

Oxfordshire

682,444
total population

21,900
people living with sight loss

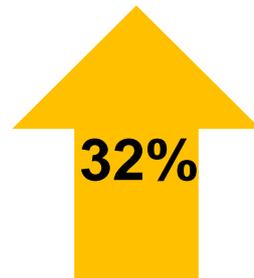
2,360
registered blind or partially sighted

201
Certificates of Vision Impairment in 2016/17

£291,300,000
Estimated cost of sight loss each year (includes direct and indirect costs)

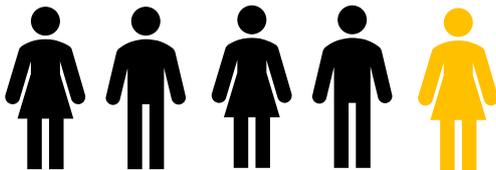
General population stats

- 18% aged 65+
- 9% from ethnic minority communities
- 4% of local authority in most deprived areas in the country
- 4% of people describe their health as “bad” or “very bad”
- 14% say that they have a long-term health condition or disability



increase in number of people with sight loss by 2030

UK stats



One in every five people will start to live with sight loss in their lifetime



Every day 250 people start to lose their sight

Main causes of sight loss

- Uncorrected refracted error (39%)
- AMD (23%)
- Cataract (19%)
- Glaucoma (7%)
- Diabetic eye disease (5%)

Blind and partially sighted people

- Only one in four in work
- 40% moderately or completely cut off
- 17% offered emotional support with sight loss
- 75% have experienced a deterioration in sight over the last 12 months

The references section at the end of this report lists sources for these statistics.

Oxfordshire: eye health and sight loss report

This report has been generated using RNIB's Sight Loss Data Tool. It provides a range of indicators relevant to blind and partially sighted people and those at risk of sight loss in Oxfordshire.

There is a comprehensive set of guidance notes to accompany this report. These notes provide further information on the data we have used throughout, including notes on terminology and the limitations of the data. Further information, including references, can be found at www.rnib.org.uk/datatool.

In terms of referencing, we suggest using the full sources at the end of the report. In addition, the RNIB Sight Loss Data Tool may be given as a reference.

Whilst every effort has been made to ensure the accuracy of the information in this report, sometimes mistakes do happen or information has changed. If you notice anything that doesn't look right, please let us know.

If you have any questions, please contact us at stats@rnib.org.uk.

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1. General population

This section provides an overview of the general population in Oxfordshire.

1.1 Age

There are 682,444 people living in Oxfordshire (1).

Oxfordshire has a higher proportion of people aged 75 years and over compared to the average for England (1, 2). Of the population:

- 21% are aged 17 or under.
- 61% are aged 18-64.
- 18% are aged over 65.

Table: Population by age band

Age band	Population
0-4	39,534
5-17	103,910
18-29	111,837
30-49	177,857
50-64	126,129
65-74	66,276
75-84	39,356
85+	17,545

Table: Proportion of population by age band

Age band	Oxfordshire	South East	England
0-4	6%	6%	6%
5-17	15%	16%	15%
18-29	16%	14%	16%
30-49	26%	26%	26%
50-64	19%	19%	19%
65-74	10%	10%	10%
75-84	6%	6%	6%
85+	3%	3%	2%

Note: totals may not add to 100% due to rounding.

1.2 Ethnicity

Oxfordshire has a lower proportion of people from minority ethnic groups than the average for England:

- 9% of the population are from a non-white ethnic group, compared to 15% in England (3).

Table: Total population by ethnicity

Ethnicity	Population
White	594,004
Mixed ethnicity	13,233
Asian / Asian British	26,039
Black / Black British	11,424
Other ethnic groups	9,098

Table: Proportion of population by ethnicity

Ethnicity	Oxfordshire	South East	England
White	91%	91%	85%
Mixed ethnicity	2%	2%	2%
Asian / Asian British	4%	5%	7%
Black / Black British	2%	2%	4%
Other ethnic groups	1%	1%	2%

Note: totals may not add to 100% due to rounding.

1.3 Socio-economics

- Oxfordshire is the 137th most deprived local authority in England (4).
- 4% of the local authority is within the 30% most deprived areas in the whole of England (4).
- There are 11,825 children living in low income families, which is better than the average for England (4).

