective they are at increasing service uptake.

Although sight loss can affect anyone at any time, several groups are at an increased risk of losing their sight unnecessarily. South Asian communities have an increased risk of diabetes and consequently diabetic eye conditions, including diabetic retinopathy, and African and African-Caribbean groups have an increased risk of developing glaucoma [1].

In addition, people living in socio-economic deprivation are less likely to access primary eye care services and are therefore at a greater risk of avoidable sight loss [11]. To ensure the pilot interventions make a difference where they are most needed, RNIB’s CEPs are focused on these at-risk groups.

Establishing an evidence base

RNIB commissioned several pieces of research to inform the development of interventions to be piloted in the CEPs:

- **Equity profiles** – local public health specialists conducted a systematic review of data in the five CEP sites to explore the population characteristics, service provision, patterns of use and outcomes among the target populations.

- **Evidence review** – De Montfort University conducted a review examining evidence of the effectiveness of intervention strategies to address inequalities in eye health care, relating particularly to AMD, cataracts, diabetic retinopathy and glaucoma [17].

- **Qualitative research** – conducted with commissioners, frontline eye health professionals, local communities and service users in the five CEP sites to explore awareness, experiences and views on accessing primary and secondary eye care services [12].

London School of Hygiene and Tropical Medicine is independently evaluating the pilots. This will include outcome, process and economic evaluation. The evaluation results will be available in 2014.

For the full research findings and more information about the CEPs visit [rnib.org.uk/healthprofessionals](http://rnib.org.uk/healthprofessionals)
References


[2] Data on AMD, cataract and glaucoma from National Eye Health Epidemiological Model (NEHEM) www.eyehealthmodel.org.uk. Commissioned from PHAST CIC by the Association of British Dispensing Opticians, the Association of Optometrists, the College of Optometrists, the Royal College of Ophthalmologists, the Federation of Ophthalmic and Dispensing Opticians and the Central (LOC) Fund.


RNIB offers practical support, advice and information to people with sight loss and those who work with them. We are committed to helping public health professionals effectively address the eye health needs of local populations.

For more information about RNIB’s work to prevent avoidable sight loss, visit rnib.org.uk/healthprofessionals or email professionals@rnib.org.uk

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