



Eye health and sight loss; statistics and information for developing a Joint Strategic Needs Assessment

Version 4: January 2015



1. Introduction

The number of people living with sight loss is set to increase over the coming decade. It is therefore important that when planning for local support and preventative services that the needs of people with sight loss and those at risk of losing their sight are understood.

The eye care and sight loss sector have produced this free resource for anyone involved with the development of or who are seeking to influence a Joint Strategic Needs Assessment (JSNA).

The guidance pulls together a number of datasets and information and should be approached as a 'menu of options', selecting those which are more relevant for the local authority and health area.

There are strong links between sight loss and other health determinants which are identified within this guidance to assist local authorities, clinical commissioning groups (CCG) and Health and Wellbeing Boards (HWB) to meet local health and wellbeing strategic priorities.

For further information and support on how to use the guidance and for details of local contacts please contact RNIB.

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Contents

Eye health and sight loss; statistics and information for developing a Joint Strategic Needs Assessment.....	1
1. Introduction	2
2. Understanding eye health and sight loss.....	4
2.1 The local cost of eye care	4
2.1.1 Spend related to eye care.....	4
2.1.2 How to access information on spend* related to eye care.....	5
2.2 National frameworks.....	5
2.2.1 Outcome frameworks.....	5
2.2.2 Public Health Outcome Framework	6
2.2.3 Local Eye Health Networks (LEHN)	7
3. Prevalence of sight loss	8
3.1. Sight loss data tool	8
3.2. Understanding the number of people living with sight loss in a locality	8
4. Eye conditions.....	9
5. Sight loss and local priorities	11
5.1. Age considerations	11
5.2. Socio-economic considerations	12
5.3. Ethnicity.....	12
5.4. Learning disabilities	12
5.5. Health determinants.....	12
6. Children and Young People	14
7. Assets and provision.....	19
8. Further considerations.....	20
References.....	22
Glossary of Terminology	26

2. Understanding eye health and sight loss

There are 1.86 million people in the UK living with sight loss. By 2020 this number is predicted to increase by 22 per cent and will double to almost four million people by the year 2050 (1). The increase can be attributed chiefly to an ageing population; over 80 per cent of sight loss occurs in people aged over 60 years (1).

The associated costs and demands on NHS outpatient services are high with ophthalmology having the second highest attendances in 2012-2013 (2).

In 2008 the direct and indirect costs of sight loss was £6.5 billion and by 2013 these costs had risen to £7 billion (3).

The Government have identified the importance of ensuring that people do not lose their sight unnecessarily. The Public Health Outcomes Framework for England includes an indicator for the prevention of sight loss, and recognises the link between sight loss and wider determinants of health (4).

2.1 The local cost of eye care

2.1.1 Spend related to eye care

In England, the average spend on problems of vision was £40,900 per 1,000 head of the population in 2010-11; a total cost of £2.14 billion that year (5). The main direct healthcare costs associated with eye care include:

Primary care

- Ophthalmic - primary ophthalmic services
- Prescribing and pharmacy - primary care prescribing relating to ophthalmology.

Secondary care

- Inpatient elective and day cases - all admitted patient care ophthalmology activity which takes place in a hospital setting where the admission is either elective or a day case
- Outpatient - expenditure relating to ophthalmology outpatient attendance or procedures.

2.1.2 How to access information on spend* related to eye care

NHS England provides an interactive benchmarking tool enabling commissioners to compare their expenditure across the programmes and care settings. Data for 2012/13 is available under “Problems of Vision”.

The benchmarking tool is available at:

<http://www.england.nhs.uk/resources/resources-for-ccgs/prog-budgeting>

This data can be used to identify how much is being spent on Problems of Vision and can allow for comparisons for similar areas.

RNIB’s Sight Loss Data Tool provides five indicators relating to spend at local authority upper tier level across the UK. www.rnib.org.uk/datatool

Additional support includes the Future Sight Loss UK reports, which provide health economists with a formula to forecast the prevalence and cost of sight loss and specific eye conditions for their locality (1) (4).

