

North East Lincolnshire

159,826

total population

5,490

people living with sight loss

665

registered blind or partially sighted

41

Certificates of Vision Impairment in 2016/17

£73,310,000

Estimated cost of sight loss each year (includes direct and indirect costs)

General population stats

- 20% aged 65+
- 3% from ethnic minority communities
- 38% of local authority in most deprived areas in the country
- 6% of people describe their health as “bad” or “very bad”
- 20% 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.

North East Lincolnshire: 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 North East Lincolnshire.

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 North East Lincolnshire.

1.1 Age

There are 159,826 people living in North East Lincolnshire (1).

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

- 22% are aged 17 or under.
- 59% are aged 18-64.
- 20% are aged over 65.

Table: Population by age band

Age band	Population
0-4	9,653
5-17	24,739
18-29	22,792
30-49	38,828
50-64	31,916
65-74	17,195
75-84	10,512
85+	4,191

Table: Proportion of population by age band

Age band	North East Lincolnshire	Yorkshire and the Humber	England
0-4	6%	6%	6%
5-17	16%	15%	15%
18-29	14%	16%	16%
30-49	24%	25%	26%
50-64	20%	19%	19%
65-74	11%	10%	10%
75-84	7%	6%	6%
85+	3%	2%	2%

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

1.2 Ethnicity

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

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

Table: Total population by ethnicity

Ethnicity	Population
White	155,421
Mixed ethnicity	1,186
Asian / Asian British	1,524
Black / Black British	411
Other ethnic groups	1,074

Table: Proportion of population by ethnicity

Ethnicity	North East Lincolnshire	Yorkshire and the Humber	England
White	97%	89%	85%
Mixed ethnicity	1%	2%	2%
Asian / Asian British	1%	7%	7%
Black / Black British	0%	2%	4%
Other ethnic groups	1%	1%	2%

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

1.3 Socio-economics

- North East Lincolnshire is the 28th most deprived local authority in England (4).
- 38% of the local authority is within the 30% most deprived areas in the whole of England (4).
- There are 7,885 children living in low income families, which is worse than the average for England (4).

1.4 Health

- The health of people in North East Lincolnshire is worse than the England average (5). Life expectancy for both men and women is lower than the national average (6).
- 20% of people have a long-term health condition or disability that limits their day to day life (7).

- 6% of people describe their health as either 'bad' or 'very bad' (5).
- 20% of people smoke (8).
- 65% of adults are either overweight or obese (9).

1.5 Local labour market

- The unemployment rate in North East Lincolnshire is 5.2%, which is higher than the national average (10).
- There is an 30% gap in the employment rate between people with a long-term health condition and the overall population (11).

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 North East Lincolnshire

In North East Lincolnshire, there are an estimated 5,490 people living with sight loss (12). This includes around:

- 4,750 people living with partial sight.
- 730 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 North East Lincolnshire compared to the average for England, with 3.4% of the population living with sight loss, compared to 3.1% 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 North East Lincolnshire, we estimate that:

- 1,010 are aged 18 to 64 years
- 1,100 are aged 65 to 74 years
- 1,550 are aged 75 to 84 years
- 1,770 are aged 85 years and over

Future projections

By 2030, there are expected to be 6,590 people in North East Lincolnshire living with sight loss, an increase of 20% from 2018 (12).

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

Severity of sight loss	2018	2025	2030
Partial sight	4,750	5,230	5,690
Blindness	730	820	910
Total	5,490	6,050	6,590

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 North East Lincolnshire, there are an estimated:

- 70 blind and partially sighted children aged 0-16.
- 30 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	20	50	70
17 to 25 years	10	20	30

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, 41 Certificates of Vision Impairment were issued in North East Lincolnshire (14).

This was lower than the overall rate for England. In North East Lincolnshire, 26 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 North East Lincolnshire:

- The rate of age related macular degeneration was 51 CVIs per 100,000 people over 65 years.
- The rate of glaucoma CVIs per 100,000 people over 40 years is not available in the latest data.
- The number of diabetic eye disease CVIs was too low to say the rate.

Trend

Since 2012/13, there has been a decrease of -52% 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 North East Lincolnshire, there are 665 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	10	20
18-49	45	55	100
50-64	60	60	120
65-74	45	45	90
75+	120	215	335
Total	285	385	665

Additional disabilities

20 of the people registered as blind or partially sighted in North East Lincolnshire have also been recorded as having an additional disability by the local authority (16).

New registrations

In the year 2016/17, there were 165 new registrations of blind and partially sighted people in North East Lincolnshire (16).

This compares to 41 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 North East Lincolnshire, there are 416 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 an increase of 280% in the overall number of people registered as blind or partially sighted.

Over the same period, there has been an increase of 71% 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 for helping people maintain good eye health.

