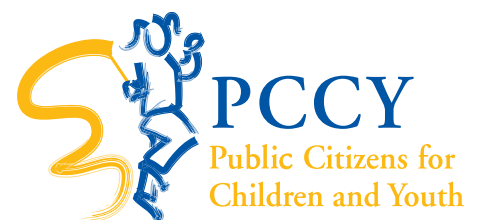


A Problem We Don't See:

The Status of Children's
Vision Health in Philadelphia



November, 2008

About PCCY

Public Citizens for Children and Youth (PCCY) serves as the region's leading child advocacy organization and works to improve the lives and life chances of its children.

Through thoughtful and informed advocacy, community education, targeted service projects and budget analysis, PCCY seeks to watch out and speak out for children and families. PCCY undertakes specific and focused projects in areas affecting the healthy growth and development of children, including child care, public education, child health, juvenile justice and child welfare.

Founded in 1980 as Philadelphia Citizens for Children and Youth, our name was changed in 2007 to better reflect the expanded work in the counties surrounding Philadelphia. PCCY remains a committed advocate and an independent watchdog for the well-being of all our children.



Public Citizens for Children and Youth

#7 Benjamin Franklin Parkway, 6th Floor, Philadelphia, Pa 19103
215-563-5848 / 215-563-9442 / www.pccy.org / info@pccy.org

A Problem We Don't See:

**The Status of Children's Vision Health
In Philadelphia**

Table of Contents

Introduction	4
Executive Summary	5
Background	6
First Step: Vision Screenings	
Vision Screening in School	7
Philadelphia School Screening Rates are Good	8
Screening in Primary Care Offices	8
Primary Care Screening Data Unavailable	9
Step Two: When Children Fail Vision Screening	
Barriers to Obtaining Vision Care Services	10
Misunderstanding and Denial of a Problem	11
Difficulty Accessing Vision Care Services and Insurance Coverage	12
Difficulty Obtaining Glasses	13
Some Children Don't Want to Wear Glasses	13
Final Step: Vision Programs Filling the Gap	
The Eagles Eye Mobile	14
The Eye Institute of the Pennsylvania College of Optometry	15
School District Contracts With Other Programs	17
Sight for Students	17
Local Vision Care Programs Significantly Increase Children's Access to Care	17
Children Failed School Screening	18
Conclusion	19
Recommendations	20
Appendix 1: The Controversy Regarding Whether Or Not All Children Should Receive A Vision Exam	22
Appendix 2: Promising Practices - Vision Programs in Other States	23
Acknowledgments	24

Introduction



Years ago, after visiting schools in economically disadvantaged sections of Boston, Jonathan Kozol remarked that it was amazing that poor African American children had such good eyesight since, in classroom after classroom, nobody was wearing glasses.

Since then, because of improvements in health insurance coverage through Medical Assistance and CHIP, millions of children throughout the country currently have a health care provider and access to needed health care services.

Yet, were Kozol to revisit those same classrooms, he could probably make that same observation. According to records, thousands of Philadelphia school children who have identified eye problems do not receive needed treatment or glasses.

Interested in understanding why even with many changes much had seemed to remain the same, PCCY undertook an examination of the issue of children's visual health in 2008.

Executive Summary

Pennsylvania state law requires school nurses to screen all students once a year. We learned that, in general, screening does occur but follow-up care after a child fails the screen does not happen for most children. Last year, 22,055 Philadelphia public school children failed their vision screen test and the majority, 13,834 or 63 percent, did not receive any follow-up care. If a child fails the screening, he or she should receive an exam by an eye doctor to identify if a suspected problem truly exists, and to receive appropriate treatment. The impact of not seeing clearly is both broad and deep, touching many aspects of a person's life; yet the majority of the children who fail their eye screens do not receive follow-up treatment.

There are programs that have stepped in to assist in providing vision care to many youth in Philadelphia. The Eagles Eye Mobile and The Eye Institute of Philadelphia provide follow up care to over 3,500 school children every year who have failed their screening test. These programs serve about 16 percent of all school children who fail each year and 43 percent of all children who fail AND get follow-up care. These programs have been important in providing care and removing two barriers that get in the way of children receiving the follow-up care they need: access to services and diminishing the perceived stigma of wearing glasses.

Barriers for Children Receiving Follow-up Vision Care

- Limited access to care;
- Lack of recognition on the parents' part that their child may indeed be having difficulty seeing - even if s/he is not walking into walls or if s/he can watch television;
- Difficulty parents experience finding a vision care provider at times when parents are available;
- Youth being uncomfortable or embarrassed about wearing glasses;
- Parents and school nurses being overwhelmed by other, seemingly more critical, responsibilities;
- Lack of clarity about the ability of public health insurance to pay for children's glasses;
- Limitations of the CHIP eyeglass benefit;
- The state's inability to track the incidence or outcome of screenings and exams for children with public health insurance from Medical Assistance and screenings for children with the Children's Health Insurance Program (CHIP).

In order to increase children's access to appropriate eye care services we must increase the number of children who secure treatment after a screening has identified a possible problem.

To realize this goal, we recommend that more efforts be made to remove the barriers to follow-up care – including: developing a screening tool that would demonstrate to parents their children's vision problems and how they can be corrected; expanding and developing more programs that provide access to care; creating a comprehensive resource guide outlining where to secure treatment, increasing public awareness about Medicaid and CHIP vision benefits and expanding these programs' benefit packages.

Undertaking these measures will improve the visual health – and ultimately the overall health and well-being of children in Philadelphia.

Background

Vision difficulties are one of the most common child health problems in the United States and the most prevalent handicapping condition in childhood.¹ As children grow and mature, between 70 – 80 percent of what they learn is processed through their eyes.² Children with uncorrected vision problems experience major disadvantages even before they enter the classroom. If a student cannot see clearly, s/he is likely to have difficulty learning and succeeding in school. Untreated vision problems can affect a child's cognitive, emotional, neurologic and physical development by limiting the range of experiences and the kinds of information to which the child is exposed.³ It is surprising that parents and educators often overlook vision problems as a possible roadblock to learning.

It is estimated that between 20 and 25 percent of school-age children suffer with vision problems that, if left undiagnosed and untreated, affect performance in school and in life.⁴ Some research suggests that in low-income, urban areas, the problem affects even more children.⁵ Approximately 158,000 school-age children in Philadelphia are enrolled in the Medical Assistance program, which is public health insurance for individuals with low incomes. Additionally, approximately 20,000 school-age children are enrolled in CHIP, the Children's Health Insurance Program for children whose families' income is low to moderate. If we focus solely on Philadelphia children enrolled in these programs, we would expect that at least 35,000 to 44,000 children have vision problems.

In addition, many researchers believe that vision problems are even more prevalent in children already experiencing difficulties in school or life. One study revealed that special education students had a higher incidence of uncorrected vision problems than their peers.⁶ With more than 24,000 children enrolled in special education in the Philadelphia School District, it is critical that particular attention be paid to the screening and follow-up treatment of these children.