*Data relates to CCG “spend” and not “cost” of service.

2.2 National frameworks

2.2.1 Outcome frameworks

The NHS Outcomes Framework 2014 to 2015 sets out the outcomes and corresponding indicators that will be used to hold the NHS England to account for improvements in health outcomes.

Understanding and addressing of eye health and sight loss needs can support to meet all five domains of the Outcome Framework.

- Domain 1 Preventing people from dying prematurely
- Domain 2 Enhancing quality of life for people with long-term conditions
- Domain 3 Helping people to recover from episodes of ill health or following injury
- Domain 4 Ensuring that people have a positive experience of care
- Domain 5 Treating and caring for people in a safe environment and protecting them from avoidable harm.

Domains 1, 2 and 3

Sight loss can contribute to premature death and is an indicator of deteriorating health in conditions such as diabetes. Those who have sight

loss in addition to other conditions such as stroke, for instance, often have poorer outcomes than those without sight loss.

Sight loss can reduce people's resilience to the adverse effects of ill health and injury in general. It can increase frailty and reduces levels of mobility.

Domains 4 and 5

The most frequent users of NHS services are those aged 60 and over. They also make up the largest group of those who have problems with their sight. This correlation needs to be borne in mind in order to ensure accessibility of service provision and information.

<http://www.commissioningforeyecare.org.uk/>

2.2.2 Public Health Outcome Framework

The Public Health Outcome Framework (PHOF) concentrates on two high-level outcomes to be achieved across the public health system; increased healthy life expectancy and reduced differences in life expectancy, and healthy life expectancy between communities

The sight loss indicator measures the rate of preventable sight loss by measuring the numbers of all people who are certified sight impaired (partially sighted) or severely sight impaired (blind) and the numbers of these who have lost their sight from one of the three major causes of preventable sight loss: glaucoma, age-related macular degeneration and diabetic retinopathy.

Tackling these three conditions is the primary public health challenge in eye care. They are the biggest causes of certifiable blindness in England but with the right care, at the right time, in the right place, people can be treated effectively and, in many cases, their sight saved.

Addressing issues of eye health and sight loss will also help to meet other outcome frameworks, including those measuring outcomes of falls, strokes and diabetes. For more detail see Sight Loss: a Public Health Priority <http://www.rnib.org.uk/services-we-offer-advice-professionals-health-professionals/public-health-professionals>

The PHOF data tool, which is recognised by the Department of Health (DH), can be found at: <http://www.phoutcomes.info/>

It must be noted that there are some limitations with the data, for example the complexity of certification process and variability across the UK. The UK Vision Strategy is working with DH colleagues to improve the certification process and data collection.

However, despite these barriers, it is important that local bodies start to look at and compare local data in order to ensure that people do not lose their sight unnecessarily.

2.2.3. Local Eye Health Networks (LEHN)

LEHNS are clinically led, multi disciplinary networks, set up by NHS England, to improve the integration and delivery of patient focused eye health services with better outcomes. There are 26 sub-regional LEHNS in England alongside Local Professional Network (LPN) for Dentistry and Pharmacy.

The main functions of LEHNS as outlined in NHS England's Single Operating Framework are:

- **Improve access to sight tests for hard to reach groups.**
- **Support effective Eye Health Needs Assessments.**
- **Redesign local services in line with national eye health pathways.**
- **Develop integrated eye health services across primary, secondary and social care based on patient needs & improved outcomes.**

LEHNS can inform and support the inclusion of sight loss information in a JSNA or preferably a more detailed Eye Health Needs Assessment for their area.

