

Section: Health Strategy (JSNA)

Chapter: Warrington JSNA Adults with a
Sensory Impairment - Service Uptake
Chapter

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Please read this chapter in conjunction with -

JSNA Chapters:

[Warrington Joint Strategic Needs Assessment Index](#)

[Warrington JSNA Children and Young People with Disabilities Chapter](#)

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Warrington Joint Strategic Needs Assessment (JSNA) 2011 - Adults with a Sensory Impairment - Service Uptake Chapter



The Joint Strategic Needs Assessment (JSNA) considers a wide range of factors that affect the health and wellbeing of the people of Warrington. The objective of the JSNA is to involve partner organisations, such as the local NHS, local authorities, Police, Fire and third sector organisations in order to provide a top level, holistic view of current and future need within the borough. The JSNA is used to agree key priorities to improve the health and wellbeing of all our communities at the same time as reducing health inequalities.

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Executive Summary

Introduction

Visual Impairment: Worldwide, about 314 million people are visually impaired. Of these, approximately 14% (45 million) are blind.

Most people (87%) who are visually impaired live in developing countries. In developing countries, cataracts (a cloudy area that forms in the lens of the eye) are responsible for most cases of blindness (48%).

With the right treatment, about 85% of visual impairment cases are avoidable, and approximately 75% of all blindness can be treated or prevented.

Due to improved public health, the number of people who become blind after having an infectious disease has fallen over recent years. However, age-related visual impairment is increasing.

Visual impairment usually affects older people and, globally, women are more at risk than men (NHS, 2012b).

Visual impairment is most often grouped into two categories, *blindness* and *partially sighted*. In this chapter, *blindness* and *serious visual impairment* are used together, as are *partially sighted* and *sight impaired*.

The World Health Organization (WHO) defines blindness as severe sight loss, where a person is unable to see clearly how many fingers are being held up at a distance of 3m (9.8 feet) or less, even when they are wearing glasses or contact lenses. However, someone who is blind may still have some degree of vision. WHO defines partial sightedness as where a person cannot clearly see how many fingers are being held up at a distance of 6m (19 feet) or less, even when they are wearing glasses or contact lenses (NHS, 2012b).

Hearing Impairment: Action on Hearing Loss (formerly the Royal National Institute for the Deaf) estimates that there are more than 10 million people in the UK with some form of hearing loss (NHS, 2012c).

There are three main types of hearing loss (NHS, 2012c):

- Conductive Hearing Loss – where sounds are unable to pass from the outer ear to the inner ear, often as the result of a blockage such as earwax, glue ear¹, a build-up of fluid due to an ear infection, a perforated ear drum or a disorder of the hearing bones.
- Sensorineural Hearing Loss – the sensitive hair cells either inside the cochlea or the auditory nerve are damaged, either naturally through ageing, or as a result of injury.
- Mixed Hearing Loss – it is possible to get both types of hearing loss at the same time.

Key Issues and Gaps

Key issues and gaps identified through user consultation include:

- The requirement for the services provided to be local (in Warrington).
- The services available should be accessible and open at convenient times.
- Staff should be consistent, reliable and well trained, with good signing skills and deaf awareness.
- People should have access to new technology to help with independent living.
- People should be made aware of new developments, such as access to personal budgets².

Recommendations for Commissioning

Sight Loss:

- Developing on the initial links that have recently been made with Action for Blind People and the appointment of a Senior Counsellor. Key tasks identified focus on developing emotional support services for service users and their carers.
- Developing support services for younger adults who have a sight loss. Working with already established services, such as the Warrington VIP Centre (who traditionally provide support for older service users), to either work in partnership to develop the already established services or to plan and develop additional services.
- To implement the recommendations outlined in the UK Vision Strategy within Warrington.
- To influence the residential care sector as part of our contractual arrangements to develop staff awareness in relation to sight loss and dual sensory loss. To also provide appropriate equipment/technology to meet residents' specific needs.
- To provide a wider range of accessible information that will support independence.

Hearing Loss:

- Developing on the initial links that have recently been made with Merseyside Society for Deaf People in order to plan and deliver a comprehensive range of training packages for key staff within Warrington Borough Council (WBC). Ensuring that WBC staff are fully 'Deaf Aware' and skilled in providing a quality service to all WBC customers who have the full range of hearing loss.
- Develop the initial links made with Health Authority partners such as the Eye Care Liaison Officers and Audiology Clinic, both at Warrington General Hospital, to ensure effective partnership working and service promotion.
- To influence the residential care sector as part of our contractual arrangements to develop staff awareness in relation to hearing loss and provide appropriate equipment/technology to meet residents' specific needs.
- To influence and identify residential and domiciliary care providers which can offer support to service users who communicate using British Sign Language by training/employing staff with the skills to communicate.
- To provide a wider range of accessible information that will support independence.

Telecare:

- Discussions are underway to consider the development of a 'telecare smart flat'. This property would provide an ideal opportunity to raise awareness, understanding and the benefits of telecare and sensory equipment and its role in supporting service users and carers. Work would involve identifying a local housing agency to work in partnership with the STS team. The STS team would then take on the responsibility to fully equip the property with a wide range of telecare and sensory equipment. The STS team would meet all the costs associated with the rent of the agreed property.
- To increase levels of procurement for all types of equipment to meet the increased demand across health and social care. This directly links with the council's commitment to prevention.
- To develop a response service that will support the needs of people with telecare equipment and prevent unnecessary hospital admissions.
- To develop the use of telehealth in order for the whole system to benefit from the outcomes outlined by the Department of Health (DoH) in their recent *3 Million Lives* research.
- To promote the use of telecare across the private residential care sector, as part of our contractual arrangements, in order to reduce the number of safeguarding concerns and increase the quality of care.
- To recognise the need to monitor, repair and replace equipment that has been installed and accommodate rapidly changing and improving telecare equipment available.

Footnotes

¹ Glue ear is a common childhood condition in which the middle ear becomes filled with fluid. The medical term for glue ear is otitis media with effusion (www.nhs.uk).

² A personal budget is money that is available from the council to meet your social care needs, allowing a service user more control over the way their support and care is organised.

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1) Who's At Risk and Why

1.1) Visual Impairment

1.1.1) Falls Risk: In 1999, there were over 2.35 million accidental falls in the UK that required hospital treatment. Of these falls, 189,000 occurred in individuals with visual impairment, of which 89,500 can be attributed to the visual impairment itself. The estimated medical costs of these falls were £269 m (range: £193 m-£360 m) and £128 m (range: £32 m-£240 m), respectively.

