Children in Focus: a clear call to action
Abigail with SeeAbility optometrist Lisa

Abigail (pictured on the front cover) is 16 years old and attends a special school in London. She has learning disabilities and autism. When she was a lot younger, she went with her mum to the hospital eye clinic.

Mum was advised that because of Abigail’s autism and learning disability it was not worth giving Abigail glasses because she wouldn’t wear them. Abigail’s mum accepted this professional advice at the time.

In 2017, Abigail had her sight test at school with SeeAbility. We found Abigail to have a high prescription - she is very short-sighted, at -8.00D.

So we went into action on supporting Abigail to get used to her glasses. SeeAbility’s dispensing optician regularly checked that Abigail was getting on well with her glasses and that they were a comfortable fit, giving her stronger frames in case of damage.

Abigail’s mum is determined to support her to wear her glasses more and more. She feels that if she had known how strong Abigail’s prescription was when they went to the eye clinic, she would have challenged not being given the glasses.

She was also delighted with the stronger frame that Abigail received. She feels frustrated that she did not know about this type of frame sooner and disappointed that her daughter has had to go through school without the glasses she needs to correct her vision. Mum says “I feel strongly that if Abigail had been introduced to glasses at a younger age, she would be used to wearing them by now. All children in special schools should have access to sight tests and glasses to help them get the education they need and deserve.”

The school has been incredibly supportive too, and teaching staff say that Abigail is at her happiest when she is riding her tricycle at school with her glasses on. Her face lights up and she smiles because she recognises her environment and faces.
Foreword
Baroness Sheila Hollins, FRCPCH, FRCPsych

When SeeAbility approached me to write the foreword for this report on bringing eye care into special schools, I didn’t hesitate for a moment, even though I do not claim to be an expert in eye care.

I know that children with learning disabilities are 28 times more likely to have a serious sight problem, and are often in need of glasses. I assumed that they would be getting regular community sight tests at an opticians.

But with shocking consistency, the majority of the children assessed for this project had either accessed no eye care at all, or if they had been having eye tests, this was only in hospital eye clinics, until they had their sight tested in school as part of the SeeAbility project.

You do not have to be an expert to understand the profound impact that being able to see well will have on a child with complex needs. These are children who may not be able to speak, or who may rely on their eyes to communicate and whose problems with vision could easily be overlooked.

The reasons why will be no surprise to those of us who campaign tirelessly for the human rights of people with learning disabilities. They emerge time and again in healthcare, around adjustments, access, and attitudes.

What strikes me most is the complete absence of attention being paid to the needs of these children at a national NHS sight testing system level. Even if parents have concerns, they are often at a total loss as to how to help their child get a sight test, and who would do it.

What is comforting about this four year project is that it shows a model of service that works in practice, that has been tried and tested, has widespread support from parents, schools, and eye care professionals, and is entirely within the gift of the NHS to implement for special school children across the country.

Let us hope that 2018 will see NHS decision makers bring determination, and not indifference, to delivering a more equal right to sight.

Professor Sheila the Baroness Hollins is Emeritus Professor of Psychiatry of Disability, St George’s, University of London, President of the Royal College of Occupational Therapists and Independent Member of the House of Lords.
Each year since we launched our specialist sight testing project ‘Children in Focus’ in a number of special schools in October 2013, SeeAbility has produced an annual report on our findings, supported by the renowned Dr Maggie Woodhouse OBE at Cardiff University School of Optometry and Vision Science.

In 2017 we hit the major milestone of sight testing 1000 children in the special schools we are working in, and at the time of writing in April 2018 we have tested over 1200 children for the first time, and carried out nearly 2500 eye tests over this period - dispensing nearly 1000 pairs of spectacles (including replacements).

What follows is an update on our campaign and a comprehensive analysis of data based on the four academic years since the service began (October 2013 – July 2017), looking at the eye care needs of 923 pupils who were new to the service across eleven special schools, averaging an age of 10.5 years.

We now believe this to be the biggest global study actively reporting on the eye care needs of children with learning disabilities.

**Key findings**

SeeAbility estimates that children with learning disabilities are 28 times more likely to have a serious sight problem. Many of these children – the vast majority of those with profound and severe learning disabilities – attend special schools.

Across the special schools we work in we can confirm a high prevalence and vast range of sight problems.

We have found:

- Half of children (47.5%) have a problem with their vision.
- Around one quarter of children for whom we could get an accurate measure have such poor sight to be classed as ‘low vision’.
- A third (31.7%) of children need a spectacle correction

Department of Education statistics indicate only 1% of all pupils with learning disabilities in mainstream or special schools have a visual impairment (primary or secondary need). However our findings point to this being a real underestimate.
Pupils in special schools are much less likely to say they are developing a sight problem and more likely to need high prescriptions.

So many of the sight problems found could be treated in school thanks to our multidisciplinary team of optometrists, orthoptists and dispensing opticians. That means only around 3% of pupils had an optical problem that needed onward referral to a GP or for hospital treatment.

Dispensing in school means children aren’t going for long without spectacles they need, meaning less interruption to their learning. Of the 293 children who we found needed spectacles, only 88 already had spectacles that were right for them or didn’t need repairing.

Some of the new prescriptions we gave for the first time were very high, so without their spectacles a child would be classed as ‘functionally visually impaired’.

It also appears that children reaching their teenage years are becoming more myopic (short-sighted) – much like their peers.

Bringing eye care into special schools meets a previously unknown need.

Of the 425 pupils we found with a vision problem over a quarter (118 pupils) had a problem that was previously unknown to school or parents. These included cases where a child may not have a full range of vision (visual field loss), through to serious conditions like keratoconus, where vision will get blurry and the eyes painful unless treated, and a case of retinal detachment.

Being in school helps makes vision issues more understandable.

With such a vast range of sight problems, making it easy for parents and teachers to understand what is going on with a child’s sight is vital. Once it is established what a child can see – the impact on their schooling and their home life can be profound.
85% of parents we surveyed said they understood more about their child’s sight and vision after the eye test. This information is important in school, from where a child sits in a classroom to whether they can make use of technologies, such as eye gaze, to open up communication. So over the course of the service we have trained 637 teachers, teaching assistants and support staff, delivered 3 conferences and presented/exhibited at 20 national conferences.

Few children are accessing the right to a community eye test.

Children in full-time education have the right to a free NHS sight test and spectacle vouchers if needed, but the assumption is that this is easily available in the community, i.e. in the ‘high street’. However, parents often say they are at a loss as to where to go or how to know if it would be possible to sight test their child.

Where parents were able to report a history of eye care (826 pupils) this is what we found:

- Over 4 in 10 of these children (43.7%) have no history of eye care.