5.1 Health administration

North East Lincolnshire is coterminous with NHS North East Lincolnshire CCG.

The local authority was formerly part of the North Yorkshire and Humber 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 447,007 sight tests in the North Yorkshire and Humber Area Team in 2016/17 (19). In terms of the groups eligible for NHS sight tests:

- 181,762 sight tests were taken by people aged 60 years and over;
- 90,283 sight tests were taken by children aged 0-15;
- 15,453 sight tests were taken by students aged 16-18;
- 56,382 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 244,899 ophthalmology outpatient appointments in the North Yorkshire and Humber Area Team in 2016/17 (20). The breakdown by major NHS Trust is in section 6.1 below.

5.4 Inpatient procedures

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

There were 22,394 ophthalmology inpatient procedures (also known as finished consultant episodes) in the North Yorkshire and Humber 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 North East Lincolnshire. 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 North Yorkshire and Humber Area Team, 2 NHS Trusts had access to an Eye Clinic Liaison Officer out of a total of 4 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 (Jul 2018)
North Yorkshire and Humber Area Team		
Harrogate and District NHS Foundation Trust	26,826	No
Hull and East Yorkshire Hospitals NHS Trust	65,202	Yes
Northern Lincolnshire and Goole NHS Foundation Trust	49,875	No
York Teaching Hospital NHS Foundation Trust	102,996	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 North East Lincolnshire, there were 249 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 41.0% 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 North East Lincolnshire, 33 blue badges were issued to people with sight loss in 2015/16. 115 blue badges were held by people registered blind in 2016, which represents 135% of people who are registered blind (24).

6.5 Education

In North East Lincolnshire, there are 32 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:

- 18 are in primary school
- 12 are in secondary school
- 2 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.
- Indirect costs of informal care or lower employment.
- Economic impact of the reduction in the quality and length of life.

Direct costs

In North East Lincolnshire, the direct cost of sight loss is estimated to be £7,710,000 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 North East Lincolnshire, the indirect cost of sight loss is estimated to be £14,500,000 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 £51,100,000 (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 North East Lincolnshire, we estimate that (28):

- 7,310 people are living with the early stages of AMD;
- 560 are living with late stage dry AMD;
- 1,160 are living with late stage wet AMD.
- 1,640 combined late stage AMD.

Future projection

Between 2018 and 2030 there is estimated to be an increase of 25% in the number of people living with late stage AMD in North East Lincolnshire (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 North East Lincolnshire, we estimate that 1,810 people are living with cataract (28).

Future projection

Between 2018 and 2030 there is estimated to be an increase of 25% in the number of people living with cataract in North East Lincolnshire (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 North East Lincolnshire, we estimate that 3,290 people are living with ocular hypertension. A further 1,760 people are living with glaucoma (28).

Future projection

Between 2018 and 2030 there is estimated to be an increase of 17% in the number of people living with glaucoma in North East Lincolnshire (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 North East Lincolnshire, we estimate that:

- 10,500 adults have diagnosed diabetes (29).
- 3,160 people are living with diabetic retinopathy (30).
- Of these, 290 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 - 1% in the number of people living with diabetic retinopathy in North East Lincolnshire (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 North East Lincolnshire, from 2018 to 2030

	2018	2025	2030
Early stage AMD	7,310	8,000	8,560
Late stage dry AMD	560	630	700
Late stage wet AMD	1,160	1,290	1,460
Total late state AMD	1,640	1,820	2,050
Cataract	1,810	2,010	2,270
Ocular hypertension	3,290	3,350	3,380
Glaucoma	1,760	2,390	2,060
Diabetes	10,500	10,700	11,000
Diabetic retinopathy	3,160	3,130	3,130
Severe retinopathy	290	290	290

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 North East Lincolnshire, 830 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 North East Lincolnshire, we estimate that 2,260 people are living with dementia (32). Within this group, we estimate that 370 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 North East Lincolnshire, we estimate that 200 adults have a learning disability and partial sight. A further 55 adults have a learning disability and blindness (34).

9.4 Hearing impairment

In North East Lincolnshire, we estimate that 17,400 people have a moderate or severe hearing impairment, and 390 people have a profound hearing impairment (35).

9.5 Dual sensory loss

An estimated 1,050 people are living with some degree of dual sensory loss in North East Lincolnshire (36). Of these people, it is estimated that 400 are living with severe dual sensory loss (36).

The register of blind and partially sighted people also records hearing impairment. In North East Lincolnshire, 0 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.

Sight Loss Data Tool Version 4

In North East Lincolnshire, it is estimated that:

- 690 people with sight loss aged over 65 experience a fall per year (38).
- Of these falls, 330 are directly attributable to sight loss (38).
- 55 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, 25 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.