Swets (2002) found that 89% of these falls, and the majority of the costs, occurred in those aged 75 years and over. Results were most sensitive to the relative risks of falls and the proportion of long-term care costs attributed to the fall. Of the total cost of treating all accidental falls in the UK, 21% was spent on the population with visual impairment and 10% was directly attributable to visual impairment.

1.1.2) Smokers: People who smoke are up to three times more likely to develop cataracts than non-smokers, due to the chemicals found in cigarette smoke (NHS, 2012f).

1.2) Hearing Impairment

1.2.1) Age: Most people begin to lose a small amount of their hearing when they are 30 to 40 years old. This hearing loss increases as people get older. By the age of 80, most people will have significant hearing impairment.

1.2.2) Loud Noises: Another common cause of hearing loss is damage to the ear from loud noises. This is known as acoustic trauma and can occur when part of the delicate inner structure of the ear becomes damaged (NHS, 2012e).

In particular, people who are at risk of developing acoustic trauma include those who:

- Work with noisy equipment (such as pneumatic drills or compressed-air hammers).
- Work in environments where there is loud music (such as nightclub staff).
- Listen to music at a high volume through headphones.

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2) The Level of Need in the Population

2.1) Sight Loss 18-64

2.1.1) Serious Visual Impairment: Table 1 shows the estimated number of adults aged 18-64 that currently live in Warrington with a serious visual impairment and require help with daily activities.

Table 1: People aged 18-64 Predicted to have a Serious Visual Impairment in Warrington (2011)

Age-Band	Number
18-24	10
25-34	16
35-44	19
45-54	20
55-64	16
Total 18-64	81

Totals may not sum due to rounding.
(Source: www.PANSI.org.uk)

The data in Table 1 is based on a review by Tate et al., (2005). "A review of epidemiological studies performed in Western Europe, North America and Australia covering the age group 20 to 59 years found the prevalence of blindness was 0.08 and, of visual acuity¹ 6/24 to 6/48, was 0.07%. These figures agree well with the prevalence of registrations in a similar age range and we conclude that registration data provide reasonably accurate estimates of the prevalence of serious vision impairment in the younger adult age groups" (Tate et al., 2005, p5). However, the RNIB suggest a lower figure of 0.002% as an estimated basis of people who would be 'registerable'. Tate et al. argue, as do others, that estimates of less than severe visual impairment are unreliable, with a high degree of variance reported in self-report studies. A mean of the three figures, 0.065%, has been used as an estimate of the numbers of people with a severe visual impairment.

The prevalence rates have been applied to ONS population projections for the 18-64 population to give the estimated numbers of people predicted to have a serious visual impairment and require help with daily activities.

Table 2 shows the number of people registered with Warrington Borough Council as blind or severely sight impaired.

Table 2: People aged 18-64 Registered as Blind or Severely Sight Impaired in Warrington (31 March 2011)

Age-Band	Number
18-49	71
50-64	51
Total 18-64	122

(Source: Warrington Borough Council, Register of Blind and Partially Sighted People (SSDA902) Table1, Column A, rows 3-6.)

Table 1 and 2 show that the number of people registered as blind or severely sight impaired in Warrington is significantly higher (+51%) than expected, based on the prevalence rates reported on the Projecting Adult Needs and Service Information (PANSI) System.

2.1.2) Partially Sighted / Sight Impaired: In addition to those people registered as blind or severely sight impaired, Warrington Borough Council also holds a record of people registered as partially sighted or sight impaired. Unfortunately, these cannot be benchmarked against national prevalence due to the high degree of variance in the different studies undertaken (Tate et al., 2005).

Table 3: People aged 18-64 Registered as Partially Sighted or Sight Impaired in Warrington (31 March 2011)

Age-Band	Number
18-49	77
50-64	54
Total 18-64	131

(Source: Warrington Borough Council, Register of Blind and Partially Sighted People (SSDA902) Table1, Column C, rows 3-6.)

2.2) Sight Loss 65+

2.2.1) Moderate or Severe Visual Impairment: Table 4 shows the estimated number of adults aged 65+ currently living in Warrington with a moderate or serious visual impairment.

Table 4: People aged 65+ Predicted to have a Moderate or Severe Visual Impairment in Warrington (2011)

Age-Band	Number
65-74	1,030
75+ (all*)	1,773
75+ (with 'registerable' condition)	915
Total 65+	2,803

*Including those with a 'registerable' condition

(Source: www.POPPI.org.uk; Charles, 2006)

Charles (2006) reported that the overall prevalence of all causes of visual impairment with visual acuity (VA) of less than 6/18 (moderate or severe) is 5.6% in those aged 65-74 years, and 12.4% for those aged over 75. VA of less than 6/18 is often used as the statutory threshold for qualifying to register as severely sight impaired (blind) or sight impaired (partially sighted).

Of those registered as blind or partially sighted over the age of 75, approximately half have cataracts or a refractive error (i.e. correctable sight loss). If these are excluded, the prevalence estimates of those with 'registerable' eye conditions are 6.4% in this age group. A small proportion have both cataracts and some other registrable cause of vision impairment and these are included within this figure. Overall, age related macular degeneration is the most common cause of registrable sight loss in older people.

Table 5 shows the number of people registered with Warrington Borough Council as blind or severely sight impaired.

Table 5: People aged 65+ Registered as Blind or Severely Sight Impaired in Warrington (31 March 2011)

Age-Band	Number
65-74	60
75+	261
Total 65+	321

(Source: Warrington Borough Council, Register of Blind and Partially Sighted People (SSDA902) Table 1, Column A, rows 3-6.)

Tables 4 and 5 show that, although it is predicted that there are 915 people aged over 75 with a 'registerable' moderate or severe eye condition, there are only 261 people aged 75+ on the Local Authority register.

2.2.2) Partially Sighted/Sight Impaired: In addition to the people registered as blind or severely sight impaired, Warrington Borough Council also holds a record of those people registered as partially sighted or sight impaired. Unfortunately, these also cannot be benchmarked against national prevalence.