Like many health issues, vision problems are best addressed through early diagnosis and treatment. Many eye conditions require early detection to stop preventable problems from causing irreversible damage, yet the majority of children in the country do not receive an eye exam or screen before starting school. Across the nation only one-third of young children have an eye exam or screening before beginning school.⁷ Thus, two in three children are without any preventive vision care before they enter elementary school. The good news is that most vision problems are correctable and we know how to identify and treat them. We must conduct high quality screenings of all children for vision difficulties and ensure that children who fail the screens receive the vision care they need.

Based on national estimates, it is expected that at least 35,000 to 44,000 school-age children in Philadelphia have a vision problem.

As stakeholders in Philadelphia explore ways to keep both children and adolescents engaged in and succeeding in school, we must underscore the importance of assuring that children can see and secure needed vision care. With an aware citizenry, good screening and follow-up care, we can make a major difference in the lives and futures of the city's children.

Between 70 – 80 percent of what children learn is processed through their eyes, so if a student cannot see clearly, s/he is likely to have difficulty learning and succeeding in school. Parents and educators often overlook vision problems as a possible roadblock to learning.

First Step: Vision Screenings

A child's vision screening test is an efficient and economical procedure in which a large number of children are separated into two groups: children who probably have no vision problems and children who require more thorough testing. Screenings are typically conducted by two major types of health care professionals: school nurses and primary care providers.

Vision Screening in School

“Screening for vision is absolutely an educational issue. If children cannot see, how are they going to ever learn to read or write or pass their PSSA test?”

– Nurse, School District of Philadelphia

“We do a really good job of screening children for vision problems. On top of all of our responsibilities, it is one of the things we can be proud of as school nurses.”

– Nurse, School District of Philadelphia

Studies have determined that school vision screening provides the first indication of abnormal visual acuity in 76 percent of children screened, thus supporting the notion that school vision screening is important.⁸ Thirty-three states, including Pennsylvania, require an annual vision screen for children before or during the school year.⁹ Pennsylvania has mandated vision screening through schools since 1957, and requires that all school children be screened by their school nurse every year for both near- and far-sightedness, lazy eye (amblyopia) and cross-eyed (strabismus).

In addition, school nurses screen children for color blindness and depth perception one time – in either the first or second grade, or when they first enter the Philadelphia school system – no matter the grade.¹⁰ Pennsylvania's screening protocol is more comprehensive than that of many other states which only require screenings to check for near or far-sightedness. The Pennsylvania Department of Health provides a procedure manual that outlines how to conduct each screening and new school nurses are paired with mentors to ensure that they are following the state guidelines.¹¹

Number and Percentage of Philadelphia School District Students By Grade Who Received a Vision Screening in Academic Year 2007-2008

Grade	Number of Children Enrolled	Number of Children Screened	Percentage of Children Screened
Kindergarten	12,308	10,119	82
1st	13,217	11,758	89
2nd	12,659	11,402	90
3rd	12,727	11,585	91
4th	12,432	11,434	92
5th	12,365	11,210	91
6th	12,036	10,676	89
7th	12,227	10,495	86
8th	13,325	11,365	85
9th	16,206	11,951	74
10th	14,246	8,983	63
11th	10,039	6,572	65
12th	10,988	6,662	61
Total	164,775	134,212	81

Philadelphia School Screening Rates are Good

In preparing this report, PCCY obtained data from the Philadelphia School District and conducted interviews and held a focus group with Philadelphia School District nurses. In the 2007-2008 academic year, the School District reported that of the 164,775 children and adolescents enrolled in non-charter public schools, a total of 134,212 or 81 percent were screened for vision difficulties. The school nurses we interviewed generally agreed that most school nurses work diligently to screen all children; the relatively high overall screening rate of 81 percent reflects the success of that effort.

In academic year 2007-2008, Philadelphia school nurses report having successfully screened 134,212 children (81 percent of all students) in the District.

Many nurses stated, however, that it is more difficult to get compliance from older students. This was confirmed by District data that revealed a decrease in screening levels as students age. Screening rates for Philadelphia's public school children were highest in grades one through eight where between 82 – 92 percent of children were screened. In high school, the screening rates declined to an average of 66 percent with a low of 61 percent for twelfth graders.¹² Different strategies including more school nurse efforts must be employed in the city's high schools in order to increase the number of older students who receive screenings.

Screening in Primary Care Offices

The American Academy of Pediatrics (AAP) recommends that pediatricians assess children for eye problems as newborns and at every well-child visit. In addition to conducting the type of testing school nurses undertake, primary care physicians also record relevant history of visual difficulties, conduct external eye inspections, and look into children's eyes with a light to detect cataract or corneal abnormalities and determine how well the pupil works.

PCCY interviewed health care providers at Philadelphia's two children's hospitals, the Children's Hospital of Philadelphia and St. Christopher's Hospital for Children, as well as providers at the Philadelphia Department of Public Health's Health Care Centers. All reported regularly trying to conduct vision screenings for children and adolescents. Providers stated that screening some children can be difficult, particularly those with behavioral health difficulties and children under four, due to a lack of age appropriate screening tools. Providers said the tools exist but they do not have access to them. One pediatrician commented, "We all want to screen children but we have so much that has to be done during a visit with a child and sometimes children aren't willing to stand and read the chart."

Studies have found that vision screenings were less likely to be completed on younger children than on older children in primary care practices. Research places the number of children ages three to five who receive vision screenings at their primary care provider's office at somewhere between 35 – 73 percent.¹³ The reasons these offices gave for not screening children included vision screening not being considered a routine service, the children being too young or uncooperative, and/or the child having been previously screened.¹⁴ A local pediatrician explained, "We try to screen all children but it isn't always easy. With younger ones it is difficult because they are not necessarily compliant and we see adolescents less and less as they get older." School nurses interviewed for this report stated that many pediatricians write on school health forms that a child's vision is fine "by observation," meaning that the provider did not conduct a formal screen to assess the child's vision status. As a result, school nurses stated they often did not trust that a comprehensive screen had been conducted.

The primary health care providers interviewed for this report said they always attempt to conduct a vision screen on children according to the AAP guidelines, but recognized that many of their colleagues sometimes perform a simple observation of children to determine their visual acuity because of screening difficulties they may encounter. As a result, one pediatrician lamented that, “With all of the things that we are expected to check for during a well-child visit, sometimes vision screens fall to the bottom of the list.”

Primary Care Screening Data Unavailable

Medical Assistance

Medical Assistance covers over 158,000 school-age children in Philadelphia making it the largest insurance program for Philadelphia children. Children enrolled in Medical Assistance are entitled to all medically necessary vision care. Unfortunately, the Department of Public Welfare was unable to provide PCCY with any data related to the number of children who receive vision screenings conducted by their primary care providers. Despite numerous requests, PCCY was told the Department did not have any reliable data to share about vision screenings – or about the number of children receiving vision exams, treatment and/or prescriptions for glasses. As a result, PCCY was unable to determine whether or not children insured through Medical Assistance were receiving adequate vision services. Based on the most prevalent data, we would assume that between 20 – 25 percent of children enrolled in Medical Assistance would need a post-screening, follow-up vision exam, but it is impossible to determine whether or not these children’s needs were being met.