Contact details for LEHN Chairs http://www.locsu.co.uk/eyecare-commissioning/local_eye_health_networks

The UK Vision Strategy CEE project worked with three Clinical Commissioning Groups in Gateshead, Bedfordshire and South Devon and Torbay to develop sustainable collaborative commissioning of eye health and sight loss services. CEE guidance has been produced, bringing together learning from the three project sites, with a suite of support tools, including guidance for LEHNS about how to complete an Eye Health Needs Assessment.

This guidance is now available to download from:
www.vision2020uk.org.uk/ukvisionstrategy/CEEGuidance

To find out more about the CEE project please visit:
www.vision2020uk.org.uk/ukvisionstrategy/commissioningproject

3. Prevalence of sight loss

3.1. Sight loss data tool

RNIB have produced a sight loss data tool which provides statistics on sight loss broken down to a local authority level for the UK. It is a free tool and provides information on

- General population, Certificate of Visual Impairment (CVI) and registration numbers
- Estimations of number of people living with sight loss in 2012 and predictions for 2020
- Those who are at risk of losing their sight
- Those at risk of sight threatening eye conditions including age-related macular degeneration, glaucoma, cataracts and diabetic retinopathy
- children and young people, NHS sight tests, and falls related to sight loss

Custom reports by local authority area or comparing up to three areas are also now available

www.nib.org.uk/datatool

3.2. Understanding the number of people living with sight loss in a locality

There are a range of data sources which can be accessed to provide an overview of the number of people living with sight loss within any local authority or CCG. A combination of methods may be used.

Certificate of Vision Impairment (CVI)

A dedicated certificate used by ophthalmologists to certify a person as either severely sight impaired (blind) or sight impaired (partially sighted). This data will also be used to measure the Public Health Indicator. The current CVI form consists of three main sections:

- Part 1 is completed by the ophthalmologist to certify the patient as sight impaired or severely sight impaired;
- Part 2 is used to record visual function and the cause of vision impairment;
- Part 3 is completed by eye clinic staff in consultation with the patient to capture epidemiological data.

The CVI is an important tool for collecting diagnostic and demographic data on patients certified. The collection and analysis of epidemiological data contained on the CVI form is the remit of the Certification Office which is based at Moorfields Eye Hospital in London. It is the CVI data which will be used to measure the Sight Loss Public Health Indicator, the data tool can be found at <http://www.phoutcomes.info/>

Registration data

Upon completion of a CVI by an ophthalmologist, a copy is sent to the relevant local social service departments to initiate the process of registering the person as blind or partially sighted. Councils with adult social services responsibilities in England are mandated to maintain a register of the number of blind and partially sighted people. Data is reported on a triennial basis based on returns submitted by councils to Health and Social Care Information Centre (HSCIC) - <http://www.hscic.gov.uk/>

The registration of blind and partially sighted people is voluntary; however it is a precondition for the receipt of certain financial benefits. Registration is not a prerequisite for all social service concessions and this factor means that the number of people registered in an area may under-represent the number of people eligible for registration.

There are also a large number of people with sight loss below registrable levels whose specific needs will need to be considered in service planning. These will include people identified as having low vision (sight loss that is not correctable by spectacles. For more detail see HSCIC article <http://goo.gl/uvT305>

POPPI and PANSI

Data on predictions of the number of people with sight loss affected by falls and dementia, which is based on census data

- POPPI (Projecting Older People Population Information) data looks at adults: www.poppi.org.uk
- PANSI (Projecting Adult Needs and Service Information) data looks at younger people: www.pansi.org.uk

4. Eye conditions

This section provides a definition of the leading causes of blindness and refers to particular issues which may need to be taken into further consideration. The prevention of sight loss is crucial as over 50 per cent of sight loss can be avoided ([1](#)).

Age-related macular degeneration (AMD)

This condition commonly affects people over the age of 50 and is the leading cause of blindness in people over the age of 65.

There are two main types of AMD: neovascular or exudative AMD commonly known as wet AMD; and atrophic commonly known as dry AMD.