Table 6: People aged 65+ Registered as Partially Sighted or Sight Impaired in Warrington (31 March 2011)

Age-Band	Number
65-74	65
75+	385
Total 65+	450

(Source: Warrington Borough Council, Register of Blind and Partially Sighted People (SSDA902) Table 1, Column C, rows 3-6.)

2.3) Dual Sensory Loss, Blind with an Additional Disability, aged 18+

Table 7 shows the number of people that are registered as blind or severely sight restricted with Warrington Borough Council and have an additional disability.

Table 7: People Registered as Blind/Severely Sight Impaired with an Additional Disability (30 March 2011)

Type of Additional Disability	Aged 18-64	Aged 65+
People who are deaf with speech	0	-
People who are deaf without speech	0	0
People who are hard of hearing	10	20
People with physical disabilities	15	80
People with mental health problems	-	15
People with learning disabilities	20	-
All persons with an additional disability	50	115

Numbers rounded to the nearest 5. Numbers less than 5, but not zero, are represented by '-'.

Totals may not sum due to rounding.

(Source: Warrington Borough Council, Register of Blind and Partially Sighted People (SSDA902), Table 2.)

The rate per 100,000 population registered locally with dual sensory loss has been compared nationally. Warrington has a rate of 46 people per 100,000. This is slightly higher than the national average of 41 per 100,000, but there is a wide degree of variation. For example, Herefordshire reports 423 per 100,000, whereas Lincolnshire reports 1 per 100,000 (Warrington Borough Council, 2009/10).

2.4) Hearing Impairment

Hearing loss and deafness is usually measured by finding the quietest sounds someone can hear, using tones with different frequencies, which are heard as different pitches. The person being tested is asked to respond, usually by pressing a button, when they can hear a tone and the level of the tone is adjusted until they can only just hear it. This level is called the threshold. Thresholds are measured in units called dBHL; dB stands for 'decibels' and HL stands for 'hearing level'. Anyone with thresholds between 0 and 20 dBHL across all the frequencies is considered to have 'normal' hearing. The greater the threshold in dBHL, the worse the hearing loss.

- Moderate Deafness – People with moderate deafness have difficulty in following speech without a hearing aid. The quietest sounds they can hear in their better ear average between 35 and 49 decibels.
- Severe Deafness – People with severe deafness rely a lot on lip reading, even with a hearing aid. British Sign Language (BSL) may be their first or preferred language. The quietest sounds they can hear in their better ear average between 50 and 94 decibels.
- Profound Deafness – People who are profoundly deaf communicate by lip reading. BSL may be their first or preferred language. The quietest sounds they can hear in their better ear average 95 decibels or more (PANSI, 2012).

2.4.1) Moderate or Severe Hearing Impairment: Table 8 shows the estimated number of adults currently living in Warrington with a moderate or severe hearing impairment.

Table 8: People Predicted to have a Moderate or Severe Hearing Impairment in Warrington (2011)

Age-Band	Number
18-24	24
25-34	112
35-44	421
45-54	1722
55-64	2787
65-74	3506
75-84	6347
85+	3310
Total	18229

Totals may not sum due to rounding.

(Sources: www.PANSI.org.uk; www.POPPI.org.uk; Davis, 1995; Davis et al., 2007)

2.4.2) Profound Hearing Impairment: Table 9 shows the estimated number of adults currently living in Warrington with a profound hearing impairment.

Table 9: People Predicted to have a Profound Hearing Impairment in Warrington (2011)

Age-Band	Number
18-24	0
25-34	0
35-44	0
45-54	14
55-64	31
65-74	113
75-84	64
85+	168
Total	389

Totals may not sum due to rounding.

(Sources: www.PANSI.org.uk; www.POPPI.org.uk; Davis, 1995; Davis et al, 2007)

Warrington completes the Department of Health Deaf and Hard of Hearing Return (SSDA910) every two years. The last return was completed in 2010 for the year 2009/10. This shows the number of people who are deaf or hard of hearing known to the council, as shown in Table 10.

Table 10: Warrington Borough Council Deaf & Hard of Hearing Return SSDA910 (2009/10)

Age-Band	Deaf	Hard of Hearing	Total
18-64	52	220	272
65-74	12	194	206
75+	33	1096	1129

(Source: Warrington Borough Council – SSDA910 – Final Return 0910)

The table shows that the number of adults aged 18-64 recorded as deaf (52) is slightly higher (+18%) than the number of people predicted to have a profound hearing impairment in Warrington (45). However, for people aged over 75, the number known to the council (33) is significantly lower than the 232 predicted to be living in the borough with a profound hearing loss.

The number of people aged 18-64 recorded by the council as hard of hearing (220) is significantly lower (-96%) than the number of people predicted to have a moderate or severe hearing impairment living in Warrington (5066). For adults aged over 65, the 1,335 known to the council as deaf or hard of hearing is substantially lower than the number predicted to be living in the borough (18,618).

Footnotes

¹ A vision of 6/6 is considered nominal performance for human distance vision. A vision of 6/12 is considered half as good as nominal performance. A vision of 6/3 is considered twice as good as nominal performance. Therefore, 6/24 and 6/48 refer to visual acuity that is a quarter and an eighth of nominal eyesight, respectively.

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3) Current Services in Relation to Need

There are a number of specialist services available in Warrington for people who are blind, visually impaired, deaf or who have a hearing loss (WBC, 2012a).

3.1) Sensory Impairment: For a person to be eligible for services provided by Warrington Borough Council, their needs have to be assessed to ensure that they meet the council's *Fair Access to Care Criteria* (FACS). During the assessment, a client's 'Primary Client Group' (PCG) is identified, which is the main reason for the services to be provided. The table below shows the services provided by Warrington Borough Council during 2010/11 for people whose PCG was identified as *Visual Impairment*, *Hearing Impairment* or *Dual Sensory Loss*.

Table 11: Adults 18-64 with a Sensory Impairment in Receipt of Community Based Services, Provided by Warrington Borough Council (2010/11)

	Home Care	Day Care	Short-Term Residential	Direct Payments	Professional Support	Equipment	Other	Total
Hearing Impairment	-	-	0	-	-	10	0	20
Visual Impairment	5	-	-	-	10	30	-	35
Dual Sensory Loss	-	-	0	0	0	-	0	-
Total service users	10	5	-	5	15	40	-	55

Values rounded to nearest 5. Values less than 5, but not zero, are shown as '-'.

Totals may not sum due to rounding.