1.4 Health

- The health of people in Oxfordshire is better than the England average (5). Life expectancy for both men and women is higher than the national average (6).
- 14% of people have a long-term health condition or disability that limits their day to day life (7).

- 4% of people describe their health as either 'bad' or 'very bad' (5).
- 12% of people smoke (8).
- 55% of adults are either overweight or obese (9).

1.5 Local labour market

- The unemployment rate in Oxfordshire is 3.30%, which is lower than the national average (10).
- There is an 28% gap in the employment rate between people with a long-term health condition and the overall population (11).

1.6 Districts

Within Oxfordshire there are 5 districts. The demographics within a county can vary significantly, and we've provided some details in the table below.

Table: Demographics by district

District	Total population	Proportion from BAME communities	Extent of deprivation
Cherwell	146,338	8%	3%
Oxford	161,291	22%	11%
South Oxfordshire	138,128	4%	0%
Vale of White Horse	128,738	5%	1%
West Oxfordshire	108,674	3%	0%

2. Adults living with sight loss

2.1 UK overview

More than two million people are estimated to be living with sight loss in the UK today (12). This sight loss is severe enough to have a significant impact on their daily lives. This figure includes:

- people who are registered blind or partially sighted;
- people whose vision is better than the levels that qualify for registration, but that still has a significant impact on their daily life (for example, not being able to drive);
- people who are awaiting or having treatment such as eye injections or surgery that may improve their sight;

- people whose sight loss could be improved by wearing correctly prescribed glasses or contact lenses.

The main causes of sight loss are:

- Uncorrected refracted error – 39 per cent
- AMD – 23 per cent
- Cataract – 19 per cent
- Glaucoma – 7 per cent
- Diabetic eye disease – 5 per cent

2.2 Oxfordshire

In Oxfordshire, there are an estimated 21,900 people living with sight loss (12). This includes around:

- 18,970 people living with partial sight.
- 2,910 people living with blindness.

Note: these figures include people whose vision is better than the levels that qualify for registration, but that still has a significant impact on their daily life (for example, not being able to drive).

The estimated prevalence of sight loss is higher in Oxfordshire compared to the average for England, with 3.20% of the population living with sight loss, compared to 3.10% nationally (12). This estimate is based on age and gender. Higher proportions of BAME communities, the number of people in low income households and access to healthcare services could all potentially impact on the prevalence of sight loss in the local area.

Age profile

In terms of the age profile of the people living with sight loss in Oxfordshire, we estimate that:

- 4,140 aged 18 to 64 years
- 4,280 aged 65 to 74 years
- 5,900 aged 75 to 84 years
- 7,320 aged 85 years and over

Future projections

By 2030 there are expected to be 29,000 people in Oxfordshire living with sight loss, an increase of 32% from 2018 (12).

Table: Estimated prevalence of sight loss over time, by severity

Severity of sight loss	2018	2025	2030
Partial sight	18,970	22,120	25,010
Blindness	2,910	3,490	4,000
Total	21,900	25,600	29,000

2.3 Districts

These estimates are based on age and gender of each district. As age is a key factor in the likelihood of living with sight loss, the older the population the higher the estimated prevalence of sight loss.

Higher proportions of BAME communities, the number of people in low income households and access to healthcare services could all potentially impact on the prevalence of sight loss in the local area. These estimates do not take these factors into account.

Table: Estimated number and proportion of people living with sight loss by district

District	Number of people living with sight loss	Proportion of the population living with sight loss
Cherwell	4,680	3.2%
Oxford	3,590	2.3%
South Oxfordshire	5,050	3.6%
Vale of White Horse	4,620	3.5%
West Oxfordshire	4,040	3.7%

3. Children and young people

There are over 25,000 visually impaired children aged 0-16 in the UK, and around 15,000 aged 17 to 25 (13). Around half of these children will have additional disabilities and special educational needs. This figure includes:

- children who are registered blind or partially sighted;
- children who are living with sight loss but who are not registered blind or partially sighted.

In Oxfordshire, there are an estimated:

- 270 blind and partially sighted children aged 0-16.
- 160 blind and partially sighted young people aged 17-25.