- Few children (6.9%) access a community optician and exercise their right to a free NHS sight test. Even children with known sight problems are not accessing community alternatives once discharged from a hospital eye clinic. Overall 91% do not report any further eye care.

- It seems the majority – nearly half (48.2%) - have or had been having their eye care in hospital.

Our 2017 survey of parents showed that 97% agreed special school eye tests were convenient for their child. Only 3% said an optician would be their first choice for their child’s eye test.

Every child has the right to an NHS sight test however:

- Many have to go to hospital for a sight test instead.
- Over 4 in 10 (43.7%) children have never had a sight test.
- Only 7% have accessed a community eye test.
- Over 4 in 10 (43.7%) children have never had a sight test.
Reform is urgently required

SeeAbility is calling for wide reforms to community eye care for children and adults with learning disabilities. We would like specialist sight tests and spectacle dispensing to be standard practice in special schools in England, bringing more accessible eye care to around 100,000 children with the most complex needs.

Experts and clinical bodies agree it is often the best place for a sight test, as it is a safe, familiar and convenient environment for children, and allows eye care professionals to work in partnership with pupils, teachers and families, as well as other clinicians. In 2017 Public Health England added its support to the case for special schools sight tests, reflecting upon the clinical framework for eye care in special schools, authored by all the lead eye care professional bodies and SeeAbility, published in 2016.

However NHS England, not Public Health England, is responsible for the NHS sight testing system. It offers a £21.31 contractual fee – already known to significantly underestimate the cost of a ‘standard’ sight test – to deliver sight tests to people with complex needs in special schools, day centres or the community. While SeeAbility uses this contract it only part funds our project.

Elsewhere there are only a few areas of the country where specialist eye care support is offered in special schools at all ages. NHS England has little involvement in these services.

The total absence of a dedicated national sight testing programme for this high risk group in special schools means no eye care at all for some children with the most severe learning disabilities, while others are left in the care of hospital eye clinics as there is no community service to discharge them to.

Our campaign also seeks to establish programmes of eye care in the community for children who do not attend special schools and adults too. We would like to see learning disability added to the list of risk factors that allow people to qualify for free NHS sight tests and regulatory change to ensure everyone with a learning disability must have their spectacles dispensed by a registered professional.

The status quo is no longer defensible and we will use 2018 to resolutely challenge it, until we achieve a more equal right to sight.

Lana needs clear vision to help her engage with school activities.
Acknowledgements

This service is led by SeeAbility and benefits from a collaborative approach with a wide range of organisations and individuals. Particular thanks are given to our special schools eye care team who deliver our specialist sight tests and Dr Maggie Woodhouse, Principal Investigator for the project, Cardiff University School of Optometry and Vision Science for analysis of the data.

Scrutiny by the School of Optometry and Vision Sciences Research/Audit Ethics Committee at Cardiff University was sought and the project was approved.

We would like to thank all the pupils, their parents and families, headteachers, principals and staff in the special schools we have been working with. Without their support this work would have not been possible. We worked hard to gain greater uptake of the service this year, and while the roll changes each year the following table serves as an indication of uptake – overall nearly 80% of pupils across our long-standing school partners (i.e. excluding pilots).

The project was considered by the Committee to be a service evaluation.

The schools involved are:

<table>
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<tr>
<th>School</th>
<th>Pupil age range</th>
<th>Total on Roll at July 2017</th>
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<td>Grangewood School</td>
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<td>107</td>
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<td>Heritage House School</td>
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<tr>
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<tr>
<td>New Bridge School* (pilot began April 2017)</td>
<td>11-19</td>
<td>346</td>
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We are grateful to all our generous donors and supporters for enabling us to continue our specialist work. We would like to pay special thanks to:

Allergan International Foundation
BrightCloud
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The Steel Charitable Trust
The Thomas Cook Children’s Charity
UKH Foundation
Vision Charity
Wates Foundation
Worshipful Company of Lightmongers
Worshipful Company of Spectacle Makers’ Charity
Wyvern Partners

We would like to make a special thanks to Optix for gifting their practice management software to us.
SeeAbility has also secured an NHS (also known as ‘GOS’) contract to help part fund our work in providing each special schools sight test. However the NHS only pays a flat fee of £21.31 per sight test – the same as is paid for any ‘standard’ community sight test. The NHS also provides some funding (via ‘vouchers’) towards the cost of spectacles when they are needed.
Introduction

Children in full-time education have the right to a free NHS sight test and spectacle vouchers if needed, but SeeAbility’s work and other studies in special schools\(^1\) have confirmed that children with learning disabilities are highly likely to have undiagnosed or untreated sight problems, and are also less likely to get access to the eye care they need.

There are only a few areas of the country where specialist eye care support is offered in special schools at all ages.

SeeAbility launched its special schools work ‘Children in Focus’ in October 2013 with the aim of transforming eye care and vision for children with learning disabilities, and to ensure specialist sight tests\(^2\) are standard practice in special schools in England through lobbying for national change.

Since then our work has expanded into securing a more equal right to sight for both children and adults with learning disabilities and we are seeking national change so people with learning disabilities can access new national community programmes of eye care in England and an NHS sight test as a right.

This is a report about our four years of service findings in special schools. Other reports can be found at www.seeability.org.

Visual impairment and blindness is relatively rare in the general population of children\(^3\), but SeeAbility estimates that children with learning disabilities are 28 times more likely to have a serious sight problem based on current research. The incidence of visual problems is also growing as this group of children grows, due to the increased survival rate of preterm babies, who have a higher risk of visual problems and disability.\(^4\)

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\(^2\)In this report we use the phrase ‘specialist sight test’ – which has no legal meaning – but is a term we use to describe a more in-depth assessment of a child’s sight and eyes, not normally available in a community optical practice, which also involves the eye care professionals and specialist equipment/training needed for children with complex needs, and communication of the results to inform education and health planning for the child.

\(^3\)The estimated prevalence of visual impairment is 0.2% of the general population of children (Vision UK, Key facts about vision in children and young people) compared with an estimated prevalence of 5.66% amongst children with learning disabilities (Emerson and Robertson, 2011, The estimated prevalence of visual impairment among people with learning disabilities in the UK).

Many sight problems are both preventable and treatable, so early eye care is essential. Eye problems that remain undetected, such as squint (where the eye turns), long-sightedness, short-sightedness and astigmatism, may lead to reduced vision - also known as ‘amblyopia’ - which, if untreated, can result in permanently reduced vision.

Problems can also develop in teenage years – a particular condition to highlight is ‘keratoconus’, a progressive disease of the cornea, where vision will get blurry and eyes painful unless treated.