(Source: Warrington Borough Council – Referrals, Assessments & Packages Return 2010/11, Table P2F, Page 1, Columns A to I, rows 3, 4 & 5)

Table 12: Older People 65+ with a Sensory Impairment in Receipt of Community Based Services, Provided by Warrington Borough Council (2010/11)

	Home Care	Day Care	Short-Term Residential	Direct Payments	Professional Support	Equipment	Other	Total
Hearing Impairment	15	-	5	-	5	35	-	45
Visual Impairment	40	15	15	-	15	95	10	115
Dual Sensory Loss	10	5	5	0	0	10	-	20
Total service users	60	20	25	5	20	140	15	180

Values rounded to nearest 5. Values less than 5, but not zero, are shown as '-'.

Totals may not sum due to rounding.

(Source: Warrington Borough Council – Referrals, Assessments & Packages Return 2010/11, Table P2F, Page 3, Columns A to I, Rows 3, 4 & 5.)

3.1.1) Concessionary Bus Pass: Warrington Borough Council work with Cheshire West and Chester, Cheshire East, and Halton Borough Council to provide all of our residents with the national concessionary bus pass scheme. In addition to the national scheme, there are also local enhancements on offer to residents of all the council areas (WBC, 2012b).

The pass is available to permanent residents of Warrington who:

- are blind or partially sighted
- are profoundly or severely deaf
- are without speech
- have a disability, or have suffered an injury, which has a substantial and long-term effect on the ability to walk
- do not have arms or have long-term loss of the use of both arms
- have a learning disability (a state of arrested or incomplete development of mind which includes significant impairment of intelligence and social functioning)
- would, if applying for a licence to drive a motor vehicle under Part III of the Road Traffic Act 1988, have the application refused under section 92 of the Act (physical fitness) on grounds other than persistent misuse of drugs or alcohol

Holders of the national concessionary bus pass issued by the Cheshire consortium are entitled to:

- On journeys starting or ending in Cheshire, Halton and Warrington:
 - Monday - Friday before 9.30am: full fare
 - Monday - Friday between 9.30am - midnight: free
 - Saturday, Sunday and bank holiday: free

- These same concessions apply to Dial-a-Ride in the four council areas, Chester Park-and-Ride services, and journeys on bus services going into Wales- providing the journey starts or ends in Cheshire, Halton or Warrington.
- In the rest of England:
 - Monday - Friday between 9.30am - 11.00pm: free
 - Saturday, Sunday and bank holiday: free
 - All other times: full adult fare (unless advised otherwise locally)

3.1.2) Other Support Agencies (WBC, 2012a): *Warrington Disability Partnership* can provide information and equipment for people with a sight and/or hearing loss. General information and advice is available about benefits, employment, direct payments, personalisation, education and training. They also have a specialist computer suite for people with a sensory loss, offering one to one or small group support on IT skills. During a sample week in November 2010, a total of 764 people received a service. 506 were aged 18-64, 170 aged over 65, and 88 where the age was not identified, as the service was provided to a carer (Warrington Borough Council, 2010).

3.2) Visual Impairment

3.2.1) Support for People with a Visual Impairment: The visual impairment rehabilitation officer is a specialist worker who supports people with poor vision to carry out everyday tasks so that they can increase or keep their independence. The service aims to help people with poor vision to use their remaining vision and other senses as effectively as possible. The specialist worker can visit people at home to find out the particular problems they face and offer advice and practical help on possible ways of dealing with them. The person is fully involved in the discussion and any decisions.

A wide range of equipment is also available to help people with poor vision in their day to day lives.

3.2.2) Services Available: The sort of help and advice that adult social services can offer includes:

Communication

- handwriting
- keyboard skills
- Braille

Household tasks

- safe use of household equipment
- specialist equipment

Mobility

- regaining confidence
- getting to local shops and amenities
- using public transport

Information

- advice to family members
- information on local services
- raising awareness in schools, colleges, and to social groups

3.2.3) Disabled Parking Badges: Individuals who are registered as blind are entitled to a disabled persons parking badge without further assessment. The badge allows the user to park for free in most pay and display car parks and on single and double yellow lines for up to three hours (where it does not cause an obstruction or endanger others). The badge costs £10 and is valid for three years. Table 13 shows how many of these badges have been issued.

Table 13: People Registered Blind Issued with a Disabled Parking Badge

	March 2010	March 2011
Blue badges on issue	114	134

(Source: Warrington Borough Council- *Disabled Persons Parking Badge Return STATS 104, Table 1, Column ii, row c.*)

Table 13 refers to all badges on issue to people registered as blind, regardless of age. As at 31st March 2011, 134 badges were on issue. There were 468 people registered in Warrington as blind or severely sight impaired, 25 of which were under 18, 122 were aged 18-64, and 321 were aged 65 or over (WBC, 2011).

3.2.4) Other Support Agencies (WBC, 2012a): *Warrington, Widnes and District Society for the Blind* aim to help people come to terms with sight loss. A help desk in Warrington Hospital is available as an initial point of contact, offering support and advice following a diagnosis of sight loss. A home visiting service offers ongoing support with the aim of promoting independent living.

The office premises at Museum Street offer recreation and social activities, continued support and advice, and a small resource centre with equipment to aid independence. During a sample week in November 2010, a total of 93 people received a service. 12 were aged 18-64, 79 were aged over 65, and there were 2 where the age was not identified, as the service was provided to a carer (Warrington Borough Council, 2010).

3.3) Hearing Impairment

3.3.1) Support for People with Hearing Loss (WBC, 2012a): Warrington Borough Council provides services for people with a hearing loss as part of the sensory loss and telecare team. The team aim to provide a comprehensive and confidential service that is tailored to the needs of the person to improve the quality of life of each individual.

3.3.2) Services Available: Hearing loss services include:

- Qualified and experienced social work staff – focusing on providing assessment and support to adults with the full range of hearing loss.
- Specialist equipment workers – offering assessment, advice, support and, where appropriate, the provision of assistive technology equipment to people with hearing loss.
- Support worker service – offering practical help with issues, such as completing forms, telephone calls, and clarification of letters and other correspondence.
- Highly qualified, self-employed professionals who can provide interpreting support to deaf people, as and when required.

3.3.3) Other Support Agencies (WBC, 2012a): *Deafness Support Network (DSN)* provide a wide range of support and services for deaf, deafened and hard of hearing people. They offer practical help, advice, and specialist support, as appropriate, to promote independent living.