Table: Estimated number of blind and partially sighted children by age group

Age group	Blind	Partially sighted	Total
0 to 16 years	70	200	270
17 to 25 years	40	120	160

Note: Based on different childhood prevalence rates, totals may not sum to total number of people living with sight loss.

4. Certification and registration

A Certificate of Vision Impairment (CVI) certifies a person as either sight impaired (partially sighted) or severely sight impaired (blind). The purpose of the CVI is to provide a formal referral route for someone with sight loss to social care services. Each CVI form is signed by a consultant ophthalmologist in an eye clinic and a copy is sent to the person's local social services department. Upon receipt of the CVI, social services offer registration and other relevant advice and services.

4.1 Certification of Vision Impairment (CVI)

In 2016/17, 201 Certificates of Vision Impairment were issued in Oxfordshire (14).

This was lower than the overall rate for England. In Oxfordshire, 29 CVIs were issued per 100,000 people; compared to 42 per 100,000 people in England (14).

There have been numerous initiatives to support better identification of need and recording of CVI so that people get access to the support they need. A higher rate of certification may indicate a positive response to this work.

Public Health Outcomes Framework

The Public Health Outcomes Framework gathers information on the rate of CVIs for three of the main causes of preventable sight loss. In Oxfordshire:

- The rate of age related macular degeneration was 84 CVIs per 100,000 people over 65 years.
- The rate of glaucoma was 9 CVIs per 100,000 people over 40 years.
- The rate of diabetic eye disease was 29 CVIs per 100,000 people over 12 years.

Trend

Since 2012/13, there has been a decrease of -19% in the number of CVIs issued. (15).

4.2 Registration

Upon receipt of a completed CVI form, the social services department offer registration as blind or partially sighted and other relevant advice and support. Registers of blind and partially sighted people are maintained by all local authorities to help them plan and deliver services.

In Oxfordshire, there are 2,360 people registered as blind or partially sighted (16). 47% are registered as blind and 53% are registered as partially sighted.

Table: Registered blind or partially sighted by age band

Age band	Registered blind	Registered partially sighted	Total
0-17	10	30	Less than 5
18-49	180	140	320
50-64	165	115	280
65-74	125	100	225
75+	815	675	1,490
Total	1,300	1,060	2,360

Additional disabilities

1,780 of the people registered as blind or partially sighted in Oxfordshire have also been recorded as having an additional disability by the local authority (16).

New registrations

In the year 2016/17, there were 160 new registrations of blind and partially sighted people in Oxfordshire (16).

This compares to 201 new CVIs. Any difference in these numbers may be due to the time taken from certification to registration, and these processes falling into different calendar years.

Rate of registration

In Oxfordshire, there are 348 registered blind or partially sighted people per 100,000 population. This is lower than the overall rate for England (17).

Trends

From 2014 to 2017, there has been a decrease of -24% in the overall number of people registered as blind or partially sighted.

Over the same period, there has been a decrease of -32% in the number of new registrations (18).

5. Eye health

Health services are crucial for the diagnosis, treatment and monitoring of eye conditions, as well as good for helping people maintain good eye health.

5.1 Health administration

Oxfordshire's districts span multiple Clinical Commissioning Groups (CCGs).

The authority was formerly part of the Thames Valley Area Team.

5.2 NHS sight tests

In England, free NHS sight tests are available to people who meet certain criteria. For example, people who are aged 60 or over, children aged 15 and under, and people in receipt of certain benefits. Public data on sight tests only records those paid for by the NHS. Privately funded sight tests are not included in this data.

There were 436,231 sight tests in the Thames Valley Area Team in 2016/17 (19). In terms of the groups eligible for NHS sight tests:

- 200,311 sight tests were taken by people aged 60 years and over;
- 101,563 sight tests were taken by children aged 0-15;

- 19,908 sight tests were taken by students aged 16-18;
- 38,595 sight tests were taken by benefit claimants.

5.3 Outpatient appointments

When diagnosed with an eye condition, patients attend a hospital appointment with an ophthalmology specialist. The outpatient appointment data below includes all ophthalmology appointments however only a small proportion of these will involve patients diagnosed with serious sight loss.

There were 251,955 ophthalmology outpatient appointments in the Thames Valley Area Team in 2016/17 (20).

5.4 Inpatient procedures

Some eye conditions, such as cataract, require a patient to have a surgical procedure.