If a child has a sight problem it is important that parents and school staff are aware of it, it is corrected or treated where possible, and/or teaching strategies can then be developed to incorporate the needs of the child. However information on a child’s visual needs does not always reach parents or teachers in an understandable format.

Awareness of significant refractive error (or simply the need to wear spectacles) has been shown to be lacking in plans to support children with special educational needs\(^5\), risking the wrong conclusions to be drawn as to why a child has difficulties with school tasks. Other research has shown across mainstream and special schools that only 1% of all pupils with learning disabilities had visual impairment noted as their primary or secondary need in their educational plans\(^6\). Our report will show how under-representative this is in special schools.

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\(^6\)See VIEW’s briefing note. Children and young people whose primary or secondary SEN was vision impairment (Keil, 2017) https://viewweb.org.uk/view/taster-view-resources/
How does the SeeAbility service work?

SeeAbility uses a multidisciplinary service model involving suitably experienced optometrists, orthoptists and dispensing opticians. The day to day operation of the service is managed by our optometry practice manager and administrator with the use of Optix practice management software.

- Orthoptists investigate, diagnose and treat defects of binocular vision and abnormalities of eye movement and vision.

- Dispensing opticians are registered professionals who fit and supply spectacles and visual aids. Under current legislation, only dispensing opticians or optometrists may supply and fit spectacles to children under 16 or anyone registered as sight impaired or severely sight impaired.

- Optometrists examine eyes, test sight, detect eye disease or abnormality, prescribe spectacles and give advice on visual problems and/or treatment.

The tests undertaken, and the equipment used in the project can be found in our earlier reports at www.seeability.org.

Parents/carers who opt for their child to be seen in school, are given the option to attend on the day of testing, and are asked to provide eye health history for their child, using SeeAbility’s ‘About your child and their eyes’ form which can be found at www.seeability.org/eye-tests-children.

We aim to see 6 children a day. Depending on how much a child might be able to tolerate or engage with the testing, in all cases the children are given as long and as many appointments as they need to get their sight examined. If children are less inclined to come and see the team in the testing room, the team go to them, in their classroom or even the playground, if appropriate.

All children are seen jointly by an orthoptist and an optometrist at age 4-5 years (school entry). All other eye tests are carried out by the optometrist who can request input from a SeeAbility orthoptist where clinically needed. Parents are asked if they want the team to fit spectacles or are given the option of taking a copy of the prescription (and corresponding voucher amount) elsewhere for dispensing.

What is the process?

Prior to commencement of the service, discussions will have taken place with local ophthalmic and paediatric services and schools to ensure the service is needed.
The SeeAbility team work with children to help them get used to their spectacles and provide specialist or flexible frames, bespoke adaptations, straps, adjustments, repairs and replacement spectacles as needed. For all newly prescribed spectacles, routine 4-12 week follow ups by the dispensing optician make sure any adaptation issues are addressed. This also allows for more efficient review appointments with the optometrist, ensuring that children are wearing their spectacles successfully so that progress can be monitored.

Results of the specialist sight tests are communicated to parents, teaching staff and Qualified Teachers of pupils with Visual Impairment (QTVIs) using SeeAbility’s ‘The results of your child’s eye test’ form at www.seeability.org/eye-tests-children.

The form explains the findings of the examination in an accessible and practical way, giving an action plan and advising what eye and vision information should be included in each child’s Education, Health and Care Plan.

If the SeeAbility team identify concerns about a child’s vision or eye health which warrant further investigation, referrals are made onwards to the GP or the hospital eye clinic as appropriate.

Children moving on from the school are also provided with a leaver report summarising what has happened to date with their eye care and where possible advising on local optical practices which may be able to support their need for regular sight tests in adult life.

Rai helped Leon get familiar with a sight test by showing him how it works with his teaching assistant.

Ionut has been learning how to look after his glasses.
Reflections on the past year

This has been an important and busy year with the sight problems experienced by children with learning disabilities continuing to gain national attention and our work developing in a number of ways.

Schools work

During the school year, SeeAbility also offers staff training for all schools on the principles of eye care and vision for children with learning disabilities. At the time of writing (April 2018) over the past four years we have trained 637 teachers, teaching assistants and learning support staff as part of school INSET days.

One of the headteachers reported that: “the training was useful for day to day practice, the staff were all engaged and felt it was one of the most successful training sessions they’d had in school.” Much of the positive feedback from attendees has included increased awareness of the importance of eye care and better understanding of how to adapt learning based on how children see.

In May 2017 we organised a conference in central London for all the headteachers and key contacts at the schools we test in. This allowed us to update them on the history and future direction of the project as well as giving them the opportunity to share the impact of the service in their schools with us.

In 2017 we began a pilot service in a secondary school in Greater Manchester, New Bridge School in Oldham. New Bridge is a state-of-the-art special school, supporting pupils with a range of special educational needs aged 11-19 years.

A Children and Family Services project run by the charity Henshaws had already highlighted concerns of unmet need at the school by the orthoptist at the local hospital and QTVI from the sensory team so we were invited to set up the in-school service. A service agreement was put in place with a local optometrist using the practice NHS GOS contract to successfully re-create the SeeAbility service model.
“At Perseid School, we understand the importance of the correct eye care and its contribution to a child’s learning and development.

We are incredibly grateful to SeeAbility for the opportunity they provide our students, delivering specialist sight tests and dispensing glasses at our school since 2013, allowing our students to continue their learning and development, with the eye care that they vitally need and deserve. They are fantastic at working with our pupils and have been able to identify need that we had no idea existed.”

Tina Harvey
Executive Headteacher, Perseid School

New resources

We worked with the Makaton charity to create a booklet and film about understanding the eye test using Makaton signs and symbols.

This is to help prepare children for their eye test using pictures, signs and symbols that they understand to explain what will happen at the eye test.

The booklet and film is now freely available to download and view from our website amongst the range of materials about eye tests for children with learning disabilities: www.seeability.org/eye-tests-children.

Nathaniel is gaining confidence and using sign language thanks to his glasses – we discovered he needed a -18.00D prescription when he was 14 years old.
Professional dissemination

We continued to bring together professionals from across the health and special educational needs sector to share good practice. Over four years we have presented and exhibited at 20 conferences for parents, paediatricians, qualified teachers for the visually impaired, visual impairment staff, teaching staff, dispensing opticians, orthoptists and optometrists. This included workshops around the needs of people with a learning disability at three of the annual national optical conferences.

Working on national change

Since early 2017 we have engaged with NHS England policymakers, the optical sector and learning disability representatives on a programme of work to examine the case to transform eye care for people with learning disabilities. We have been pleased to host officials from NHS England on school visits, including the Head of Primary Care Commissioning, Dr David Geddes.