Children’s Health Insurance Program (CHIP)

Data about CHIP and eye care also is not easy to obtain. There are currently about 20,000 school-age children in Philadelphia enrolled in CHIP. Children with CHIP coverage are entitled to emergency, preventative and routine vision care.

PCCY requested data on the number of children screened by primary care providers in the CHIP program in Philadelphia, but the Pennsylvania Insurance Department which oversees CHIP reported their data was unreliable. The Insurance Department stated that children were screened for a variety of conditions during well-child exams and that primary care providers were supposed to record when they complete a vision screening but many do not document this activity. The Insurance Department reported the data it had provided documenting the number of CHIP members receiving vision screenings by primary care providers was a gross underestimate of the actual number of children screened.

The Medicaid and CHIP public health insurance programs do not have reliable data on the number of children in their plans that are screened by their primary care providers.

Without data, children with vision problems cannot be appropriately identified and referred to needed vision care services.

And the public cannot know whether the children who need care are securing it.

Consequently, there is no reliable data available about the number of children receiving a vision screening or treatment by primary care providers participating in the Medicaid or CHIP health insurance programs. What gets counted counts and since a screening is the first step in identifying and tracking children with vision problems so they receive the follow-up care they need, it is critical that both the Medicaid and CHIP programs find a reliable method through which to record and track the number of children screened and treated.

Step Two: When Children Fail Vision Screening

“We can screen every single child but it also has to be part of our job to connect children who fail to an eye doctor. Without this follow up, the screen is useless.”

– Nurse, School District of Philadelphia

“We screen all of our kids and tell their parents if they fail, but that is it. We do not do a good job connecting children to the next step.”

– Pediatrician

Vision Screening Data Results for Philadelphia Public School Students in Academic Years 2006 and 2007

	2006-2007		2007-2008	
	Number	Percentage	Number	Percentage
Children Enrolled	174,034	-	164,775	-
Children Screened	151,307	87	134,212	81
Children Who Failed Screening and Referred	19,920	13	22,055	16
Children Who Received a Vision Exam	8,003	40	8,221	37
Children Who Did Not Receive a Vision Exam	11,917	60	13,834	63

Vision screening is only the first step in meeting the vision needs of children. Children who fail the screening should receive an exam by an eye doctor. Unfortunately, many children do not secure this necessary treatment after failing a screen. For the 2006 and 2007 academic years, school nurses screened more than 80 percent of all children in the Philadelphia School District.

Nearly 20,000 children failed the screening in 2006-07 and 22,000 failed in 2007-08. When a child fails an eye screen, the School District is to inform the parent or caretaker through a notice sent home which recommends that the child be taken for treatment. The parent is to return documentation reporting the results of the treatment visit to the school. *Unfortunately, according to District records, approximately 60 percent of the children who failed their screen in each of those years did not receive a vision exam by the end of that school year.*

Barriers to Obtaining Vision Care Services: What is getting in the way of children obtaining the follow-up eye exam services that they need?

While vision screening in school is required by Pennsylvania law, the state does not require that children who fail the screen receive a follow-up exam by an eye doctor. Many Philadelphia children fail their vision screen year after year without securing the care needed to respond to their vision problems. The school nurses surveyed for this report all expressed frustration at the lack of follow-up from failed screenings.

For the last two academic years, approximately 60 percent of Philadelphia school children who failed their school vision screening test did not receive a follow-up vision exam.

Some nurses said that ensuring that a family follows up on a failed vision screening was very time consuming. Once a child fails a screen, school nurses call the parents and send a form home alerting them to the need for an eye exam and the eye doctor of the child's screen results. Usually the form is not returned. "I give parents one month, then call again," said one school nurse, with 20-plus years of service. "The length of time I wait depends on the problem." She and her colleagues follow up the call by sending the form home again and again.

One nurse said, "Every year I start my screenings with those children who failed the year before but didn't get care and it breaks my heart because they fail again. I really go out of my way to try to get them to a doctor but I can only do so much without the parents working with me."

The school nurses and health care providers we interviewed identified a number of reasons why children who fail their vision screen never receive a follow-up eye exam and the glasses they might subsequently need. Most notably, the reasons involve parents or caretakers who do not fully understand the significance of a failed screen and issues related to access to care and insurance coverage.

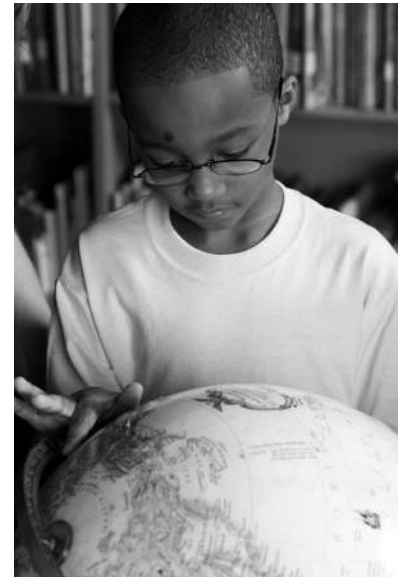
Misunderstanding and Denial of a Problem

According to the school nurses and primary care providers we interviewed for this report, one of the primary reasons children do not receive a follow-up vision exam after failing a vision screen was that parents often do not recognize the need to do so – not understanding that an eye screen failure is a significant problem. One school nurse reported, "Parents tell me all the time, 'My child sees fine; he watches television and doesn't bump into walls'."

This sentiment was echoed by pediatricians, one of whom said, "We tell parents that there is a problem but we don't really convince them of it. Parents think their child can see the TV so there isn't a problem." Some research has shown that parents might not understand that their child has failed their vision screening. One study found that 50 percent of parents of children who had failed a vision screen at their doctor's office were unaware of the failure two months after the vision screening. The reason for this misunderstanding is not clear, but this 50 percent figure is consistent with the literature on the miscommunication of diagnostic information and therapeutic instructions to patients.¹⁵

Sometimes the reason for the parent's lack of comprehension is as simple as an inability to read, which savvy nurses recognize when they meet with a parent, who then hesitates to fill out the form. "There's a population of young people in this country that can't read," said one nurse, who handles the situation by gently suggesting, "Do you want me to fill it out for you?"

For other parents, language and cultural issues are barriers to understanding their child's condition. In recent years there have been significant numbers of immigrants settling in the city whose first language is not English and their children attend public school. The School District has translated the form nurses send home alerting parents that their child has failed the screen into multiple languages including Spanish, Vietnamese and Arabic, yet really communicating about this issue and helping connect parents to a vision care provider can be difficult.



Once cultural and language barriers are eliminated and an appropriate eye care provider is found, the situation is changed. “If they had enough energy to come here to the United States, they want to take advantage of everything the country has to offer,” reasoned one nurse.