- **Wet AMD** can develop quickly affecting central vision in a short period of time. Early identification and treatment of wet AMD is vital. Treatment

can halt the further development of scarring but lost sight cannot be restored.

Further consideration: it may be applicable to investigate the local policy for treatment and the fast track referral of wet AMD.

- **Dry AMD** can develop slowly and take a long time to progress There is currently no treatment for dry AMD. People with early and moderate stages of dry AMD are not eligible for registration, but it does have an impact upon a person daily life, for example they may have to stop driving.
In it its final stage, known as geographic atrophy, a person then can become eligible for registration.

Glaucoma

This is a group of eye conditions in which the optic nerve is damaged commonly, but not always, due to changes in eye pressure. Damage to sight can usually be minimised by early diagnosis in conjunction with careful regular observation and treatment.

Many glaucoma patients will attend regular appointments and take eye drops for the rest of their lives to prevent deterioration of vision. Some forms of glaucoma can be treated with laser surgery and surgery.

NICE have produced guidance (CG85) and quality standards on the diagnosis and management of chronic open angle glaucoma (COAG) and of ocular hypertension, which includes the monitoring of appointments and keeping a register of patients (6). There is also a NICE commissioning guidance (CMG44) for services for people at risk of developing glaucoma. <http://www.nice.org.uk/guidance/cm44> and <http://www.nice.org.uk/guidance/qualitystandards/glaucoma/Home.jsp>

Further consideration: it may be applicable to investigate whether glaucoma patients are being invited to and are attending follow-up appointments (in line with NICE guidance) and to consider the introduction of Glaucoma register.

Cataracts

This is a common eye condition that is prevalent in older people. The lens becomes less transparent and turns misty or cloudy. Cataracts over time can get worse and impact upon vision. A straightforward operation replaces the lens with an artificial one. A number of studies have demonstrated the cost benefits of cataracts surgery in improving life quality and reducing the number of falls (7).

Further consideration: it may be applicable to establish a local cataract treatment policy.

Diabetic retinopathy

This can lead to permanent sight loss, therefore screening and early diagnosis with appropriate intervention is essential. A Department of Health screening process has been introduced (8).

Further consideration: it may be applicable to explore the uptake of screening services for diabetic retinopathy, this information can be gathered from the NHS Atlas of Variation 2012

<http://www.rightcare.nhs.uk/index.php/atlas/diabetes>

Low vision

This refers to people who have some useful vision which can often be improved with low vision aids and adaptations. Low vision services may be based in a local hospital, located in opticians' practices or offered from a resource centre run by the local society for people with sight loss. To find out more about low vision services in your area, contact a local hospital eye department or speak to a GP, social services (the visual or sensory impairment team) or local society for people with sight loss (9).

The adults with low vision clinical commissioning guidance from the College of Optometrists and the Royal College of Ophthalmologists helps those designing and commissioning eye care to improve the value of their services. <http://www.rcophth.ac.uk/page.asp?section=904§ionTitle=Adults+with+low+vision>

Many patients with sight loss receive appointments in formats that they cannot read, consequently missing essential treatments which could prevent further deterioration of their sight.

5. Sight loss and local priorities

5.1. Age considerations

The prevalence of sight loss increases with age and the UK population is ageing. One in five people aged 75 and over and one in two people aged 90 and over are living with sight loss in the UK (1).

Data can be used from RNIB's Sight Loss Data Tool for the number of people aged 70 and over predicted to have been living with sight loss in 2012 and predictions for 2020.

www.nib.org.uk/datatool

5.2. Socio-economic considerations

Evidence shows that there is a link between people on low incomes and living in deprivation and people living with sight loss; three out of four blind or partially sighted people are living in poverty or on its margins (11).

5.3. Ethnicity

The risk of developing glaucoma is higher in African and African-Caribbean populations (4). People from South-East Asia and China are at higher risk of angle-closure glaucoma (10).