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4) Projected Service Use and Outcomes in 3-5 Years and 5-10 Years

4.1) Serious Visual Impairment 18-64: Table 14 shows that the need in the borough for services for adults aged 18-64 with a serious visual impairment is likely to remain constant over the next 10 years. This data is also based on the review by Tate et al., (2005), discussed in Section 2.1.1.

Table 14: People aged 18-64 Predicted to have a Serious Visual Impairment

	2011	2012	2013	2014	2015	2020
18-24	10	10	10	10	10	9
25-34	16	16	17	17	17	18
35-44	19	18	18	17	17	17
54-54	20	20	21	21	21	19
55-64	16	16	15	16	16	18
Total 18-64	81	80	80	81	81	81

Totals may not sum due to rounding.

(Source: www.PANSI.org.uk)

Based on the figures above, the projected number of service users is illustrated in Table 15.

Table 15: Projected Service Use by Warrington Borough Council for People with a Serious Visual Impairment (18-64)

	2011	2012	2013	2014	2015	2020
Predicted to have a serious visual impairment	81	80	80	81	81	81
Forecast to be registered as blind with Warrington Borough Council	122	121	121	122	122	122
Forecast to be in receipt of a service with a primary client group of 'Visually Impaired'	35	34	34	35	35	35

(Source: www.PANSI.org.uk)

4.2) Visual Impairment 65+: Table 16 shows that the need in the borough for services for adults aged 65+ with a moderate or severe visual impairment or aged over 75 with a registrable eye condition.

Table 16: People aged 65+ Predicted to have a Visual Impairment

	2011	2012	2013	2014	2015	2020
65-74	1030	1075	1114	1142	1154	1204
Over 75	1773	1798	1860	1934	1996	2368
Over 75 (with a registrable eye condition)	915	928	960	998	1030	1222

(Source: www.PANSI.org.uk)

Table 16 shows that the number of people aged 65-74 with a moderate or severe visual impairment is predicted to increase by 17% over the next nine years (+174). The number of people aged over 75 with a moderate or severe visual impairment is predicted to increase by 34% over the next nine years (+595). Those aged over 75 with a registrable eye condition is also expected to increase by 34% (+307).

Table 17 shows the projected service use by WBC for people with a visual impairment aged over 65. It shows a predicted increase of 27% (+769) of people with a visual impairment over the next 9 years.

Table 17: Projected Service use by Warrington Borough Council for People with a Visual Impairment (65+)

	2011	2012	2013	2014	2015	2020
Predicted to have a visual impairment	2803	2873	2974	3076	3150	3572
Forecast to be registered as blind/severely sight impaired with Warrington Borough Council	321	330	342	354	362	411
Forecast to be registered as partially sighted or sight impaired with Warrington Borough Council	450	463	479	495	507	575
Forecast to be in receipt of a service with a primary client group of 'Visually Impaired'	115	118	122	126	129	146

(Source: www.PANSI.org.uk)

4.3) Moderate or Severe Hearing Impairment: Table 18 shows that the need for services for adults with a moderate or severe hearing impairment is likely to remain fairly constant over the next 5 years (+1%). However, by 2020, there will be a substantial increase, especially in the older age bands (+34% for 75-84).

Table 18: People Predicted to have a Moderate or Severe Hearing Impairment

	2011	2012	2013	2014	2015	2020
18-24	24	24	23	23	22	21
25-34	112	116	118	121	123	124
35-44	421	407	395	387	378	376
45-54	1722	1760	1782	1791	1806	1692
55-64	2787	2748	2725	2763	2801	3206
65-74	3506	3660	3791	3890	3945	4106
75-84	6347	6595	6843	7028	7276	8522
85+	3310	3395	3480	3650	3735	4415
Total	18228	18704	19158	19652	20084	22461

Totals may not sum due to rounding.

(Sources: www.POPPI.org.uk; Davis, 1995; Davis et al., 2007)

4.4) Profound Hearing Impairment: Table 19 shows that the number of adults with a profound hearing impairment is likely to increase by 44 people over the next 5 years (+11%), and there is predicted to be an additional 97 people 2020 (+25%). Although this suggest an increased service need in the borough, care should be taken when interpreting this demand due to the small numbers involved.

Table 19: People Predicted to have a Profound Hearing Impairment

	2011	2012	2013	2014	2015	2020
18-24	0	0	0	0	0	0
25-34	0	0	0	0	0	0
35-44	0	0	0	0	0	0
45-54	14	14	14	14	15	14
55-64	31	30	30	30	30	35
65-74	113	118	122	125	127	132
75-84	64	67	69	71	73	86
85+	168	173	176	184	189	220
Total	390	401	412	425	434	487

Totals may not sum due to rounding.

(Sources: www.POPPI.org.uk; Davis, 1995; Davis et al., 2007)

Table 20 below shows the projected service use by WBC for people with a serious profound hearing impairment aged 18-64. It shows a predicted increase of 11% (+5) of people with a serious profound hearing impairment over the next 9 years.

Table 20: Projected Service Use by Warrington Borough Council for People with a Serious Profound Hearing Impairment (18-64)

	2011	2012	2013	2014	2015	2020
Predicted to have a Profound Hearing Impairment	44	44	44	45	45	49
Forecast to be recorded as Deaf with Warrington Borough Council	52	52	52	53	53	58
Forecast to be in receipt of a service with a primary client group of 'Hearing Impairment'	20	20	20	20	20	22

(Sources: www.POPPI.org.uk; Davis, 1995; Davis et al., 2007)

Table 21 below shows the projected service use by WBC for people with a Serious Profound Hearing Impairment aged 65+. It shows a predicted increase of 27% (+93) of people with a serious profound hearing impairment over the next 9 years.