Specifically the project is looking in detail at SeeAbility’s call for a new national programme of sight tests in special schools in England. Last year we reported how we helped develop a clinical framework for eye care in special schools, authored by all the lead eye care professional bodies, which presents the case for operating an eye health care service in special schools in England and gives recommended clinical protocols.

On vision screening at school entry age (ages 4-5 years), the clinical framework\(^7\) states that it “does not recommend it [vision screening] as a tool for the special school population. This is because this population of children are much less likely to be able to cooperate with National Screening Committee recommended tests and are also much more likely to have visual/ocular problems.” More about vision screening protocols can be found on page 26 along with new data on how many children would fail a vision screen.

It was therefore very welcome that in October 2017, Public Heath England reflected upon this work when launching a new set of national resources to support child vision screening.\(^8\) The new resources specifically recommend that the best arrangement for vision screening is to deliver the programme to all children except those in special schools and that “children attending special schools should be offered an alternative pathway for assessment of visual function in school.” This references the clinical framework as the alternative pathway. This recommendation was also reiterated in correspondence between Public Health England and NHS England.

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\(^7\)See www.seeability.org/Handlers/Download.ashx?IDMF=f3c1194b-512e-41a4-844d-b564222ad84d

Kiyana choosing her new glasses with Ned, SeeAbility’s dispensing optician.
Key findings

In 2017 we hit the major milestone of sight testing 1000 children in the special schools we are working in, and at the time of writing in April 2018 we have tested over 1200 children for the first time, and carried out nearly 2500 eye tests over this period - dispensing nearly 1000 pairs of spectacles (including replacements).

We now believe this to be the biggest global study actively reporting on the eye care needs of children with learning disabilities, and we hope this evidence can help add to clinical knowledge, inspire future research, help transform eye care for children with learning disabilities, and raise awareness so more people get their eyes tested.

Other large cohort studies have taken place in Denmark (see papers by Sandfeld Neilsen, Skov and Jensen, 2007)\(^9\), where similar numbers of children were seen for ophthalmological examination in the community.

What follows is an analysis of data based on the four academic years since the service began (October 2013 – July 2017), looking at the eye care needs of 923 pupils who were new to the service across eleven special schools. This was a fairly even split of children across primary and secondary age groups. Ages ranged from 3.0 to 19.8 years, with a mean age of 10.5 years.

The following analysis applies to pupils seen for the first time by SeeAbility (please note sometimes the percentages do not total exactly due to rounding).

\(^9\)Sandfeld Nielsen, L., Skov, L. and Jensen, H. (2007), Visual dysfunctions and ocular disorders in children with developmental delay. I. prevalence, diagnoses and aetiology of visual impairment. Acta Ophthalmologica Scandinavica, 85: 149–156; Visual dysfunctions and ocular disorders in children with developmental delay. II. Aspects of refractive errors, strabismus and contrast sensitivity. Acta Ophthalmologica Scandinavica, 85: 419–426. The researchers included 1126 children with an IQ ≤ 80, aged 4–15 years, from Copenhagen County, in a cross-sectional study. All children were each offered an ophthalmological examination of whom 923 were examined. The mean age was 10.0 years.
Key findings

Previous history of eye care

Every child and young person under the age of 19 in full-time education has the right to a free NHS sight test. Where parents were able to report a history of eye care (for 826 pupils) this is what we found:

• Over 4 in 10 of these children (43.7%, 361 pupils) had no history of eye care.

• Few children (6.9%, 57 pupils) had accessed a community optician in the past and exercised their right to a free NHS sight test.

• Of those children who had a history of eye care, it seems the vast majority - half of children (48.2%, 398 pupils) - have or had been having their eye care in hospital.

• However even children with known sight problems are not accessing community alternatives once discharged from a hospital eye clinic. Of the 203 children who had been discharged, only 18 had gone on to see an optometrist. Overall 91% (185 pupils) do not report any further eye care once discharged.

A very small number of children (1.2%, 9 pupils) had a history of being seen in school for a full sight test by an optometrist before our service began.

Vision problems overall

Data on diagnoses of visual defects were recorded for 894 pupils. Nearly half of children (47.5%, 425 pupils) had some form of visual deficiency.

The type and range of sight problems is vast, and often easy to treat through spectacle correction but sometimes complex to understand or even potentially sight threatening. More detail on the range of issues follows.

28x more likely

Children with a learning disability are 28 times more likely to have serious sight problems.
Numbers with refractive error

Refractive errors are optical imperfections that prevent the eye from properly focusing light, causing blurred vision. The primary refractive errors are long-sightedness (also known as hyperopia), short-sightedness (also known as myopia) and astigmatism – this is where the cornea or lens of the eye isn’t a perfectly curved shape.

An optometrist can usually assess level of refractive error through a technique called ‘retinoscopy’ where they shine a light into the patient’s eye and observe the reflection (reflex) from the patient’s retina.

Sometimes this is assessed with the use of dilating eye drops (cycloplegia) to relax the eye – we used this in 42 cases. However there is always a line to be drawn between clinical judgment on the use of these drops, which do sting and cause blurred vision, and the distress these can cause children with more complex needs.

We found, when it was necessary to use eye drops to measure a child’s eyes, that asking parents to use drops at home on the morning prior to our visit was usually successful. Having drops instilled in a safe environment by a trusted adult minimised stress for the children and negative associations with the optometrist.

For refraction we found:
• 204 (22.5%) were short-sighted
• 141 (15.6%) were long-sighted
• 271 (29.9%) had astigmatism

Accommodation is the ability to shift focus from far to close viewing. There is significant evidence that this is often reduced or inaccurate in children with learning disabilities.

Accommodative accuracy was recorded for 676 pupils, of whom 542 (80.2%) had an accurate response, 73 (10.8%) had under-accommodation, 6 (0.9%) had over-accommodation and for 55 (8.1%) pupils, the result was ‘inconclusive’.

The degree of focussing (refractive error) is measured and recorded in units called dioptres illustrated by the letter ‘D’. We used the same criteria as the Aston Eye Study for spherical refractive error (spherical equivalent): myopia ≤-0.50 in either eye, and hyperopia ≥+2.00 in either eye (as long as one eye is not myopic). The Aston Eye Study is an ongoing cross-sectional study to determine the prevalence of refractive error and its associated ocular biometry (measurement of eye dimensions) in a large, multi-racial sample of mainstream school children from the metropolitan area of Birmingham (UK). For more information on the Aston Eye Study please see: www.aston.ac.uk/lhs/research/health/org/eye-study.
Key findings

Numbers needing spectacles

Outcomes for prescriptions for spectacles were available for all 923 children. Overall 293 children (31.7%) needed spectacles, 123 of these children for the first time.