There were 19,533 ophthalmology inpatient procedures (also known as finished consultant episodes) in the Thames Valley Area Team in 2016/17 (21).

6. Services and support

Blind and partially sighted people may require services and support to help them remain independent. This section provides a summary of some key services.

The Sightline Directory provides more information on services aimed at helping blind and partially sighted in Oxfordshire. Please visit www.sightlinedirectory.org.uk for more details.

6.1 Eye Clinic Liaison Officers

Eye Clinic Liaison Officers or ECLOs, providing a sight loss advice service, are based within eye clinics or hospitals. They play an important role in helping patients recently diagnosed with an eye condition or who are experiences changes in their eye sight to understand the impact of their diagnosis and provide patients with emotional and practical support.

ECLO support is not available in every NHS Trust or Health Board. RNIB has collected information about where support is available.

This only includes qualified ECLOs, trained by RNIB, and there may be other support services available locally.

In the Thames Valley Area Team, 3 NHS Trusts had access to an Eye Clinic Liaison Officer out of a total of 3 Trusts (based on the busiest 150 trusts in England by ophthalmic appointments) (22).

Table: Availability of ECLO support by NHS Trust

	Ophthalmic outpatient appointments 2016/17	RNIB-trained ECLOs (Dec 2017)
Thames Valley Area Team		
Buckinghamshire Healthcare NHS Trust	60,288	Yes
Oxford University Hospitals NHS Trust	79,603	Yes
Royal Berkshire NHS Foundation Trust	112,064	Yes

6.2 Vision rehabilitation

Rehabilitation is the structured support put in place by a local authority (or commissioned agency) to maximise independence and quality of life for people with sight loss, as required by the Care Act 2014.

The mapping data we currently hold on the vision rehabilitation offer in local authorities is out of date. When this information is updated, we will include it in a future update to the Sight Loss Data Tool.

For further information please see the “Demonstrating the impact and value of vision rehabilitation”, which is available at www.rnib.org.uk/research.

6.3 Benefits

- In Oxfordshire, there were 502 blind and partially sighted people claiming either Personal Independence Payment (PIP) or Disabled Living Allowance (DLA) (23).
- At the end of the 2017, there were still 47.50% of working age DLA claimants waiting to be moved on to PIP (23).

6.4 Transport

Blue badges are parking badges for disabled people. Local authorities issue them to individuals and organisations concerned with the care of disabled people. Upon issue, a Blue Badge is valid for a period of three years. People who are registered as blind are automatically entitled to a blue badge if they register for one (i.e. there will be no further assessment of need).

In Oxfordshire, 217 blue badges were issued to people with sight loss in 2015/16. 582 blue badges were held by people registered blind in 2016, which represents 35% of people who are registered blind (24).

6.5 Education

In Oxfordshire, there are 91 pupils with a statement of special educational needs (SEN) or education, health and care (EHC) plans with vision impairment as their primary support need (25). Of these pupils:

- 59 are in primary school
- 29 are in secondary school
- 3 are in special schools

7. Cost of sight loss

RNIB has worked with Deloitte Access Economics to produce detailed analysis of the economic cost of sight loss in the UK. Based on the proportion of people living with sight loss in each area, we can estimate these costs for each local authority.

There are different costs related to eye health and sight loss:

- Direct costs of providing health and social care services.
- The indirect costs of informal care or lower employment.
- Economic impact of the reduction in the quality and length of life.

Direct costs

In Oxfordshire, the direct cost of sight loss is estimated to be £30,600,000 each year (27).

The main elements of this costs are hospital treatments, sight tests, prescriptions and social care. This is different to the NHS

programme budget costs as it includes estimated expenditure on things not provided or counted by the CCG.

Indirect costs

In Oxfordshire, the indirect cost of sight loss is estimated to be £57,700,000 each year (27). The main elements of this cost are:

- unpaid care provided by family and friends;
- lower employment rate for blind and partially sighted people;
- devices/modifications.

Wider economic impact

The estimated wider economic impact of cost of sight loss is estimated to be around £203,000,000 (27). This includes the costs associated with the reduction in the quality and length of life.

8. Sight threatening eye conditions

The figures presented in this section highlight estimates for all people living with certain eye conditions. This includes people who have experienced sight loss as a result of these eye conditions, people who have been diagnosed but have not experienced any sight loss yet, and also those people who are undiagnosed.