Table 21: Projected Service Use by Warrington Borough Council for People with a Serious Profound Hearing Impairment (65+)

	2011	2012	2013	2014	2015	2020
Predicted to have a Profound Hearing Impairment	345	358	367	380	389	438
Forecast to be recorded as Deaf with Warrington Borough Council	45	47	48	49	51	57
Forecast to be in receipt of a service with a primary client group of 'Hearing Impairment'	45	47	48	49	51	57

(Sources: www.POPPI.org.uk; Davis, 1995; Davis et al., 2007)

5) Evidence of What Works

5.1) Visual Impairment

5.1.1) Preventing Visual Impairment:

- Eye Tests – Prevention, or at least early detection, is very important to prevent eyesight from being damaged by undiagnosed conditions. The NHS recommends that eyes should be tested at least every two years, but if another health condition such as diabetes, glaucoma (or family history of glaucoma), or hypertension is present then they should be tested more regularly (NHS, 2012f).
- Sunglasses – Ultra violet rays from the sun can damage eyesight so it is important that good quality sunglasses, with UVA and UVB protection, are worn in bright sunlight (NHS, 2012f).
- Quit Smoking – Giving up smoking can significantly reduce the chances of developing problems with vision. Smokers are up to three times more likely to develop cataracts than non-smokers, due to the chemicals found in cigarette smoke (NHS, 2012f).

5.1.2) Treating Visual Impairment: Treatment for impaired vision will depend on the type of eye related problem. A number of treatments for the most common problems are described below (NHS, 2012a).

- Glaucoma (Chronic) – Can be treated with eye drops, of which there are different types that all act on the fluid in the eye. Glaucoma can also be treated with laser treatment or surgery if it does not respond to eye drops.
- Acute Glaucoma – Can be treated with eye drops or systemic medicines injected into the bloodstream to reduce the pressure in the eye. Laser treatment or surgery can also be used.
- Dry Eye Syndrome – Can be treated with eye drops or by adjusting the environment, such as installing a humidifier in a dry environment. In extreme cases, surgery on the tear ducts is an option.
- Cataracts – In the early stages of a cataract, wearing stronger glasses or using a brighter light to read will help to improve vision. However, for more severe cases, surgery will be required. The surgery involves removing the cloudy lens in the eye and replacing it with a clear plastic one.
- Age Related Macular Degeneration (AMD) – Dry – There is currently no cure for dry AMD. Deterioration of vision is very slow and peripheral vision should not be affected. Low vision clinics provide advice, support and practical help. Magnifying glasses, large print books and bright reading lights are all available.
- Age Related Macular Degeneration (AMD) – Wet – If started early enough, Photodynamic Therapy (PDT) can be used. This involves injecting a chemical into the bloodstream which is then activated in the eye by a low powered laser. This destroys the abnormal cells in the eye without damaging the healthy cells.

5.2) Hearing Impairment

5.2.1) Preventing Hearing Impairment: It isn't always possible to protect a person's hearing if there is an underlying condition which causes hearing loss. However, there are things which can be done to reduce the risk of hearing loss:

- Loud Noises – Using ear protection in noisy work environments and ensuring music or television volume is not too loud.
- Objects – Objects such as cotton buds or fingers should not be inserted into the ears, especially young children.
- Awareness – An awareness of the common symptoms of hearing loss, such as ear infections, and visiting the GP if hearing loss occurs.

5.2.2) Treating Hearing Impairment: The way a hearing impairment is treated depends on the type of impairment and how severe it is (NHS, 2012c).

- Sensorineural Hearing Loss – There are several options that can improve a person's ability to hear and communicate. For example, digital hearing aids, surgical implants (such as middle ear implants and cochlear implants), and British Sign Language (BSL).
- Conductive Hearing Loss – There is often the possibility that this can be treated with surgery or a device, such as a Bone Anchored Hearing Aid (BAHA).
- Hearing Aids – A hearing aid does not cure a hearing impairment, but it increases the volume of sound entering your ear so that sounds may be heard more clearly. Hearing aids are fitted with devices that can distinguish between background noise, such as traffic, and foreground noise, such as conversation (NHS, 2012d).
- Cochlear Implants – These are small hearing devices that are surgically fitted behind your ear. A cochlear implant is sometimes recommended for adults or children who have profound sensorineural hearing loss in both ears, when it is not helped by hearing aids. There are currently around 10,000 people in the UK with cochlear implants and the number is increasing each year (NHS, 2012d).
- British Sign Language – Many people with a hearing impairment learn to communicate in other ways instead of, or as well as, using spoken English. Those who are born with a hearing impairment often learn sign language, such as British Sign Language (BSL), which is a form of communication using hand movements and facial expressions to convey meaning. BSL is completely different from spoken English and has its own grammar and syntax (word order). Other types of sign language include Signed English and Paget Gorman Signed Speech (NHS, 2012d).

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6) (Target) Population/Service User Views

In order to ensure the effective planning and delivery of deaf and hearing loss services in Warrington, a comprehensive consultation exercise was undertaken during August and October 2010. Service users and carers were supported to express their views via:

- 2 group discussion forums, with a PowerPoint presentation (held at Warrington Deaf Club).
- Individual (one to one) discussions at Warrington Deaf Club.
- Assistance to complete written questionnaires/feedback forms.
- Feedback via the Warrington Borough Council website.

Communication Support Workers and two qualified, independent British Sign Language interpreters were available at every consultation forum to ensure accurate and honest feedback was collated.

A total of 117 feedback questionnaires were received and collated. These remain available should they be required.

Warrington Borough Council submitted a proposal to provide a social work service and technical equipment support for adults with the full range of hearing loss. The results were:

- 73% supporting the proposal
- 11% expressed no preference
- 16% disagreed with the proposal

This resulted in the above services (social work and technical equipment support) transferring from Deafness Support Network to Warrington Borough Council from the agreed date of 1st April 2011.

All those who contributed to the consultation process received detailed feedback regarding the main themes expressed. Service users and carers expressed the desire for:

- A local service based in Warrington
- A service that is available at least Monday to Friday 9am – 5pm
- A team of staff that are consistent (so that they may have a named worker if needed), reliable, have good signing skills and excellent 'Deaf awareness'
- Access to the full range of equipment and new technology that is available to help with independent living
- To be aware of all new developments such as personal budgets

The formulation of a steering group, named the 'Sensory Liaison Group' (Ref. Minutes 27/7/11), ensures effective partnership working to aid future service delivery. The membership of the group (as at 1/2/12) consists of 7 service users who have a sensory loss (Ref. Minutes 26/1/12).

The 'Warrington Sight Loss Service Development Group' has been influenced and developed in response to the *UK Vision Strategy*. The *UK Vision Strategy* was developed in response to the *World Health Assembly Vision 2020* resolution to reduce avoidable blindness by the year 2020 and improve support and services for blind and partially sighted people. The 3 strategic outcomes of the UK Vision Strategy were identified as:

- Improving the eye health of people in the UK.
- Eliminating avoidable sight loss and delivering excellent support for people with sight loss.
- Inclusion, participation and independence for people with sight loss.