Of the 170 children who already had spectacles, 82 needed a change in prescription or a replacement for wear and tear.

Looking at all 293 children in need of refractive correction, this effectively means 70% (211 children) either didn’t have the right prescription or a properly usable pair of spectacles.

As noted below some of these prescriptions were very high so without their spectacles a child would be classed as “functionally visually impaired”.

Patterns of refractive error

Dividing the pupils into primary and secondary age groups, there was an increase in myopia from 18.2% to 28% from primary to secondary, accompanied by a decrease in hyperopia from 17% to 13.9%. The distribution was significantly different between the two age groups ($\chi^2=12.5$, $p=0.002$).

It was also notable that levels of refractive errors were often high and higher than would be expected in the general population of children (for example, see the Aston Eye Study).\(^{10}\)

The higher the number measured in dioptres, the higher the refractive error. 36 pupils were high myopes ($\leq -6.00$D), 17 of primary age and 19 of secondary age. At primary age the three highest myopes were -13.50, -13.50 and -19.25D and at secondary age -17.00, -18.00 and -30.00D.

A child with high short-sightedness would have real problems identifying faces.

Without glasses

With the right correction
**Suleman’s story**

We saw Suleman, aged 10, for the first time in 2016. Suleman had never been seen by an optometrist or by a hospital eye service in the past.

On examination, the SeeAbility optometrist found that Suleman was very long-sighted at +11.00DS with mild astigmatism in both eyes. A reduced prescription was given initially to help Suleman to adapt to his glasses.

Suleman was referred to the hospital eye clinic in view of the very high prescription, however missed the appointment. We have followed up again with Suleman’s parents, recently updated his glasses and re-referred to the hospital eye clinic as severe long-sightedness is worse than short-sightedness when it comes to development of vision in children.

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**Many children like Suleman can miss hospital appointments**
Visual acuity

Visual acuity is a measurement of the smallest degree of detail an eye or two eyes together can detect. This is normally scored as the smallest line of letters that can be seen on a chart (measured and reported according to the ‘LogMAR’ scale). This is often tested differently for children with learning disabilities.\(^{11}\)

It is assessed as the child ‘presents’ at the sight test, in other words if they come with or without their spectacles on. It is usually reported on the basis of what detail a child can see in their ‘best eye’ (monocularly) so the optometrist will also try to cover a child’s eyes to test which is the better eye.

It can be challenging to reliably record visual acuity in children with learning disabilities, which is reflected in these findings.

Our analysis indicates that children with autism were less likely to be successfully tested for acuity due to their ability to co-operate with the tests.

Of other children, 43 pupils had severe visual impairment (including 11 with cerebral visual impairment or CVI) precluding any measurement.

Overall of the 923 children, we could only get an accurate monocular or binocular visual acuity measure for 550 (around 60%).

Around one quarter of these children (25.8% or 146 pupils) had such poor sight to be classed as having ‘low vision’\(^{12}\) according to the World Health Organisation (WHO) criterion (LogMAR 0.5 or poorer in the better eye).

These findings show how vision screening (see overleaf) which uses these tests cannot be relied on alone in special schools.

\(^{11}\)The tests used here were Keeler cards, Cardiff Acuity Test and Kay’s singles, all considered non-crowded, and the Kay’s crowded test.

\(^{12}\)The World Health Organisation full definition of low vision can be found here http://www.who.int/blindness/causes/priority/en/index4.html
How many children would ‘fail’ a vision screening test?

In the UK, the National Screening Committee recommends vision screening of children at school entry, age 4-5 years. The recommendation is for a monocular measurement using a LogMAR test, and if a child cannot see a certain level of detail with each eye separately or they are unable to perform the test, they will be referred on for further, fuller tests dependent on local protocols. For example, parents may be advised to take their child to a community optician or be referred into hospital care. The ‘pass’ criteria is LogMAR 0.2 in each eye.

To give sufficient numbers for analysis, data was selected on a number of pupils that fell within this age group (156 pupils) to determine numbers who would pass or fail vision screening using the appropriate tests. Only 10 pupils would be able to use the appropriate tests and only 4 pupils would pass if a letter or picture test were used. In fact, Public Health England guidelines recommend only the Keeler LogMAR crowded letter test is used, and this would result in only 1 child passing.

The implications of this are discussed later in the report.

Squint and overall orthoptic anomalies

Orthoptic anomalies and squints are conditions affecting the ability of the eyes to move and work together. A squint – also known as strabismus - is present when the two eyes are not in alignment with each other; it is often treatable with spectacles but may require surgery.

Uncorrected squint/strabismus usually results in reduced vision in the affected eye (amblyopia) which can be treated with spectacles and/or patching of the better eye. These issues can bring symptoms of blurred vision, double vision, lack of depth perception, or inability to use the eyes to accurately find or follow an object or move into certain positions.

Another condition is nystagmus, which causes constant movement of the eyes which can’t be controlled.

237 pupils (25.7%) had an orthoptic anomaly. The majority (214 pupils, 23.5% of the total) had strabismus. 20 (2.2%) had nystagmus, in addition to strabismus.

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Key findings

Ocular (eye health) disorders

Other than the orthoptic anomalies above, 77 pupils (8%) had an ocular pathology including conditions that cause irritation, such as 4 cases of blepharitis and 5 cases of conjunctivitis. But to illustrate the extent and range of pathologies and sight problems there were also more serious cases:

- 4 cases of keratoconus
- 12 cases of cataract
- 4 cases of enlarged optic cup
- 7 cases of retinal anomalies
- 16 cases of hemianopia and gross visual field defects.

Cerebral Visual Impairment

Even if a child’s eyes are healthy and focussed, there can be problems processing visual information in the brain – known as Cerebral Visual Impairment or CVI.

Diagnosis will rely more on observable behaviours and we use a screening questionnaire to identify possible cases, unless CVI is already diagnosed. CVI was diagnosed or suspected in a total of 97 pupils, or 10.5% of all pupils.

Referrals onwards

Overall, 261 (28.3%) pupils were referred for support from the Qualified Teacher of pupils with Visual Impairment (QTVI). This happened in some cases of new prescription of spectacles, diagnosis of CVI, eye movement disorders, or their ocular disorders impacting on visual function.

61 pupils were referred for medical or orthoptic evaluation: 9 to the GP, 12 to the ophthalmologist, 9 to hospital eye services, and 31 to the SeeAbility orthoptist team in school.