8.1 Age-related macular degeneration (AMD)

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

There are two main types of 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.
- 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 daily life, for example a person may have to stop driving.

In Oxfordshire, we estimate that (28):

- 28,600 people are living with the early stages of AMD;
- 2,180 are living with late stage dry AMD;

- 4,510 are living with late stage wet AMD.
- 6,360 combined late stage AMD.

Future projection

Between 2018 and 2030 there is estimated to be an increase of 40% in the number of people living with late stage AMD in Oxfordshire (28).

8.2 Cataract

Cataract 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. Numerous studies have demonstrated the cost benefits of cataracts surgery in improving life quality and reducing the number of falls

In Oxfordshire, we estimate that 7,080 people are living with cataract (28).

Future projection

Between 2018 and 2030 there is estimated to be an increase of 38% in the number of people living with cataract in Oxfordshire (28).

8.3 Glaucoma

This is a group of eye conditions in which the optic nerve can be damaged 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.

In Oxfordshire, we estimate that 13,700 people are living with ocular hypertension. A further 6,960 people are living with glaucoma (28).

Future projection

Between 2018 and 2030 there is estimated to be an increase of 27% in the number of people living with glaucoma in Oxfordshire (28).

8.4 Diabetic eye disease

People with diabetes are at risk of diabetic eye disease, which can affect the blood vessels in the eye. This can lead to permanent sight loss. Screening and early diagnosis with appropriate intervention is essential.

In Oxfordshire, we estimate that:

- 42,900 adults have diagnosed diabetes (29).
- 13,500 people are living with diabetic retinopathy (30).
- Of these, 1,240 have severe diabetic retinopathy, a later stage of the disease that is likely to result in significant and potentially certifiable sight loss (30).

Future projection

Between 2018 and 2030 there is estimated to be an increase of 4% in the number of people living with diabetic retinopathy in Oxfordshire (30).

8.5 Trends

These trends assume that the underlying prevalence of these eye conditions stays the same until 2030. The changes are due to demographics – as the population ages, more people will be living with eye conditions and sight loss.

Table: Estimated number of people living with sight threatening eye conditions in Oxfordshire, from 2018 to 2030

	2018	2025	2030
Early stage AMD	28,600	33,100	36,400
Late stage dry AMD	2,180	2,650	3,040
Late stage wet AMD	4,510	5,460	6,350
Total late state AMD	6,360	7,690	8,920
Cataract	7,080	8,480	9,800

Ocular hypertension	13,700	14,300	14,600
Glaucoma	6,960	1,940	8,840
Diabetes	42,900	45,500	47,500
Diabetic retinopathy	13,500	13,700	14,000
Severe retinopathy	1,240	1,270	1,290

8.6 Districts

These estimates are based on age and gender of each district. Higher proportions of BAME communities, the number of people in low income households and access to healthcare services could all potentially impact on the prevalence of sight loss in the local area. These estimates do not take these factors into account.

Table: Estimated number living with sight threatening eye conditions by district, 2018

District	Total late stage AMD	Cataract	Glaucoma	Diabetic retinopathy
Cherwell	1,350	1,510	1,510	2,920
Oxford	990	1,080	1,100	3,020
South Oxfordshire	1,500	1,670	1,620	2,780
Vale of White Horse	1,360	1,510	1,460	2,580
West Oxfordshire	1,190	1,330	1,280	2,190

9. Additional health problems and disabilities

Many blind and partially sighted people are also living with other health problems or disabilities. Sight loss is linked to age, and as we get older we are more likely to be living with many health conditions at the same time.

9.1 Stroke

Around 60% of people who experience strokes will also experience some form of visual impairment immediately after their stroke. There are national guidelines recommending specialist vision assessment for stroke survivors who have a suspected visual problem.

In Oxfordshire, 3,250 people have a long-standing health condition after experiencing a stroke (31).

9.2 Dementia

Up to 850,000 people in the UK have some form of dementia. Prevalence of sight loss is higher among people with dementia, especially those living in care homes.

In Oxfordshire, we estimate that 8,970 people are living with dementia (32). Within this group, we estimate that 1,460 people have dementia and significant sight loss (33).