Evidence shows that people from the Asian population are at a higher risk of developing cataracts. African, African-Caribbean and Asian populations are at a higher risk of developing diabetic eye disease (1).

Evidence indicates that targeting preventative sight loss amongst people from black and ethnic minority (BME) communities can form part of a cost effective prevention programme (4).

Further consideration: it may be appropriate to look at local data for areas with BME communities to identify where there may be people at higher risk of sight loss and what provision is available in that locality.

5.4. Learning disabilities

There is a high prevalence rate of sight loss amongst adults with learning disabilities. An estimated 96,500 adults with learning disabilities in the UK, including 42,000 known to the statutory services, are blind or partially sighted. This means that nearly one in ten adults with learning disabilities is blind or partially sighted. Adults with learning disabilities are 10 times more likely to be blind or partially sighted than the general population (12).

Further consideration: data on the number of people with a learning disability and the number of those that are registered as blind or partially sighted. If a disparity is shown between the numbers of people with learning disability that are registered blind or partially sighted compared to prevalence levels it may indicate that some targeted work needs to be undertaken.

Sources of data include:

- Hospital Episode Statistics <http://www.hesonline.nhs.uk/>
- Registration data <http://goo.gl/vG4Oh5>

5.5. Health determinants

The impact of sight loss, both from uncorrected refractive error and eye conditions, coupled with other health determinants can dramatically increase

risk of ill health from falls, depression and the complications of co morbidities. The links between sight loss and other health determinants include:

Smoking

The evidence of a link between smoking and the UK's leading cause of sight loss is the same as the evidence of a link between smoking and lung cancer. Smokers not only double their risk of developing AMD but also tend to develop it earlier than non-smokers. Furthermore, smoking can make diabetes-related sight problems worse, and has been linked to the development of cataracts ([13](#)).

Research has shown that cessation programmes which link sight loss and smoking provide a motivation for people to reduce or give up smoking ([14](#)).

Obesity

Obesity has been linked to several eye conditions including cataracts and AMD. Obesity also has a strong link to diabetes and an exacerbation of sight deterioration in diabetic retinopathy ([15](#)).

Stroke prevention

Damage resulting from stroke can impact on the visual pathway of the eyes which can result in visual field loss, blurry vision, double vision and moving images. In addition there may be inability to read (alexia) or to write (agraphia).

Around 60 per cent of stroke survivors have some sort of visual dysfunction following stroke. The most common condition is homonymous hemianopia, a loss of half a person's visual field, which occurs in 30 per cent of all stroke survivors ([16](#)).

Blood pressure/hypertension

In addition to increasing the risk of stroke, uncontrolled high blood pressure increases the risk of both retinal vein and retinal artery occlusion. Both conditions can cause sudden loss of vision in one eye and can lead to further complications ([17](#)).

Dementia

At least 123,000 people in the UK have both dementia and serious sight loss ([1](#)). Most are aged over 65 and, among everyone of that age, normal ageing of the eye will reduce their vision to some extent. As the population ages an increasing number of people will experience both dementia and sight loss ([18](#)).

Falls

A recent review of evidence on the link between falls and sight loss found that almost half (47 per cent) of all falls sustained by blind and partially sighted people were directly attributable to their sight loss ([19](#)).

On average, the estimated medical cost of falls nationally is £269 million. Of the total cost of treating all accidental falls in the UK, 21 per cent was spent on the population with visual impairment ([19](#)).

Scuffham's formula can be used to calculate the number of falls that can be attributed to sight loss. For further information see Tammy Boyce, Falls - costs, numbers and links with visual impairment, August 2011 RNIB www.rnib.org.uk/sites/default/files/Falls_boyce_0.doc

Depression

Older people with sight loss are almost three times more likely to experience depression than people with good vision ([20](#)). The Royal College of Psychiatrists estimates that 85 per cent of older people with depression receive no help at all from the NHS ([21](#)).