In other words only 3% of children needed external referral due to the multidisciplinary model. Having a good relationship and communication pathways with hospital eye clinics also enabled hospital clinics to feel comfortable enough to discharge to our service, either fully or for some of the more routine checks needed, reducing the number of hospital attendances necessary for some children.
Previously undiagnosed sight problems

Of the 425 pupils with a record of visual deficiency, 28% (118 pupils) had a vision problem that was previously unknown to school or parents.

These included four previously unknown cases of visual field loss (limited peripheral vision). This is most often a total loss of half of the field of vision, and may be associated with cerebral palsy and hemiplegia. Although visual field loss is usually untreatable, it is very important everyone working with a child understands its nature so that appropriate strategies can be put in place for example, being on the right side of the classroom, or having books or screens positioned appropriately.

We also identified 4 cases of keratoconus – a progressive disease of the cornea (the front surface of the eye) in which vision deteriorates over time as the cornea becomes increasingly distorted.

Timely identification of keratoconus is critical for less invasive new treatment methods to be successful.

Even amongst children with newly prescribed spectacles (123 pupils) there were those whose high myopia could put them at risk of retinal detachment.

Amongst children with no history of eye care reported by parents (361 children) and therefore those most at risk of having their eyesight overlooked as children, we found 48 children that needed a spectacle correction, and 61 children with an overall vision deficiency.

In other words, almost 1 in 5 of the children with no history of eye care had a problem with their eyesight. Where we could get an acuity measurement, we found 17% of these children would be classed as having low vision.

A child with high long-sightedness would really struggle with close up work without wearing their glasses.
Other findings

Outside of the four years analysis by Cardiff University, we also assessed some data relating to our service recently, in particular around the need for dispensing input, the level of unmet eye care needs amongst secondary schools age pupils who we have started recently working with, and parental satisfaction with the service.

Dispensing

Over 4 years of our service 266 first pairs of spectacles were provided. In this service the dispensing optician often has more interaction with pupils than the optometrist, seeing children to measure for their spectacles, supply and fit, then follow ups at 4-12 weeks to make adjustments and help with getting used to glasses as well as make ongoing repairs. In just one year (2016-2017) the dispensing optician had 631 contacts with children for these reasons. Dispensing appointments were carried out all over the school, for example, in the classroom, soft play, music room, etc.

Parents were offered the choice of taking a copy of the prescription (and corresponding voucher amount) elsewhere for dispensing, however only 5 parents across the four year course of the service have requested this – the remainder wanting dispensing to take place in school. The high preference for spectacles to be dispensed in school was also confirmed in the parental survey.

Eye care history amongst older children

Having expanded into new secondary schools recently, we have also looked at the data just from secondary age children to see if access to eye care is changing significantly by the time children are reaching their teenage years.

For 42% of children we were still giving them their first sight test indicating that there is a significant barrier to eye care for these children. 17% had reportedly accessed a community optometrist in the past, and 40% hospital eye care services.

Dispensing glasses doesn’t have to be a stressful experience.
Charlotte’s story

Charlotte needed a -7.00D prescription for significant short-sightedness but, with her autism, she has struggled to get used to glasses and refused them when she was little. With the support of local occupational therapists Whole Child Therapy, our dispensing optician started a programme of ‘active adaption’ and positive association with her glasses, involving mum and teaching staff.

Stimulating a child’s balance system with focussed vision is believed to help them in getting used to the ‘changed world view’ more easily. Charlotte’s learning support assistant says: “As a class team we all agreed to keep going and be patient as Charlotte didn’t want to wear the glasses. I would distract her in other ways.

I used to collect Charlotte from the bus every day and take her back at home time. This was the start of getting Charlotte used to the glasses, I would put them on and walk with her, holding her hands, singing or skipping! I would take her for walks around the school with them on and over the months Charlotte was happy to wear her glasses all the time.”

Charlotte now wears her glasses all day every day, in fact she cries if she has to take them off. She has chosen a soft, flexible pair of red glasses which she now loves. It would have been easy for Charlotte’s behaviours to be attributed to her autism, now she has glasses she is much more confident, engaged and less anxious.

Parental survey

In beginning to establish the project in four special schools we surveyed 25 parents by telephone in 2014. This was based on a questionnaire used in the pilot eye care project in Wales (see Woodhouse et al).

All 25 reported it was useful for their child to have a sight test in their special school. We felt it would be timely this year to follow up with a larger survey in the summer holidays of 2017, when it would be easier to contact parents.

This telephone questionnaire reached 95 parents who were randomly selected from our database, aiming for a 10% response rate to a total cohort of over 900 children which we have tested. Questions were based on the Likert Scale – strongly agree/agree/don’t know/disagree/strongly disagree.

The results show a clear preference for special school environments for eye care with 84% of parents agreeing that special school would be the first choice for their child to receive an eye test.
Only 3% agreed an optician would be their first choice. 85% also agreed that special school would be the first choice to have their child’s glasses fitted and supplied.

97% of parents agreed with the statement ‘having an eye test in school is convenient for my child’ while 49% said the same for a hospital eye test and 32% for an opticians. 97% agreed that sharing information about eyes and vision with their school is useful and 85% agreed they understood more about their child’s eyes and vision after the school eye test.

55% of parents agreed with the statement ‘I have not tried to get an eye test for my child in the past because I was worried it would not be possible’.

Joseph’s story

Joseph is typical of the many teenage children we see. When he was three, a health centre had prescribed glasses but Joseph couldn’t get used to them and his parents were advised that he could manage without them.

“We found out recently that some of Joseph’s medication could make his vision blurred and luckily we received some information from the school soon after. It was from SeeAbility, who said they could test Joseph’s eyes in school,” says Neal, Joseph’s dad.

“They were lovely, immediately putting Joseph at ease and making him comfortable. They worked together to test his eyes, being patient and calm, and adapted the test around Joseph,” says Rebecca, Joseph’s mum.

Our optometrist found Joseph to be long-sighted with blurred vision. “When the optician put Joseph’s new glasses on him he immediately started looking around, as though he was seeing things clearly for the first time. It was amazing to see,” continued Rebecca.

Now Joseph wears his flexible and light glasses often. The school encourage him to wear them and mum and dad are very pleased with the outcome.
Discussion

High prevalence of sight problems found

In common with other findings for children with learning disabilities and studies in special schools, our report confirms a high prevalence and extensive range of sight problems amongst children in special schools.

Although we are still to get 100% uptake of our service, with a consent rate touching on 80% (excluding the two pilot areas) we are able to say that of the children we see or get a measure for:

- Nearly half have a problem with their vision.
- Around one quarter have such poor sight to be classed as ‘low vision’.
- Nearly a third need a spectacle correction.
- A quarter have a squint.

The type and range of sight problems is also vast - from conditions that cause inflamed and itchy eyes to more serious cases such as keratoconus and a case of retinal detachment.