Some parents put off securing the treatment not knowing the serious handicap their children are experiencing; others do not know their health insurance covers the care, noted another nurse, who recently retired after 20 years serving the District. At the beginning of one school year, she recalled, a new teacher brought a student to her office requesting that she check the child’s eyes. The parents had told her the previous spring that they intended to get their child glasses “over the summer” but never did. Another nurse related the story of a third grader who was obviously wearing adult glasses; her father had given his daughter his glasses two years earlier in the absence of taking her to an eye doctor for an exam. Again, many parents do not believe that the eye screen failure was a significant problem. They also may not know that their child’s treatment and/or glasses would be covered by their medical insurance.

In any case, lack of information and understanding about an abnormal test precludes effective follow-up care. There is, however, reason for encouragement. According to one study of pediatric practices, when parents understand that their child had failed a vision screening and have been referred to an eye specialist, 85 percent reported having made or kept an appointment within two months of the visit.¹⁶

Difficulty Accessing Vision Care Services and Insurance Coverage

Children enrolled in Medical Assistance are entitled to a new pair of eyeglasses if they lose their glasses or their vision changes during the year. If their glasses break, they should be repaired at no cost, and if they cannot be repaired, they must be replaced. Contact lenses are not provided by Medical Assistance unless the child’s condition requires the use of contacts instead of eyeglasses.

Children enrolled in CHIP are entitled to receive one set of frames each year but can receive two sets of lenses if their vision changes during the year. Unfortunately, replacement frames or lenses are not covered, nor are repairs to broken glasses. Contact lenses are not covered by CHIP unless the child’s vision condition requires the use of contacts instead of glasses.

School nurses and primary care providers reported that some parents do not know how to find a vision provider or that their health insurance probably covers vision care for their children. Nurses and pediatricians sometimes do not know where to refer children for exams. They are often unfamiliar with vision care providers located within the communities in which they work. Some parents also find it challenging to find a provider that accepts their health insurance coverage – and some are unsure whether their insurance even covers vision services. “If parents have insurance that doesn’t cover glasses and they have to pay, it’s considerably expensive,” one nurse stated, noting a \$200 – \$300 cost for a single pair of glasses. Sometimes parents hold off on getting glasses until they can afford the expensive, designer frames their kids desire. “Parents wait until they can get the fancy glasses,” she added, “and the children are the ones who suffer.”

Some parents with children who need an exam also experience difficulty finding a vision care provider with office hours during evenings and weekends when it is easier for many parents to keep these appointments. One school nurse said, “I care about this issue for the children in my school, and I know first-hand that it’s difficult to get an appointment in the afterschool hours. I can’t miss work and I know my students’ parents can’t either.”

Difficulty Obtaining Glasses

For children who do receive their vision exam and are prescribed glasses, another set of challenges can impede them from getting the care they need. Unfortunately, the school nurses and primary care providers interviewed for this report stated that children and families were often told by vision providers (optometrists or ophthalmologists) that replacement glasses and lenses are not available for children insured through Medical Assistance. As a result, health care providers were confused about the availability of replacement glasses for children. This data matches PCCY’s findings from callers to our Child Healthwatch Helpline that fields calls from parents who incorrectly believe they need assistance purchasing glasses although their children were enrolled in Medical Assistance.

Given how often children break or lose glasses, clearly more education is needed regarding the Medical Assistance vision benefit so parents and adults who serve children better understand coverage for replacement frames and lenses.

Regrettably, for children who lose or break their glasses, the CHIP vision policy means that some children go without glasses for at least part of the year. As one school nurse said, “It is completely unrealistic to believe that a child is going to only need one pair of glasses a year!”

Some Children Don’t Want to Wear Glasses

Even when vision problems are detected, there appear to be problems with ensuring that children wear their eye-glasses to correct their vision difficulties. A Baltimore study found that only 30 percent of children continued to use their glasses one year after receiving them.¹⁷

The difficulty in getting children in Philadelphia to wear their glasses was confirmed by school nurses and health care providers interviewed for this report who stated that, even when children are given glasses, they often do not want to wear them.

“Glasses are not cool. If kids don’t get their glasses early and learn to wear them everyday, they certainly aren’t going to start wearing them in middle school.”

– Nurse, School District of Philadelphia

“Some students who wear glasses are called names and teased,” said one nurse, “leading kids to refuse to wear them.” Another nurse recalled a kindergarten student who broke her glasses on purpose as a result of the badgering. A limited selection of frames provided through Medical Assistance, and parents who do not insist that their children wear them, don’t help she noted - even if they wear glasses themselves. “A lot of parents say their kids won’t wear them. Personal appearance is very important.” Other nurses report that some public awareness initiatives are helping children recognize that glasses are okay and important to wear, and some children are now wearing them who previously were not. Initiatives such as the Eagles Eye Mobile which feature football players wearing glasses are helping children keep their glasses on.

Final Step: Vision Programs Filling The Gap

Philadelphia has two major programs aimed at helping children who failed their vision screen access a vision exam and obtain glasses and other services they need to improve their sight: The Eagles Eye Mobile and The Eye Institute at the Pennsylvania College of Optometry. Each of these programs combine access with care, an important factor in securing treatment.

The Eagles Eye Mobile

The Eagles Eye Mobile is led by the Eagles Youth Partnership, a public charity of the Philadelphia Eagles football team. The Eagles Eye program is a mobile vision clinic traveling to public elementary and middle schools to provide comprehensive eye exams to under- and uninsured children primarily in Philadelphia who have failed their vision screening tests. The popularity of the Eagles football team encourages many youth to take advantage of the traveling eye clinic. The Eagles Eye Mobile offers children eye exams, prescription eyeglasses, and follow-up care by an ophthalmologist, all at no cost to children or their families.

The Eagles Eye Mobile works closely with school nurses who collect consent forms from parents of children who failed their vision screen. Once a nurse has collected 30 consent forms, s/he schedules a date for the Eye Mobile to come to the school. If the Eagles Eye ophthalmologist prescribes glasses for a child, s/he can choose frames from a selection offered on the bus. Two weeks later, the child will receive two pairs of glasses when the Eye Mobile returns to the school. For children who have more complicated vision problems, Eagles Eye staff refers them to care at the ophthalmology department at St. Christopher's Hospital for Children and the Children's Hospital of Philadelphia.

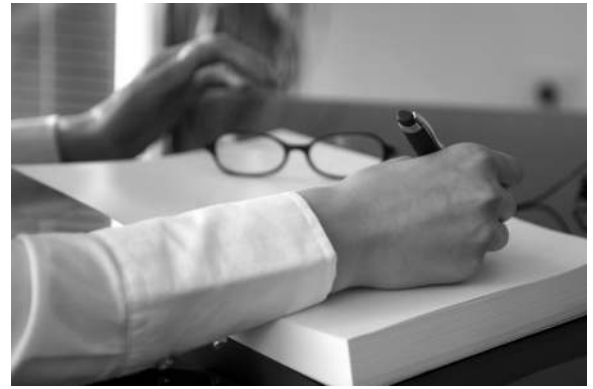
During the 2007-08 school year, the Eagles Eye Mobile visited 103 schools an average of 1.5 times and examined 2,637 public school children who had failed a vision screen conducted by a school nurse. Of those, 77 percent or 2,036 children needed and received free prescription glasses and 15 percent or 390 children were referred for more comprehensive treatment.