9.3 Learning disabilities

People with learning disabilities are 10 times more likely to experience sight loss than the general population

In Oxfordshire, we estimate that 810 adults have a learning disability and partial sight. A further 230 adults have a learning disability and blindness (34).

9.4 Hearing impairment

In Oxfordshire, we estimate that 69,100 people have a moderate or severe hearing impairment, and 1,560 people have a profound hearing impairment (35).

9.5 Dual sensory loss

An estimated 4,240 people are living with some degree of dual sensory loss in Oxfordshire (36). Of these people, it is estimated that 1,670 are living with severe dual sensory loss (36).

The register of blind and partially sighted people also records hearing impairment. In Oxfordshire, 355 people registered blind and partially sighted are also deaf or hard of hearing (37).

9.6 Falls

Falls are more common, and are more likely to have serious outcomes, amongst older people. In some cases, falls can lead to serious medical problems and a range of adverse outcomes for health and wellbeing.

In Oxfordshire, it is estimated that:

Sight Loss Data Tool Version 4

- 2,690 people with sight loss aged over 65 experience a fall per year (38).
- Of these falls, 1,270 are directly attributable to sight loss (38).
- 210 people aged over 65 with sight loss experience a severe fall per year (here, a severe fall is defined as a fall that results in hospital admission through A&E) (38).
- Of these severe falls, 100 are directly attributable to sight loss (38).

Additional resources

RNIB Research and Knowledge Hub

Information on the latest research news and reports published by RNIB, as well as guides to impact measurement, blogs and other resources.

These resources can be accessed on the RNIB website: www.rnib.org.uk/research.

State of the Nation: Eye Health 2017

A summary report that provides the latest evidence on eye health across the UK. It supports strategic thinking to transform eye health and take steps to stop people losing their sight unnecessarily.

My Voice

Research into the views and experiences of over 1,200 registered blind and partially sighted people in the UK. My Voice covers a range of different topics, such as employment, transport and access to information and services. It is a key source in helping us understand the circumstances of blind and partially sighted people.

Sight Loss Data Tool

Sight Loss Data Tool is the UK's biggest collection of eye health data. The Excel based tool shows users all of the local figures relating to sight loss and eye health to use as evidence in campaigns, fundraising and service development.

Evidence-based reviews

RNIB's Evidence-based reviews look in detail at the experiences of blind and partially sighted people in different age groups. They include a profile of the group, the policies that govern and impact upon their lives, and a commentary on what the evidence tells us. We publish reviews focusing on children and young people, people of working age and older people.

For further information or queries, please contact us at stats@rnib.org.uk.

References

Please see the “References and Further Information” document for full details on the evidence used in this report. A summary of the evidence is provided below.

1. Office for National Statistics (2018), 2018 mid-year detailed population estimates.
2. Official subnational population projections and benchmarking tool.
3. 2011 Census ethnicity data and benchmarking tool.
4. DCLG (2015) Local Authority Summaries. Department for Communities and Local Government.
5. 2011 Census data for ‘general health’.
6. Office for National Statistics (2015) Life Expectancy at Birth and at Age 65, by Local Areas in England and Wales.
7. 2011 Census data for ‘Long-term health problem or disability’.
8. Public Health England (2017), Public Health Outcomes Framework, ‘Smoking Prevalence in adults - current smokers’, 2016.
9. Public Health England (2017), Public Health Outcomes Framework, ‘Percentage of adults (aged 18+) classified as overweight or obese’, 2015/16.
10. NOMIS (2018), Model-based estimates of unemployment. March 2018. NOMIS.
11. Public Health England (2017) Public Health Outcomes Framework, 1.08i - Gap in the employment rate between those with a long-term health condition and the overall employment rate 2016/17.
12. Pezzullo et al (2017). The economic impact of sight loss and blindness in the UK adult population. RNIB and Deloitte Access

Economics. Prevalences applied to subnational population projections.

13. Keil (2013), Key statistics on number of blind and partially sighted children and young people in England. RNIB ; Morris and Smith (2008), Educational provision for blind and partially sighted children and young people in Britain: 2007. Prevalences applied to subnational population projections.

14. Public Health England (2018), Public Health Outcomes Framework Data Tool; indicators on avoidable sight loss.

15. Public Health England (2018), Public Health Outcomes Framework Data Tool; indicators on avoidable sight loss: data for 2013/14 and 2016/17.