Employment

66 per cent of registered blind and partially sighted people of working age are not in paid employment ([22](#)). People registered as blind or partially sighted are nearly five times more likely to have been not in paid employment for five years or more than the general population ([23](#))

Age, additional disability or health problems, severity of sight loss, educational level and ethnicity are all factors that influence the employment status of blind and partially sighted people of working age.

6. Children and Young People (CYP)

Vision impairment in children is a low incidence high impact disability. Children with vision impairment have different needs to adults with sight loss. In order to reduce lifelong inequalities, it is important that support is provided from birth, throughout childhood and the transition into adulthood. If this support is not received, then during their development, and life, chances can be severely limited.

Significant vision impairment can delay early childhood development and learning; including social communication, mobility, and everyday living skills. Children with vision impairment are at risk of poor outcomes across a range of emotional and social wellbeing indicators ([24](#)), which can have an effect on

adult life, limiting work opportunities (25). It can also have a major impact on the wellbeing and coping capacities of the family.

6.1 National picture

The Children and Young People's Health Forum, an independent group of experts set up by the Government, has developed recommendations for local authorities and CCGs to improve care for Children and Young People (CYP): <http://healthandcare.dh.gov.uk/forum-recommendations/>

The Healthy Child Programme sets out National Screening Guidelines. There are three key stages at which all children should be screened for ocular conditions and vision impairment. Early detection and treatment interventions are imperative to avoid preventable sight loss. Screening programmes are recommended at the new-born examination, the 6 to 8 weeks review, and the school-entry vision check at the age of 4-5 years:

<http://www.screening.nhs.uk/vision-child>

6.2 Measuring vision impairment in children

Children with vision impairment have various degrees and types of vision loss. The two common definitions of vision impairment in children are:

Medical definition is based on clinical measures of vision, in particular measures of visual acuity.

Functional definition focuses on how an individual child's vision impairment affects the way that they learn, develop and carry out everyday activities.

The following functional definition is generally accepted by the sight loss sector:

The child or young person's vision impairment interferes with optimal development, learning and achievements, unless adaptations are made in the methods of presenting learning experiences, the nature of the materials used and/or the learning environment.

The term 'learning' includes not just academic learning but the acquisition of mobility, life and social skills that in the case of a child or young person with vision impairment would be provided through habilitation education. This definition includes children and young people with other disabilities/impairments in addition to vision impairment, including those with profound and complex needs.

6.3 Understanding the number of children with vision impairment

The number of children with vision impairment is increasing, which is demonstrated by a steady year on year increase of children registered as blind or partially sighted. (26)

An estimated 2 in every 1,000 children and young people up to the age of 18 in the UK meet the WHO criteria for blindness and vision impairment. (27, 28)

An estimated 5 in every 10,000 of these children up to the age of 16 are severely sight impaired. (29)

The prevalence of vision impairment is significantly higher in children with learning difficulties than in the overall child population. (30)

6.4 Data sources

There is a range of information sources and statistics on children with vision impairment which can be used to help understand local need.

RNIB Data tool sets out the number of children with sight loss, broken down to local authority level www.rnib.org.uk/datatool

Department of Health (DH) registers provide data on the number of children aged 0-17 registered in England with a vision impairment.
<http://goo.gl/vG4Oh5>

Department for Education (DfE) data on the National Pupil Database from the Schools Census, show the number of pupils in England aged up to 19 identified as having vision impairment as their primary and occasionally their secondary special educational need (SEN), and pupils with multi-sensory impairment (MSI).

Please note DfE statistics under-represent children with vision impairment combined with additional disabilities/SEN, particularly pupils with learning disabilities.