Nurses at some schools say the Eagles Eye Mobile has greatly increased parental involvement. "When the Eye Mobile is coming, parents get the consent forms back right away," observed one nurse, noting that parents are called well in advance of the visit.

During the 2007-08 school year, the Eagles Eye Mobile examined 2,637 public school children who had failed a vision screen conducted by a school nurse; of these, 77 percent or 2,036 children received free prescription glasses and 15 percent or 390 children were referred for more comprehensive treatment.

The Eagles Eye Mobile's two yearly stops at her school have resulted in a change in school climate regarding wearing glasses, another nurse stated – to the point where a student may try faking the eye test just for the chance to go on board for an exam. "Brian Dawkins makes it more acceptable to wear glasses," she said, noting improvements to the program including repairs, and how they supply of a spare set of frames for each child that are kept in the nurse's office. The glasses, she said, "look good and are attractive."

Another nurse echoed those remarks saying, “More students are getting glasses now. More students are wearing their glasses. The Eagles say it is acceptable now.” One school nurse said she hoped the program would be expanded. “They provide an invaluable service, especially in the elementary school,” she said. Another nurse commented that the Eye Mobile comes out to her school twice a year, seeing between 40 and 60 children annually, but that the need is much greater. “We need it more than two times a year,” she said.



The effects of a child receiving an eye exam followed by prescription lenses can be profound according to school nurses. One such child is, Andrew, a first grade student whose speech needs were compounded by the fact that he could not see the board. “He couldn’t do the work,” said Andrew’s school nurse. “His father had no insurance and was really happy to hear about the Eagle Eye Mobile.” Once Andrew received his prescription lenses his grade improved markedly. “He got his glasses in the spring and he was almost performing at grade level by the end of the year.”

Another nurse related a story of a seventh grader who transferred from New Jersey to a District middle school and could not see well. “He fell through the cracks; nobody in Jersey had suggested an exam,” she said. After his eye exam and new glasses, his fifth grade reading level “jumped to the seventh grade. He’s still in special education but now he can read. He became proficient over time.”

“The teacher said it was the first time the child was sitting and reading,” a nurse reported about a kindergartner, also the recipient of Eagles Eye Mobile glasses, who prior to receiving his glasses had displayed behavior problems. But following an Eagles Eye Mobile exam with a visit to an ophthalmologist at St. Christopher’s, he became more cooperative in class, she said, adding that kids truly appreciate the gift of proper sight. She recalled the shock of one her students when she presented him with his spare set of Eagles Eye Mobile glasses at the end of the year. “He treasured those glasses,” she smiled.

School nurses reported some challenges associated with connecting children to the Eagles Eye Mobile program – specifically collecting parental consent forms for the program. Some school nurses said it was difficult to get parents to return the form; they believed this stemmed from parents not fully understanding the significance of their child failing his/her vision screen and the importance of a follow-up exam eye.

A school nurse told us that, “I have to bribe my parents to sign the consent form. I have threatened to call DHS before because it is neglect to not allow a child to see. We have this great free-glasses service, but my kids can’t go unless I get that form signed, so I call and call and still sometimes don’t get it.” School nurses also stated that they thought the consent form was too long – that it needed to be condensed to one page. They believed that if the form were shorter, then parents would be more likely to read it. Because children in their schools speak a variety of languages, the school nurses also suggested that the form be translated into other predominant languages spoken by children in the District. Currently, the consent form is available in English and Spanish.

As noted earlier in this report, high school students have the lowest screening rate of all children in the District. The Eagles Eye Mobile targets its program for elementary and middle school students; it does not provide services to high school students. Given these circumstances, more effort must be directed at providing services to older youth to make sure that their vision needs are being met.

The Pennsylvania College of Optometry operates The Eye Institute, a large outpatient eye care facility located in Philadelphia. For many years the Institute has partnered with the School District of Philadelphia to provide vision screenings in schools. TEI also contracts with the District to provide comprehensive vision exams to children who fail the state mandated vision screening by transporting them to their pediatric office for comprehensive care.

Over the last three academic years, of the approximately 2,500 students who have been screened each year at participating Eye Institute schools, about one-third failed the screening. Of those children who failed the screening, TEI has successfully transported almost two thirds to The Institute for a more comprehensive exam. Of those children who received a comprehensive exam over the last three years, on average, 83 percent received some prescriptive eye service such as glasses or other treatment. On average, 19 percent of all children in schools participating with The Institute over the past three years were found to have a vision problem, which is somewhat consistent with national statistics that estimate that 20-25 percent of children across the country have a vision problem.

Vision Care Services Provided by The Eye Institute to Children in the School District of Philadelphia in Academic Years 2005 to 2008				
School Year	Number of Children Screened	Number/Percentage of Children Who Failed the Screening	Of Children Who Failed Screening, Number/Percentage That Were Bussed to TEI for Vision Exam Service	Of Children Who Received Follow-Up Care, Number/Percentage That Received Vision Treatment (e.g. glasses)
2005-06	2514	844/34%	684/81%	579/85%
2006-07	2833	941/33%	463/49%	384/83%
2007-08	2542	867/34%	655/76%	536/82%
Total	7889	2652/34%	1802/68%	1499/83%

Similar to the Eagles Eye Mobile, The Eye Institute leadership explained they also experience difficulty getting parents to sign a consent form allowing children to be bussed from school to the Institute for an exam. Unfortunately, school nurses and the Institute report they do not have the resources to provide comprehensive follow up to parents to make sure they sign the consent form.

The Eagles Eye Mobile and The Eye Institute programs provided the bulk of the 43 percent of follow-up care to children who failed their school screening test in Philadelphia schools in 2007-2008. These programs are fulfilling a significant need and are positively contributing to the well-being of the city's children.

School District Contracts With Other Programs

The School District contracts with two commercial vision care providers to fill gaps in care that the Eagles Eye Mobile and The Eye Institute do not – namely follow-up care to high school age students. School nurses refer primarily under-insured and uninsured students to Castor Eye Care and Krystal Vision for eye exams and glasses. Krystal Vision cares for 80-100 students each year, half of which are high school age students; Castor Eye Care provides care to about 160 students of all ages each year. Parents bring their children to one of these providers' offices to receive care. If the child does not have insurance, Castor and Krystal bill the District, so the service is free to families.