The Warrington Sight Loss Service Development Group was launched in May 2009 and consists of a number of key partner organisations committed to developing sight loss services in Warrington. The group is independently chaired by a senior member of staff from Action for Blind People. Two service users, who are both registered blind, attend the group and contribute to service development (Ref. Minutes 3/2/11, 7/6/11, 9/8/11, 1/11/11).

A benchmarking exercise included feedback from service users and identified two main areas for development:

- To improve communication of the local support services available for blind and partially sighted people.
- To develop emotional support services for all people at all stages of the 'sight loss journey'.

Service user views have contributed to the development of sensory loss services in Warrington. Services to support people with a hearing loss and/or a sight loss now work in partnership with our 'Telecare Service' to provide a high profile team. This 'stand alone' team has a key responsibility and focus to engage and integrate fully with all key statutory and third sector partners in developing sensory loss services.

- The Sensory and Telecare Team (STS) are now a key part of the Warrington Borough Council Neighbourhood and Community Services.
- The STS team provide support from 8.30am – 5pm on Monday – Friday.
- Staff providing support for service users with a hearing loss are qualified to a minimum of British Sign Language (BSL) level 2, with some staff holding the BSL level 3 qualification. Warrington Borough Council work in partnership with Merseyside Society for Deaf People to deliver Deaf awareness and an introduction to BSL course for all key front line staff.
- Hearing Loss Technical Officers in the STS team assess and provide equipment to support people with a hearing loss. A monthly drop-in clinic at the Warrington and Halton Hospital Foundation Trust (WHFT) Audiology Clinic also assists with this.
- Two qualified social workers, qualified to BSL level 2, ensure that personal budgets are promoted during the assessment and care management process.
- A new information booklet was produced in partnership with service users entitled *Information for people with a sight loss*.

- A Senior Counsellor has been appointed to provide emotional support services for people with a sight loss and their carers. This professional is employed by Action for Blind People and is part of the STS team.
- An awareness day for sensory loss equipment provision is to be held, facilitated by Warrington Borough Council and Warrington Disability Partnership.

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7) Unmet Needs and Service Gaps

The Warrington Sight Loss Services Development Group carried out a 'benchmarking exercise' in two phases, using the Royal National Institute of Blind People (RNIB) *Good Practice in Sight Guidelines*. This was presented to, and discussed at, the Sight Loss Development Group meeting in January 2010 (Ref. Meeting minutes 25/1/2010).

The key points that emerged from the exercises were:

Benchmark 1 – Emotional Support

- A gap in provision exists between initial, via Eye Care Liaison Officer (ECLO), and more formal counselling services.
- Lack of peer group support networks available.
- Gaps in emotional support for younger people, families and carers.

Benchmark 2 – Referral

- Gaps in referral to ECLO from the broader hospital wards and clinics.
- Limited knowledge of support available among service users.
- Gaps in referral from high street optometry into services other than hospital services.

Benchmark 3 – Information and Advice

- Gap in marketing of services across broader health and social care media.
- Lack of information regarding the provision of IT equipment.
- Lack of information regarding generic services that may support blind and partially sighted people.

Benchmark 4 – Assessment

- No single or integrated assessments.

Benchmark 5 – Equipment

- A gap in funding available to access specialist IT equipment.
- Gaps in the availability of loan stock equipment.

Benchmark 6 – Training

- Gap relating to IT training for service users.
- Gap in service user awareness of training opportunities available.

Benchmark 7 – User Involvement

- Generally the feedback was that user involvement does take place.

Benchmark 8 – Complaints

- Generally the feedback was that organisations can evidence a complaints/ compliments process.

Benchmark 9 – Interagency Working

- Links with Public Health Services can be improved.

The consultation exercises with the Deaf community in Warrington are clearly detailed in section 6 of this document.

The gaps in services and areas for development were identified and recorded as part of the **consultation processes**. To ensure a smooth transition of services from the Deafness Support Network to Warrington Borough Council the 'areas of concern' and 'possible unmet needs' were recorded and collated as:

- A local service based in Warrington
- A service that is available at least Monday to Friday 9am – 5pm
- A team of staff that are consistent (so that they may have a named worker if needed), reliable, have good signing skills and excellent 'Deaf awareness'
- Access to the full range of equipment and new technology that is available to help with independent living
- To be aware of all new developments such as personal budgets

These areas were addressed by:

- The Sensory and Telecare Team (STS) are now a key part of the Warrington Borough Council Neighbourhood and Community Services.
- The STS team provide support from 8.30am – 5pm on Monday – Friday.
- Staff providing support for service users with a hearing loss are qualified to a minimum of **British Sign Language (BSL) level 2**, with some staff holding the BSL level 3 qualification. Warrington Borough Council work in partnership with Merseyside Society for Deaf People to deliver Deaf awareness and an introduction to BSL course for all key front line staff.
- Hearing Loss Technical Officers in the STS team assess and provide equipment to support people with a hearing loss. A monthly drop-in clinic at the Warrington and Halton Hospital Foundation Trust (WHHFT) Audiology Clinic also assists with this.
- Two qualified social workers, qualified to BSL level 2, ensure that personal budgets are promoted during the assessment and care management process.

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8) Recommendations for Commissioning

Services for people who have a sensory loss are provided as part of Warrington Borough Council's Sensory and Telecare Service (STS). Telecare solutions can help to support individuals with a sensory loss, offering increased independence to the service user and peace of mind to carers.

Possible recommendations for future commissioning plans may consider:

Sight Loss:

- Developing on the initial links that have recently been made with Action for Blind People and the appointment of a Senior Counsellor. Key tasks identified focus on developing emotional support services for service users and their carers.
- Developing support services for younger adults who have a sight loss. Working with already established services such as the Warrington VIP Centre (who traditionally provide support for older service users), to either work in partnership to develop the already established services or to plan and develop additional services.
- To implement the recommendations outlined in the UK Vision Strategy within Warrington.
- To influence the residential care sector as part of our contractual arrangements to develop staff awareness in relation to sight loss and dual sensory loss. To also provide appropriate equipment/technology to meet residents' specific needs.
- To provide a wider range of accessible information that will support independence.