<https://www.gov.uk/government/publications/children-with-special-educational-needs-an-analysis-2013>

RNIB survey of vision impairment services; provides an estimate of CYP with vision impairment, aged up to 18 in England in 2012

<http://www.rnib.org.uk/services-we-offer-advice-professionals-education-professionals/maintaining-quality-provision>

6.5 Causes of vision impairment in children

The causes of vision impairment in childhood are generally different to the causes of sight loss in adults. The four most common causes are:

Cerebral Vision Impairment is ante- or post-natal damage to the vision processing parts of the brain. Cerebral vision impairment accounts for 48% of blindness in children (29) and between 32% and 45% of all children with vision impairment. (31) (Cerebral vision impairment can be abbreviated to CVI.)

Optic nerve disorders are a group of conditions where the optic nerve doesn't transmit light signals to the brain correctly and accounts for about 28% of severe vision impairment in children. (30)

Retinal or macular dystrophies are umbrella terms for a range of inherited conditions which cause the retina to not function correctly. A significant proportion of children with retinal dystrophies have serious co-morbidity, with 13% having dual vision and hearing impairment. (32)

Congenital cataracts can cause significant sight loss which is preventable if it is detected and quickly treated. It is estimated 200-300 children are born with congenital cataract each year in the UK. (33)

6.6 Children most at risk of vision impairment

Particular groups are more at risk of developing a vision impairment:

Premature and low birth weight babies are at risk of underdevelopment of ocular structures, increased risk of squint, and cerebral vision impairment (26, 29). Very premature and low birth weight babies are at particular risk of retinopathy of prematurity, a preventable condition. Ocular screening on premature babies is recommended.

Guidelines can be found at:

<http://www.rcpch.ac.uk/improving-child-health/clinical-guidelines-and-standards/published-rcpch/clinical-guidelines-and-sta>

Genetic eye conditions can affect any structure of the eye or visual pathway. They are prevalent in socioeconomically deprived groups and in ethnic minority populations, particularly South Asian (32).

Maternal infections such as measles and rubella can cause childhood vision impairment. Measles immunisation is necessary to reduce preventable childhood blindness. (34)

Alcohol and drug exposure: a high percentage of children suffering from foetal alcohol syndrome have vision impairment and develop eye abnormalities. (35, 36) Maternal drug misuse affects the development of the eye and visual system causing sight loss. (37)

Smoking: exposure to maternal smoking increases the risk of prematurity, low birth weight and of ocular complications.

Children with learning disabilities have a very high prevalence of vision impairment. The estimated prevalence rate for vision impairment in the learning disabilities population aged 0-19 in the UK is 5.6%. (30)

6.7 Support for parents and children

The VISION 2020 UK Children and Young People's group have developed guidelines and a pathway which sets out the key needs and support milestones for children and young people and their families from the moment vision impairment is identified through to transition into the adult pathway. These guidelines are intended for those responsible for commissioning and providing services for children and young people and their families. They will assist with the interpretation and implementation of the UK Vision Strategy across health, education and social care.

The guidelines and pathway can be found:

<http://www.vision2020uk.org.uk/ukvisionstrategy/cyp-pathway>

Time of diagnosis: A key working approach should be available to provide information and support to parents to help them understand and accept their child's vision impairment and its implications in terms of any specialist needs. (38, 39)

Early support for babies and young children with vision impairment: A prompt referral should be made to a local authority specialist vision impairment education advisory service. Support can then be provided by a qualified teacher of children with vision impairment (QTVI). Support is particularly important in the first 2 years as development of social and communication skills can be seriously impeded. (40)

Support resources can be found at:

<http://councilfordisabledchildren.org.uk/what-we-do/networks-campaigning/early-support/resources/developmental-journals>

Education: Educational services have statutory responsibilities under SEN and equalities legislation. Approximately two thirds of children are educated in

mainstream schools, or mainstream schools additionally resourced for learners with vision impairment. (41)

Mobility and low vision assessments: Children with vision impairment require training in mobility and independence skills, including daily living activities. This is usually provided by a children's mobility officer/ habilitation worker. Low vision assessment, advice and dispensing of aids are important to assist children in all aspects of independent living.