Sight for Students

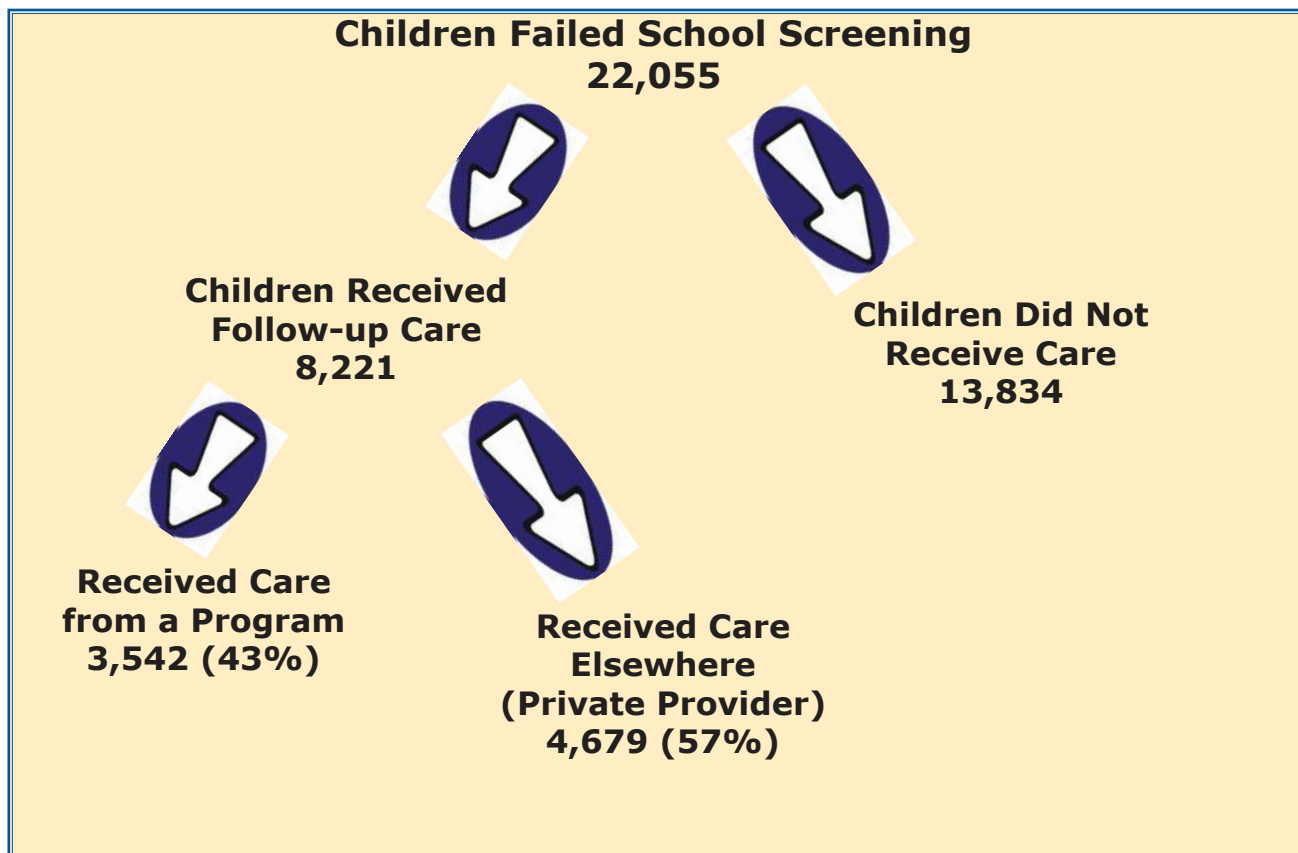
Vision Service Plan (VSP) is the nation's largest provider of eye care health insurance coverage, contracting with 29,000 clients across more than 100 health plans and more than 24,000 private practice doctors located in rural and metropolitan areas throughout the nation. VSP operates a charitable program called "Sight for Students" that provides free vision exams and glasses to more than 50,000 low-income, uninsured children. The program operates nationally through a network of community partners who identify children in need, giving them vouchers to redeem with a VSP network doctor of their choice. The network of community partners in Philadelphia includes the City's District Health Care Centers, schools and local non-profit agencies such as the Boys and Girls Club and YMCA.

In 2007, VSP issued 3,411 vouchers to its community partners in Philadelphia who, in turn, distributed some number of vouchers to parents. VSP does not track this number but does, however, keep a record of how many vouchers parents redeemed in Philadelphia. In 2007, parents redeemed 780 (23 percent) of the 3,411 available vouchers. How many of those children were diagnosed with vision problems or obtained glasses is not known because VSP does not track this information.

Identifying vision care providers willing to deliver free services to uninsured children is a good idea – particularly for children who are undocumented citizens and, therefore, ineligible for public health insurance in Pennsylvania. More information about utilization of the program's services would be helpful in determining the true success of Sight for Students – namely how many vouchers community partners actually distribute and what services children ultimately receive. Since Sight for Students delivers care to a substantial number of children, it would be helpful to find a way for the participating doctors to report to a child's school that the child received follow-up care.

Local Vision Care Programs Significantly Increase Children's Access to Care

In the 2007-08 academic year, the District reported that 22,055 children failed their screening test and that 8,221 children received a follow-up vision care exam.¹⁸ That same year, the Eagles Eye Mobile, The Eye Institute of Philadelphia and the two District-contracted vision care service providers delivered follow up care to a combined total of 3,542 children – 43 percent of the 8,221 children reported to have received follow-up care that year. These programs are providing almost half of all vision care services to children who fail their school screening test. The remaining 57 percent were likely to have received care from a private, vision care provider. The Eagles Eye Mobile and The Eye Institute programs in particular, are providing critical services to the city's children. Bringing services to where children are – in school – where they can more easily access services has proved to be a highly successful strategy. Yet, in academic year 2007-08, more children who failed a school screening did not receive follow-up care (13,834) than those who did (8,221).



Conclusion

Last year, 22,055 children were identified through their school screening as needing follow-up vision care.

Sixty percent did not receive this care.

All Philadelphia children need access to appropriate vision care services to stay healthy and keep learning. The public must be more aware of the impact on all of us when children cannot see well. School nurses and primary care providers must continue to screen children and refer them to optometrists and ophthalmologists when a problem is detected. Programs that provide access and services play critical roles in identifying and treating children with vision care problems and should be replicated and expanded.

Parents need to follow up and consent to have their children participate in these programs and/or take their children to eye care specialists when their children require care. Public health insurers must improve their monitoring and data collection so that we can better track and improve service delivery.

Further, an adequate supply of private eye care providers should be available to deliver services to children and families, including during evening hours and over the weekends.

More must be done at each of these intervention levels to better ensure that children are getting the care that they need.

Recommendations



In order to increase children's access to, and utilization of, appropriate eye care services, we must increase public awareness concerning the prevalence of untreated vision problems among children. Educators in particular must pay attention to the possibility of poor vision hampering student learning.