16. NHS Digital (2017) Registered Blind and Partially Sighted People - England, Year ending 31 March 2017.

17. NHS Digital (2017) Registered Blind and Partially Sighted People - England, Year ending 31 March 2017 ; and benchmarking tool.

18. NHS Digital (2017) Registered Blind and Partially Sighted People - England, Year ending 31 March 2017.
Health and Social Care Information Centre (2014), Registered Blind and Partially Sighted People - England, Year ending 31 March 2014.

19. NHS Digital (2017), General Ophthalmic Services, Activity Statistics, England, 2016-17.

20. NHS Digital (2017), Outpatients - Provider level analysis 2016-17, Table 8: Hospital provider attendances broken down by main specialty.

21. NHS Digital (2017), Hospital Admitted Patient Care Activity, 2016-17, Provider Level Analysis.

22. RNIB (2018), Mapping of RNIB-qualified sight loss advisors in the UK. Unpublished.

23. Department for Work and Pensions (2018) DLA cases in payment: local authorities by main disabling condition (Nov 2017) ; Department for Work and Pensions (2018) PIP claims in payment: local authorities by disability (Nov 2017).

24. Department for Transport Statistics (2016), Blue badge scheme statistics: 2016.

25. Department for Education (2017) Special educational needs in England: January 2017.

26. NHS England (2015), 2013-14 CCG Programme Budgeting Benchmarking Tool, Indicator 08. Problems of vision.

27. Pezzullo et al (2017). The economic impact of sight loss and blindness in the UK adult population. RNIB and Deloitte Access Economics. Cost apportioned out to local authorities using population data.

28. NEHEM (2013) National Eye Health Epidemiological Model. Data and models by Public Health Action Support Team, published by Local Optical Committee Support Unit. Prevalences applied to subnational population projections.

29. Diabetes UK (2013) Diabetes in the UK 2013. Diabetes UK. Prevalences applied to subnational population projections.

30. R. Mathur et al (2015), Diabetic eye disease: A UK Incidence and Prevalence Study, London School of Hygiene and Tropical Medicine. RNIB. Prevalences applied to subnational population projections.

31. POPPI (2013), Projecting Older People Population Information System. Institute of Public Care for the Department of Health ; General Household Survey 2007, table 7.14 Chronic sickness: rate per 1000 reporting selected longstanding conditions, by sex and age, Office for National Statistics. Prevalences applied to subnational population projections.

32. POPPI (2013), Projecting Older People Population Information System. Institute of Public Care for the Department of Health. Prevalences applied to subnational population projections.

33. Thomas Pocklington Trust (2007), Dementia and serious sight loss, Occasional paper February 2007, number 11. Prevalences applied to subnational population projections.

34. Emerson and Hatton (2004), Estimating the Current Need/Demand for Supports for People with Learning Disabilities in England. Lancaster: Institute for Health Research, Lancaster University, 2004 ; Emerson and Robertson (2011), The Estimated Prevalence of Visual Impairment among People with Learning Disabilities in the UK. RNIB. Prevalences applied to subnational population projections.

35. POPPI (2013), Projecting Older People Population Information System. Institute of Public Care for the Department of Health ; Davis A (Ed.), Hearing in Adults (1995), Whurr Publishers Limited ; Davis A et al, Health Technology Assessments 11(42):1-294 (October 2007). Health Technology Assessments. Prevalences applied to subnational population projections.

36. Robertson J and Emerson E (2010), Estimating the Number of People with Co-Occurring Vision and Hearing Impairments in the UK. Centre for Disability Research. Prevalences applied to subnational population projections.

37. Health and Social Care Information Centre (2014), Registered Blind and Partially Sighted People - England, Year ending 31 March 2014, additional disability.

38. Boyce T, Stone MK, Johnson S and Simkiss P (2013), Projecting numbers of falls related to visual impairment. British Journal of Healthcare Management Vol 19 No 6. ; Scuffham, P. et al, (2003), Incidence and costs of unintentional falls in older people in the United Kingdom, Journal of Epidemiology and Community Health, Vol. 57, No.9, Sept. 2003, pp.740-744. Prevalences applied to subnational population projections.