Hearing Loss:

- Developing on the initial links that have recently been made with Merseyside Society for Deaf People in order to plan and deliver a comprehensive range of training packages for key staff within Warrington Borough Council (WBC). Ensuring that WBC staff are fully 'Deaf Aware' and skilled in providing a quality service to all WBC customers who have the full range of hearing loss.
- Develop the initial links made with Health Authority partners such as the Eye Care Liaison Officers and Audiology Clinic, both at Warrington General Hospital, to ensure effective partnership working and service promotion.
- To influence the residential care sector as part of our contractual arrangements to develop staff awareness in relation to hearing loss and provide appropriate equipment/technology to meet residents' specific needs.
- To influence and identify residential and domiciliary care providers which can offer support to service users who communicate using British Sign Language by training/employing staff with the skills to communicate.
- To provide a wider range of accessible information that will support independence.

Telecare:

- The promotion and development of telecare solutions is now considered to be a key priority for social work staff. A target of 100% increase in referrals to the STS team comparing the periods 1/4/10 – 31/3/11 to 1/4/11 to 31/3/12 has been identified. Currently the increase in referrals is at 111%.
- Discussions are underway to consider the development of a 'telecare smart flat'. This property would provide an ideal opportunity to raise awareness, understanding and the benefits of telecare and sensory equipment and its role in supporting service users and carers. Work would involve identifying a local housing agency to work in partnership with the STS team. The STS team would then take on the responsibility to fully equip the property with a wide range of telecare and sensory equipment. The STS team would meet all the costs associated with the rent of the agreed property.
- To increase levels of procurement for all types of equipment to meet the increased demand across health and social care. This directly links with the council's commitment to prevention.

- To develop a response service that will support the needs of people with telecare equipment and prevent unnecessary hospital admissions.
- To develop the use of telehealth in order for the whole system to benefit from the outcomes outlined by the Department of Health (DoH) in their recent 3 Million Lives research.
- To promote the use of telecare across the private residential care sector, as part of our contractual arrangements, in order to reduce the number of safeguarding concerns and increase the quality of care.
- To recognise the need to monitor, repair and replace equipment that has been installed and accommodate rapidly changing and improving telecare equipment available.

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9) Recommendations for Needs Assessment Work

A significant amount of needs assessment work and consultation has been undertaken, which has been invaluable in helping to plan, develop and deliver services for people with a sensory loss. Consultations include:

- Deaf Services consultation, August – October 2010.
- Sight Loss Benchmarking exercise, January 2010.

Recommendations for future needs assessment work may wish to consider:

People with a Dual Sensory Loss: Work is now underway to ensure that processes are in place to accurately record figures for all those who have received an assessment of their need (and have been assessed as having a hearing and sight loss combined). Warrington Borough Council's adult social care computer system, Carefirst 6, has been modified to ensure relevant data can be captured and monitored on a regularly basis.

Continued areas of work may wish to consider how best to ensure that the needs of this particular client group are met in the continued development of sensory services.

Younger Adults with a Sensory Loss: The recently established Sensory Liaison Group benefits from the attendance of a number of service users and carers. This forum will be a valuable tool to assist future service development. Service users who engage with the current 'more traditional' services are predominately older adults.

Future areas of work may wish to consider how best to develop services and meet the need of younger adults with a sensory loss.

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Key Contacts

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References

- Charles, N. (2006). The Number of People in the UK with a Visual Impairment: The Use of Research Evidence and Official Statistics to Estimate and Describe the Size of the Visually Impaired Population. Royal National Institute of the Blind.
- Davis, A (Ed.) (1995). Hearing in Adults. Whurr Publishers Limited.
- Davis, A., Smith, P., Ferguson, M., Stephens, D., & Gianopoulos, I. (2007). Acceptability, benefit and costs of early screening for hearing disability: a study of potential screening tests and models. *Health Technology Assessment*, 11 (42).
- Department of Health. 3 Million Lives. [<http://www.3millionlives.co.uk/>]
- NHS (2012a). Text taken from <http://www.nhs.uk/Conditions/Visual-impairment/Pages/Treatment.aspx> - Correct as of 08/02/2012
- NHS (2012b). Text taken from <http://www.nhs.uk/Conditions/Visual-impairment/Pages/Introduction.aspx> - Correct as of 08/02/2012
- NHS (2012c). Text taken from <http://www.nhs.uk/Conditions/Hearing-impairment/Pages/Introduction.aspx> - Correct as of 08/02/2012
- NHS (2012d). Text taken from <http://www.nhs.uk/Conditions/Hearing-impairment/Pages/Treatment.aspx> - Correct as of 08/02/2012
- NHS (2012e). Text taken from <http://www.nhs.uk/Conditions/Hearing-impairment/Pages/Causes.aspx> - Correct as of 08/02/2012
- NHS (2012f). Text taken from <http://www.nhs.uk/Conditions/Visual-impairment/Pages/Prevention.aspx?url=Pages/Lifestyle.aspx> - Correct as of 08/02/2012
- PANSI (2012). Text taken from <http://www.pansi.org.uk/index.php?pageNo=418&areaID=8294&loc=8294> - Correct as of 07/02/2012
- Swets (2002). The incidence and cost of injurious falls associated with visual impairment in the UK. Taken from Visual Impairment Research, 4 (1), 1-14.
- Tate, R., Smeeth, L., Evans, J., Fletcher, A., Owen, C. and Rudnicka, A. (2005). The prevalence of visual impairment in the UK: A review of the literature. Report commissioned by the Royal National Institute of the Blind.
- Warrington Borough Council (2012a). Text taken from http://www.warrington.gov.uk/home/health_and_social_care/adult_social_care/sight_hearing_l - Correct as of 09/02/2012
- Warrington Borough Council (2012b). Text taken from http://www.warrington.gov.uk/home/health_and_social_care/adult_social_care/concessionary_l - Correct as of 09/02/2012
- Warrington Borough Council (2011). Warrington Borough Council – Register of Blind and Partially Sighted People (SSDA902) return 31 March 2011.

Warrington Borough Council (2010a). Grant Funded Services Return 2010, Column G, rows 23 & 30-34.

Warrington Borough Council (2010b) Deaf Services consultation August – October 2010.

Warrington Borough Council (2010c) Sight Loss Benchmarking exercise January 2010

Warrington Borough Council (2009/10). Deaf Blind figure Comparators.

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