We must work to:

1) Increase the number of children who receive a follow-up vision exam by an optometrist or ophthalmologist if they fail the screen. There are many steps to reach this goal. We recommend that:

- School-based or focused eye programs that provide access and care be replicated and expanded. To further increase participation, we also recommend that consent forms be shortened and translated into other languages.
- A comprehensive print and online vision resource guide be developed for parents and health care providers that includes a list of optometric and ophthalmologic providers for Medical Assistance and CHIP recipients as well as information about the importance of good vision health.
- A variety of strategies be developed for use by school nurses, counselors and other school personnel as well as primary care and social service providers to assist parents in recognizing the seriousness of their children's vision problems. We recommend the development of a tool to demonstrate a child's vision problem to parents.
- Community-wide education about the Medical Assistance and CHIP vision benefits be undertaken to provide a better understanding of coverage for replacement frames and lenses. The CHIP benefit package should be expanded to allow more replacement glasses.
- A more in-depth, community-based study identifying barriers preventing children from following up with an eye care specialist after failing a vision screening be conducted. Special attention should be paid to vision service barriers for children with academic and behavioral health issues as well as students with disabilities.

2) Increase the number of children who get a vision screening test.

- The School District of Philadelphia does a good job screening its students, but there is room for improvement. The District needs to particularly focus its efforts on high school students who are screened in smaller numbers and students in special education whose learning may be improved by correction of an undiagnosed vision problem.
- Primary care providers need to consistently screen children at well-child exams and obtain the available and necessary tools to make screening young children easier. In addition, primary health care providers should be offered incentives for reaching certain compliance rates for screening – particularly for children on public health insurance plans. Providers also need to appropriately document when they complete a vision screen so that screening rates can be adequately measured.

3) Increase the number of children and youth who wear the glasses prescribed to them.

- In an effort to break the stigma of wearing glasses, develop a public awareness campaign with local celebrities to promote regular vision screening, examination follow up, and daily wear of prescription eye wear.

4) Increase the overall monitoring and accuracy of data collection concerning eye screening and treatment.

- The Medicaid and CHIP programs need to clarify and expand their benefit packages and develop a system that adequately tracks screening and vision exam rates.
- Other programs that provide large numbers of students with eye care need to collect additional data that includes the number of vouchers local partner organizations distribute and the type of care delivered by its participating providers.

Appendix 1

The Controversy Regarding Whether Or Not All Children Should Receive A Vision Exam

Vision care for children includes screenings that are usually performed by a school nurse or primary health care provider to identify potential problems, and exams performed by an ophthalmologist or optometrist to diagnose vision problems for children who fail screenings.

There is universal agreement that all children should receive regular screenings to detect potential vision difficulties, but it is not necessarily recommended that all children receive regular eye exams. Optometrists and ophthalmologists disagree over who should receive an eye exam: all children or only those who have failed a vision screen.

The Pennsylvania Optometric Association (POA) recommends that all children receive regular eye exams even if asymptomatic or free of risk for visual problems. According to the POA, children should be examined at six months, three years, before beginning first grade, and every two years thereafter. Children at risk for vision difficulties should be examined more frequently.¹⁹

In contrast to the POA, the American Academy of Ophthalmology and the American Association for Pediatric Ophthalmology and Strabismus recommend regular eye exams for children who fail a screening. They also recommend that medical providers screen newborns prior to discharge from the hospital, and that children continue to be screened at all outpatient well-child visits.²⁰ Screening is also supported by the American Academy of Pediatrics, the U.S. Public Health Service, the National Association of School Nurses Head Start and the Maternal and Child Health Bureau.²¹

The American Association of Pediatric Ophthalmology and Strabismus has gone one step beyond supporting screening and published a policy against universal eye exams for children because they are too costly and primary care providers can accurately screen children on a routine basis.²²

Clearly all children should receive, at a minimum, a vision screen; those who fail should receive follow-up care from an eye care professional. We support thorough screening conducted by primary care providers and school nurses, with follow-up exams provided to children who suffer from a vision problem.

Appendix 2

Promising Practices: Vision Programs in Other States

Children in many other parts of the country also face challenges getting the screening and follow-up vision care they need. As of 2002, 30 states plus the District of Columbia required vision screening in either elementary schools or for all school-aged children. Another eleven states recommended vision screenings.²³ Grades at which students must receive vision screenings vary by state with the majority requiring testing before kindergarten or first grade. Even with these recommendations and requirements, only a small percentage of preschool and school age children actually receive the tests. There are programs in some of these states that seem to be working well and should be considered for replication in Philadelphia.

Kentucky: In 2000, Kentucky was the first state to mandate comprehensive vision exams performed by an optometrist or ophthalmologist for all children ages three to six entering public preschool, Head Start or public school for the first time before January 1st of the school year. Medicaid and Kentucky's Child Health Insurance Program (KCHIP) cover this service, as do many private insurance plans. Kentucky officials interviewed for this report could provide only anecdotal data that the vision exam rate has increased significantly in the state since that year. No data exists, however, to back this statement because schools are not required to report to the state Department of Health when a student receives an exam. In addition, no formal evaluation of the law has been conducted. When discussing the Kentucky law, a representative from the Kentucky Optometric Association said, "We require children be tested for all sorts of things that are much less prevalent than vision problems like PKU [phenylketonuria - a genetic disorder]. This law ensures that every child will have their eyes looked at by a professional at least once in their life."

Alabama and Mississippi: Alabama requires that all public school kindergarten, second and fourth grade students receive a vision screening. Mississippi requires all kindergarten students to receive a screening. Children in these states who fail the screening are referred to Sight Savers of America for follow-up services.

Sight Savers, a non-profit organization, has an extensive network of eye care providers who donate their services for free to families who have no health insurance or inadequate coverage and cannot afford to pay out of pocket. Sight Savers provides necessary treatments including eyeglasses, surgery and advanced technological equipment at little or no cost to eligible families in Alabama and Mississippi, helping to ensure that school age children receive vision services. What makes Sight Savers of Alabama unique is its use of Patient Coordinators who are responsible for the case management of all children referred to the program. Case management services occur at every step of the process; coordinators follow up with parents over the phone and by mail to initially notify parents of a failed vision screening result and help schedule appointments and transportation for eye exams as well as obtain any other prescribed treatments.

During the 2007-2008 school year, more than 35,000 children were referred to Sight Savers for eye care. Sight Savers reported that 85 percent of these children successfully received follow-up services – compared to prior years before the Sight Savers program was enacted when only 15 percent of children received follow-up care. The Sight Savers program directly attributes the increase to the intense case management services parent and guardians receive to help connect their children to care. Because of the impressive outcomes of this program, with a more thorough evaluation of its success, a similar pilot program in Philadelphia could be considered for replication.