There were many co-occuring sight problems too and it appears that children, as they reach their teenage years, are becoming more myopic (short-sighted) – much like their peers. However the difference is that pupils in special schools are much less likely to say or show they have developed a sight problem.

Children not accessing the eye care they need

Despite this level of need, based on children that we see and their parent’s self reported history, it seems a large proportion of children in special schools have no history of eye care. Overall 43.7% stated there was no history.

Even when we looked at data for secondary age children only, this was very similar (42%).

Overall few children (6.9%) access a community optician and exercise their right to a free NHS sight test.

In the most part, around half of children have or were having their eye care in hospital and using already busy hospital outpatient services.
This brings associated challenges of time out of school for pupils and work for parents, travel arrangements to get to hospital and potentially stressful waits in an unfamiliar clinical environment. It is also clear that even children with known sight problems are not accessing community alternatives once discharged from a hospital eye clinic. Overall 91% do not report accessing any further ongoing routine eye care once discharged from hospital.

Our 2017 survey of parents showed almost all agreed special school eye tests were convenient for their child. The vast majority felt it would be their first choice for sight tests, and to have their child’s glasses fitted and supplied. This is confirmed in practice with only 5 parents ever asking to have glasses vouchers rather than dispensing in school. Parents often say they are at a loss as to where to go or know if it would be possible to sight test their child.

Kaif’s story

Kaif is 12 years old and is typical of children that would have two or three hospital appointments a year to monitor his sight as he is extremely short-sighted and needs glasses. He has a real fear of hospitals. Mum Shagufta says:

“He would cry and tantrum as soon as we got to the hospital. Trips to the hospital always felt like a full day out and one that I dreaded.”

It got to the point that Kaif had to have a general anaesthetic when he was 6 years old, to know exactly what his prescription was.

With the agreement of Kaif’s consultant, we began to see Kaif in school. Taking the time to sit and explain to Kaif what was going to happen, our optometrist even practised on his teaching assistant, so Kaif could see how the test worked.

In this way, Kaif went from standing nervously by the door to sitting down in his own time when he felt comfortable. Kaif’s glasses were updated to a stronger prescription and he is doing really well with them.
Meeting needs in school works

Being in school with a multidisciplinary team brings in the ‘targeted surveillance’ needed for this high risk group.

The calm, familiar setting in school relieves stress and anxiety for these children and means they are much more likely to comply with a sight test and get used to eye care. The teaching staff know the children and can inform the team what works best for the child or what might be potential triggers for distress. In any case the model gives the flexibility to reschedule or carry out different elements of the tests on different days/times without any need to take the child out of school.

Often children hadn’t got the spectacles they needed or weren’t wearing those that had been prescribed, or weren’t wearing them as they should be. Some of the prescriptions were very high so without their spectacles a child would be classed as ‘functionally visually impaired’. The impact of not having spectacles on children who may be non-verbal, or who rely on their eyes to communicate (e.g. through eye gaze) can be much more significant than children without special educational needs. In school, children get their spectacles with little disturbance to their day, in a relevant educational context and won’t be without their spectacles for long if they get broken or need a replacement. With the high demand for repairs, replacements and fittings of spectacles, the dispensing optician role is crucial to the service and often the busiest of the team.

The other important element is immediate feedback from the sight test so findings could be discussed. With such a high level or complexity of sight problems, making it easy for parents and teachers to understand what is going on with a child’s sight is vital. Once it is established what a child can see – the impact on their schooling and their home life can be profound. For example, from knowing where best for a child to sit in their classroom to whether they can make use of new technologies to open up communication.

For children with high myopia, the classroom environment and seeing your teacher can be a blur.
Pavlo’s story

Pavlo has Profound and Multiple Learning Disabilities, and limited movement. He is 9 years old and is long-sighted, with astigmatism, which means he sees better with glasses. Because Pavlo has no speech he uses Eye Gaze technology. This is equipment that allows him to access a computer by using his eye movements, so he can use specialist software to communicate. His glasses help him focus on the screen when using this equipment.

Pavlo has nystagmus (wobbling of his eyes) and he has a large outward turning squint in his left eye. He also appears to have loss of vision on his right side (hemianopia), something that teaching staff were unaware of. This means he sees best when things are placed on his left side.

Pavlo’s visual needs have to be carefully explained and highlighted in his Education, Health and Care Plan (EHCP) so complex equipment like the Eye Gaze system can be placed correctly and so that everyday classroom activities can be adapted to take his needs into account.

Brenden’s story

Brenden has been a SeeAbility patient since 2015. When Brenden was first seen in school he was already wearing glasses, these however weren’t fit for purpose, and were forever slipping down his face. Brenden has a very high degree astigmatism (-6.00DC), which means having well fitting glasses is very important as any misalignment will have a negative impact on how well he sees.

Brenden also has special facial characteristics and frequent involuntary head movements, this makes frame choice something that needs to be made with care to ensure optimal vision and comfort.

SeeAbility ordered new glasses after Brenden’s eye test and our dispensing optician is able to visit him and check that these are still suitable and fitting well when he is in school regularly, ensuring Brenden is never without his very strong glasses for long.
Serious sight problems identified

Over the course of the service one of the most satisfying elements has been to help support nearly 120 children who no-one knew had a problem with their sight. Much of what has been found is very treatable.

However, even issues such as squint and refractive error can have a significant impact on a child’s education and development, their social skills and behaviour, if allowed to go untreated. At worst these untreated issues can leave a child with permanent sight loss if their eyesight is not supported to develop properly.

By recognising or identifying the cause of poor sight for the first time in a number of children, particularly those with no previous history of eye care, the service helps ensure children are on the right pathway of care. Many cases of orthoptic disorders could be managed in school because the service benefits from orthoptists, again highlighting the benefit of a multidisciplinary model and mechanisms that allow for co-ordination with local hospital services.

Teenagers we identified with keratoconus exemplify the need for ongoing monitoring of a child’s sight using the right tools. These children were very unlikely to have self presented with a sight problem.

In this picture of a classroom the black dot in the centre shows us where the person is looking. The right hand side of the scene is visible to someone with a full visual field but is not visible to a child who has a right hemianopia (see top picture). If someone approached from this side or their communication device/computer was placed there, they would not see it.
Rai, a SeeAbility optometrist

“I’m still very early on in my optometry career being only less than 3 years qualified and enjoy varied work, both in practice but also working for SeeAbility. A day with SeeAbility is so different and is one of my most enjoyable days in my week!

In the special schools I visit, I feel we are really part of a school team, working together to help children reach their potential. It is all about that vital exchange of information, whether it’s a child I’m seeing for the first time or a child that is now under my regular care. For me this all came together last year for one of my patients, in one of the most serious, but most rewarding ways.