6.8 Recommendations/key messages for commissioners

- Maternal and pre-natal care health promotion programmes should include messages regarding risk factors for congenital vision impairment.
- Specialist education services should be provided to support children with vision impairment and their families during early years, primary, secondary and post 16 provision. These services might be provided on a regional basis via consortia of local authorities.
- Access to services should be based on an assessment by specialist professionals of a child's functional vision impairment.
- Vision screening programmes should adhere to national guidelines.
- A local pathway should be developed to support children and families from birth into adulthood.

6.9 Examples of JSNA with information on disabled children

- Surrey JSNA for disabled children;
- Bolton JSNA for disabled children;
- Kent JSNA for children.

7. Assets and provision

A strong JSNA identifies current activities, service provision and assets, including gaps and examples of good practice and cost effective approaches. The UK Vision Strategy has produced guidance which may assist in identifying this information at <http://www.commissioningforeyecare.org.uk/>

Serious consideration should be given to implementing the new Public Health Indicator for eyes detailed in the Public Health Outcomes Framework "Improving outcomes and supporting transparency". This indicator will track the rates of three major causes of sight loss including glaucoma, age related macular degeneration (AMD) and diabetic retinopathy.

Current activity, provision and assets by the following providers may be considered

- Primary care; local optometrists can provide locally commissioned enhanced community services, usually negotiated through Local Optical Committees. General Ophthalmic Services activity statistics can assist; <http://www.hscic.gov.uk/primary-care>
- Secondary care; for example, hospital provision
- Adult social care; for example, rehabilitation, befriending service, housing
- Voluntary sector; for example, rehabilitation, advice, support, employment, welfare rights; independence

8. Further considerations

This section outlines considerations and suggested outcomes that should be considered for inclusion as part of the actions of a JSNA:

- Inclusion of eye health and sight loss in the Health and Wellbeing Strategy or Annual Report of the Director of Public Health; data collected to meet the Public Health Framework for Sight Loss may support this work.
- Eye health needs analysis to be conducted alongside a review of local eye care pathways to ensure the efficient and effective use of existing assets. This should include looking at medical and social aspects of the eye care journey.
- Conduct a review of existing systems, processes and services relating to the main eye conditions, including glaucoma follow-up appointments and treatment policies for AMD, to ensure patients have timely access to services
- Better integration of “Early Intervention Services” which provide support at time of sight loss including rehabilitation support, counselling services or Eye Care Liaison Officer to help people adjust to sight loss.
- Incorporating eye health messages into health campaigns concerning obesity, smoking cessation and the management of diabetes and glaucoma.
- Ensure vision screening programmes are in place for children as set out in national guidelines

- Ensure there is adequate uptake of screening for diabetic retinopathy and timely treatment following diagnosis.
- Develop a targeted Public Health campaign to raise awareness of the importance of regular sight tests, particularly around at risk groups such as older people or BME communities.
- Development of a local Eye Health Strategy group, based around the strategic outcomes of the UK Vision Strategy, to include partners like Local Professional Networks, health and social care professionals, patients and customers, voluntary sector and Local Optical Committees.

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Glossary of Terminology

Certificate of Vision Impairment (CVI)

The document signed by the ophthalmologist to identify someone as being 'sight impaired' or 'severely sight impaired'.

Sight impaired

The term used to identify someone who as been assessed by an ophthalmologist as being "substantially and permanently handicapped by defective vision caused by congenital (present at birth) defect, illness or injury."

Severely sight impaired

The term used to identify someone who as been assessed by an ophthalmologist as being "so blind as to be unable to perform any work for which eyesight is essential."

Sensory impairment

The term used to encompass visual impairment (those who are sight impaired or severely sight impaired) and hearing impaired (those who are profoundly deaf, deafened or hard of hearing). Sensory impairments may be congenital or acquired at any age.