Endnotes

- 1 Parents Active for Vision Education. Vision and Learning page. <http://www.pave-eye.com/vision/visionandlearning.htm>.
- 2 Children's Vision Information Network. <http://www.childrevisions.com/2020.htm>
- 3 The Center for Health and Health Care in Schools (2007). Your State and Vision Screening: What's the Score? Health and Health Care in Schools E-Journal, Vol. 8, No. 3. <http://www.healthinschools.org/News-Room/EJournals/Volume-8/Number-3/Your-State-and-Vision-Screening.aspx>
- 4 Kemper, A.R., Cohn, L.M. and Dombkowski, K.J. (2004). Patterns of Vision Care Among Medicaid-Enrolled Children. Pediatrics, Volume 113, No. 3, pp. e190-e196. <http://pediatrics.aappublications.org/cgi/content/full/113/3/e190>
- 5 Frederick, D.R. and Asbury, T. (2004). Strabismus. In P. Riordan-Eva and J.P. Whitchee (Eds.) Vaughan & Asbury's General ophthalmology (16th ed., pp. 230-249). New York: Lange. and Preslan, M.W. and Novak, A.S. (1998). Baltimore Vision Screening Project: Phase 2. Ophthalmology, Vol. 105, pp. 150-153.
- 6 Suchoff, I.B. and Mozlin, R. (1991). Vision Screening of an Adolescent Inner City Population: A High Failure Rate and Low Compliance on Follow-up Care. Journal of American Optometric Association, Vol. 62, No. 8, pp. 598-603.
- 7 The American Optometric Association. The Need for Comprehensive Vision Examination of Preschool and School-age Children. www.aoa.org/x5419.xml
- 8 Yawn, B. P., Lydick, E. G., Epstein, R., and Jacobsen, S. J. (1996). Is school vision screening effective? Journal of School Health, Vol. 66, No.5, pp. 171-175.
- 9 Vision Council of America. (2005). Making the Grade? An Analysis of State and Federal Children's Vision Care Policy.
- 10 Pennsylvania Department of Public Health. (2002). Procedures for the Vision Screening Program for Pennsylvania's School-Age Population. <http://www.dsf.health.state.pa.us/health/lib/health/schoolhealth/VisionGuideline2000.pdf>.
- 11 Ibid.
- 12 Vision screening data provided by the Philadelphia School District.
- 13 Kemper, A.R. and Clark, S.J. (2006). Preschool vision screening in pediatric practices. Clin Pediatrics, Vol. 45, No. 3, pp. 263-6.
- 14 Wasserman, R.C., Croft, C.A. and Brotherton, S.E. (1992). Preschool Vision Screening in Pediatric Practice: A Study From the Pediatric Research in Office Settings (PROS) Network. Pediatrics, Vol. 89, No. 5. http://www.aap.org/research/periodicsurvey/peds5_92.htm
- 15 Ibid.
- 16 Ibid.
- 17 Preslan, M.W. and Novak, A.S. (1998). Baltimore Vision Screening Project: Phase 2. Ophthalmology, Vol. 105, pp. 150-153.
- 18 The School District relies on parents to self-report that they took their child to a vision care provider. Consequently, it is likely that some parents did not report to the District that their child received follow-up care, therefore, the number of children with follow-up care is likely to be higher than 8,221, but we have no way to confirm this.
- 19 Pennsylvania Optometric Association. Recommended Eye Examination Frequency for Pediatric Patients and Adults. <http://pennsylvania.aoa.org/x5502.xml?prt>
- 20 The American Association for Pediatric Ophthalmology and Strabismus. Policy Statement for Vision Screening for Infants and Children. <http://www.aapos.org/displaycommon.cfm?an=1&subarticlenbr=54>
- 21 Committee on Practice and Ambulatory Medicine, Section on Ophthalmology, American Association of Certified Orthoptists, American Association for Pediatric Ophthalmology and Strabismus and American Academy of Ophthalmology. (2003). Policy Statement: Eye Examination in Infants, Children, and Young Adults by Pediatricians. Pediatrics, Vol. 111, No. 4, pp. 902-907.
- 22 American Association for Pediatric Ophthalmology and Strabismus. Healthy Eyes – Infants and Children – Policy Statement approved by the AAOPOS Board of Directors, November 2006. <http://www.aapos.org/displaycommon.cfm?an=9>.
- 23 American Academy of Ophthalmology - State Affairs Secretariat. (2002). Eye Screening State Status.

Acknowledgements

PCCY Funders

Advanta Corporation, Aetna Foundation, The Annenberg Foundation, The Barra Foundation, The Claneil Foundation, The Dolfinger-McMahon Foundation, Eagles Youth Partnership, The Samuel S. Fels Fund, John C. and Chara C. Haas Charitable Trust, Phoebe W. Haas Charitable Trust, The Hess Foundation, Independence Blue Cross, The Independence Foundation, Jewish Funds for Justice, Christian & Mary Lindback Foundation, The Lomax Family Foundation, The Christopher Ludwick Foundation, The Northwest Fund, The Pew Charitable Trusts, The Philadelphia Foundation, Philadelphia Youth Network, The Puffin Foundation, Ltd., The Elizabeth B. and Arthur E. Roswell Foundation, The Shefa Fund, The Paula Steinebach Trust, Target Stores, United Way of Southeastern Pennsylvania, Wachovia Foundation, Washington Mutual, The William Penn Foundation.

Project Staff

Colleen McCauley-Brown, Health Policy Director, Alisa Simon, Former Health Policy Director, Joshua Cohen, Health Strategist, Sid Holmes, Communications Director, Shelly D. Yanoff, Executive Director, Steven Fynes, Design and Layout

PCCY Staff

Shelly D. Yanoff, *Executive Director* * *Staff*: Christie Balka, Dennis Barnebey, Melissa Berrios, Joshua Cohen, Bobbie Dunham, Kathy Fisher, Steven E. Fynes, Sherrie Glensky, Gretchen Elise Iversen, Bill Madeira, Colleen McCauley-Brown, Kelly Siegel, Alisa Simon, Sheila Simmons, Gail Smith, Roxy Woloszyn and Deborah Zubow

PCCY Board

James Martin, *President*, Carolyn Adams, *Vice President*, Barbara Grant, *Secretary*, Darren Spielman, *Treasurer*, Fasaha Traylor, *Immediate Past President* * *Board Members*: Naomi Alper, Leann Ayers, Jalila Brown, David Camp, Evelyn Eskin, Paul Fink, Richard Frazier, Philip R. Goldsmith, Mark Goldstein, Reverend Robin Hynicka, Stephanie Kallen, Stephanie Korber, Robert Listenbee, Wanda Mial, Yvette Nunez, Susmita Pati, Jerilynn Radcliffe, Matt Riggan, Pat Russell, Quyen Shanahan, Judy Silver and Cheryl Weiss
Honorary Directors: Christie W. Hastings, John Riggan, Allener Rogers, Donald Schwarz and Pat West

Special Thanks

This project was supported primarily by the Eagles Youth Partnership. We are also grateful for the continuing support from the Pew Charitable Trusts and the William Penn Foundation for related work. PCCY is solely responsible for the content.



Public Citizens for Children and Youth

#7 Benjamin Franklin Parkway, 6th Floor, Philadelphia, Pa 19103
215-563-5848 / 215-563-9442 / www.pccy.org / info@pccy.org