Sajid* is a young boy who has been under joint care with us and the local hospital eye clinic since 2016. Sajid is very short-sighted at around -13.50DS in both eyes and has always had trouble keeping his glasses on. As with many children we see, he had missed a hospital appointment and was subsequently discharged.

In late 2017, we had a follow up appointment with Sajid where I noticed his visual behaviour had changed – I followed up with an examination and referred urgently to the hospital after finding he had a retinal detachment. There’s a risk of permanent vision loss if retinal detachment is left untreated or if treatment is delayed, but Sajid has since had an operation in the right eye.

When a child has such high myopia, retinal detachment is a risk, particularly as Sajid will bang his head if he is feeling distressed or emotional. His high short-sightedness and retinal detachment surgery has resulted in the development of a cataract in his right eye but this year, if all goes well, he will have an operation on both eyes to restore balanced vision. Sajid’s dad will continue to keep us updated and is reassured we’ll be monitoring his son.

I can’t say what would have happened if we hadn’t been working with Sajid’s school in the way we do, but I am thankful that we were there and the result was a successful retinal detachment operation. We will continue to work with the school to ensure that nothing happens to his other eye.”

*Sajid’s name has been changed
Areas of future work

While SeeAbility considers the service model has worked very well, we still recognise there are areas where we continue to learn and improve. We evaluate the service with the support of the schools we are working in to constantly refine the model and gain feedback.

We hope that our evidence can help add to clinical knowledge and inspire future research, and in 2018 we would like to publish the evidence in this report in a peer reviewed journal.

We are amending our consent form to strive for a 100% response rate. We have just gained ethics approval to ask parents who are not making use of the schools service to identify whether their child is accessing eye care elsewhere, as part of their educational annual review.

We also plan to develop our work around transition and embedding vision into the Education, Health and Care Plans for children and in care plans once a young person has left special school. Our data has shown that as many as a quarter of children in special schools would meet the World Health Organisation classification of having ‘low vision’ and in other studies this has been even higher.\textsuperscript{15} It is clear that vision issues are often under-reported in special educational needs plans.

We continue to explore barriers to carrying out parts of the eye test and wearing the spectacles prescribed with the view to being involved in the development of new testing techniques using technology and support strategies for tolerating spectacles.

There is no specialist qualification for optometrists working with children or adults with learning disabilities. SeeAbility is now making plans to work with others to fill this gap, and a fundamental review of education and training in the optical sector by the regulator, the General Optical Council, provides an excellent opportunity to highlight this need.

On a wider note, we are also developing our information and advice offer, and our work with adults with learning disabilities. We know there are many areas of the eye care journey that need further research projects and look forward to developing new partnerships.

\textsuperscript{15} For example, see Pilling et al (2016). Are all children in need of visual assessment known to the eye clinic? BJO Online First. Of new children seen in Bradford’s primary special schools, 33% of children had low vision or were blind.
Conclusion: reform is urgently required

SeeAbility continues to call for a national programme of specialist sight tests in special schools in England, offering the ‘right care, at the right time and in the right place’, to children at high risk of sight loss and sight problems. This is a group of around 100,000 children that are in real need and our work and that of others shows that a special schools service can work in practice.

This year, our data confirms only 1 child in the vision screening age group would pass the screening protocols in use at school entry. So it has been a breakthrough that Public Health England support the recommendation that full sight tests rather than vision screening is offered in special schools, based on SeeAbility’s findings and the clinical framework authored in 2016 by SeeAbility and leading eye care professional bodies.

However, NHS England, not Public Health England, is responsible for the NHS sight testing system. It is yet to move forward on implementing change. It continues to rely on a £21.31 contractual fee – already known to significantly underestimate the cost of a ‘standard’ sight test – to deliver sight tests to people with complex needs in special schools, day centres or the community.

The total absence of dedicated national programmes for this high risk group means no eye care at all for some of the most severely disabled children, while others are left in the care of hospital eye clinics as there is no community service to discharge them to. These are children more likely to struggle to comply with tests, or miss appointments at hospital, where clinics are already battling to meet demand for treatment.

Our Equal Right to Sight campaign also seeks to establish programmes of eye care in the community for children who do not attend special schools and adults too. We would like to see learning disability added to the list of risk factors that allow people to qualify for free NHS sight tests and regulatory change to ensure everyone with a learning disability must have their spectacles dispensed by a registered professional.

In parliament, the All Party Parliamentary Group on Eye Health and Visual Impairment has called on the leadership of NHS England and at the Department of Health and Social Care to make the reforms required.

The status quo is no longer defensible and we will use 2018 to resolutely challenge it, until we achieve a more equal right to sight for those most in need of accessible eye care.
What are special educational needs and disabilities or ‘SEND’?

According to the statutory government code of practice, children with special educational needs and disabilities or ‘SEND’ all have learning difficulties or disabilities that make it hard or harder for them to learn than most children of the same age.

This might include needs around behaviour and interaction, speech and language, sensory impairment, cognitive difficulties or physical disabilities.\(^\text{16}\)

What is a special school?

Special schools can be defined as:

“A school which is specifically organised to make special educational provision for pupils with SEND. Special schools maintained by the local authority comprise community special schools and foundation special schools, and non-maintained (independent) special schools that are approved by the Secretary of State under Section 342 of the Education Act 1996.”

Special schools and pupil numbers in England

Pupil numbers are published in government figures. Pupil numbers are 112,114 pupils in special schools.\(^\text{17}\) In addition there are also 13,130 pupils in independent special schools (based on numbers the DfE holds for 431 independent schools).\(^\text{18}\)

The Department of Education has confirmed to SeeAbility it does not collect the primary SEND needs of children in independent schools (e.g. autism, profound and multiple learning disabilities, visual impairment).

It is important to note that not all special schools cater for children with learning disabilities or autism.


\(^{17}\)See here www.gov.uk/government/statistics/special-educational-needs-in-england-january-2017 National Tables. Table 10 for numbers of special schools, and Table 8 for numbers of children in special schools.

\(^{18}\)Ibid extracted using the “underlying data table” on this page and filtering column ‘O’ by special school types independent special schools.
About SeeAbility

SeeAbility encourages people with disabilities to challenge what they expect from life, from themselves and from wider society.

The people we support overcome huge barriers to achieve exciting new things every day: some big, some small, all extraordinary.

They challenge us all to rethink disability.

SeeAbility provides extraordinary support and champions better eye care for people with learning disabilities and autism, many of whom have sight loss.

Registered as The Royal School for the Blind, SeeAbility is one of the oldest disability charities in the UK and has pioneered specialist support for over 200 years.


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