Background

Undiagnosed vision problems are particularly common for children with limited access to preventive and vision health services. Untreated vision problems can seriously hinder a child’s ability to learn, as an estimated 80% of learning occurs through the eyes. Approximately 20% of kindergarten and first grade students fail vision screening tests, and by high school, an estimated 25% of students cannot read the blackboard without corrective lenses.

In 2015, New York City committed $2 million for vision services—including screening, optometric exams, and glasses—for students in community schools. The commitment was part of the City’s Community Schools Initiative, implemented in 130 public schools across New York City that had been historically low-performing, with high absenteeism and/or drop-out rates. The initiative aimed to create strong partnerships between schools and experienced community partners to provide social services, counseling, mental health supports, and academic interventions to engage entire families and communities as part of a holistic approach to elevate educational outcomes. Through the program, students within the community schools were provided with a range of school-based academic and health services, including vision services.

In 2015, NYSHealth awarded the Fund for Public Health in New York (the Fund) a grant to pilot a vendor-based model to provide vision screenings, exams, and glasses to middle and high school students in New York City. The project focused on this population of students because all New York City children are already offered free school-based vision screenings through the fifth grade, but many may not develop vision problems until they are older. Under this grant, the Fund, in collaboration with the Office of School Health (OSH) at the New York City Department of Health and Mental Hygiene (DOHMH), conducted a pilot project to test a low-cost, vendor-based model to expand vision services in schools. The project aimed to provide vision services to more than 9,000 seventh and tenth graders at 86 middle and high schools in low-income communities, leveraging staffing and resources from the City’s Community Schools Initiative funding. Students in the pilot schools had historically been less likely to confirm a follow-up visit to an eye doctor after a failed vision screening compared...
Background (continued)

with students across all New York City public schools (27% vs. 48%, respectively). Given that OSH had been screening community schools since 2015, the pilot leveraged existing OSH staff presence by targeting community schools that are co-located in the same building as other schools, allowing the Fund to maximize the number of students reached.

In OSH’s previous service delivery model, the City funded all vision services for 100% of students in selected schools, where vision services are provided by OSH staff. Under that model, all children in the selected schools are eligible to receive vision services, regardless of insurance status, because the City acts as the direct provider and covers all service costs. In the pilot model, the Fund selected qualified vendors to conduct exams and provide glasses to all students who needed them, aiming to bill Medicaid for the 60% of students expected to be eligible for coverage in selected pilot schools. NYSHealth funds would cover the cost of services for the other 40% of students who are uninsured. Project staff coordinated with the schools and parents on a plan to obtain parental consent for Medicaid billing as applicable, aiming to develop an insurance billing system to connect the vendors with students’ Medicaid information to streamline reimbursement.

One of the goals of this pilot was to enable OSH to investigate the potential sustainability of the program beyond the pilot. If the pilot was successful and proven to be cost-effective, New York City would replicate the model and expand vision services to middle and high school students in all public schools, with the City subsidizing services for the 40% who are uninsured.
OSH developed a service delivery model that used its own staff to perform vision screenings and contracted with two separate vendors, the Optical Academy and Helen Keller International, to provide eye exams and glasses. Before the initiation of the pilot, Optical Academy had conducted vision screenings in some third and fifth grade classes across the City and had obtained a 30% consent rate to bill Medicaid. Starting in spring of 2016, an outreach plan was launched to increase the engagement of both school personnel and parents by disseminating multi-language consent forms and information sheets to parents and conducting site meetings with principals and superintendents.

In September 2016, OSH began implementing the pilot model at community schools, scheduling screenings for students as the first step in the process and a precursor to eye exams. During the screening process, OSH staff entered students’ results into an electronic medical records system. Students who failed the screenings were referred for eye exams and given parental consent forms requesting Medicaid billing information and indicating that the costs for services for uninsured students would be covered by grant funds. Typically, eye exams were held 4–6 weeks after the vendor’s initial contact with the school. After completion of the eye exams, vendors submitted documentation detailing eyeglass prescriptions and usage specifications, Medicaid status, and other important information. The vendors tracked the claims submitted to and paid by Medicaid for eligible students.

Through the pilot, OSH screened 6,704 seventh and tenth graders in the targeted schools. Out of the students screened, 1,856 of students (28%) failed the screening; 568 of students who failed the screenings (31%) received eye exams (see the “Challenges and Lessons Learned” section below); and 543 of students who received eye exams (96%) were prescribed glasses. Vendors were paid $25 per exam and $15 per set of glasses for each uninsured student. Using the City’s previous service delivery model, the total cost of vision services for these students would have been $307,934, of which 67% was attributed to screenings and 33% to exams and glasses. In contrast, the pilot incurred a total cost of $225,276, of which 93% is attributed to screenings and 11% to exams and glasses. The average Medicaid claim reimbursement amount paid to vendors was higher than what vendors received for uninsured students, $76 versus $40, respectively. The vendors billed Medicaid for 122 exams and 119 glasses, which would have cost the City $4,835 without this project. The pilot showed that using a third-party vendor in combination with Medicaid reimbursements can result in cost savings, mainly because of lower labor costs.
Challenges & Lessons Learned

Although the pilot project showed promise as a model for cost savings, the Fund encountered challenges in reaching its target numbers, largely as a result of the nature of public schools. Originally, the Fund aimed to provide screening services to a potential pool of 9,233 students registered at 86 schools on 50 campuses. However, because of the size fluctuation in community schools, the potential pool of students decreased to 8,554 students registered at 84 schools on 62 campuses. Of this potential pool, OSH staff screened just 6,704 students.

The decrease in the potential student pool was the result of a few factors. Despite the fact that the Department of Education (DOE) increased the number of community schools, the shift was counter-balanced by the number of schools that lost their designations, as well as the refusal of services from some principals. In one case, a principal who refused screening services cited her concern for the safety and privacy of a largely undocumented student population. Of the schools that were included in the pilot, the main reason for screening drop-off was student absenteeism.

Securing parental consent forms was another substantial challenge in the pilot; only 594 forms (32%) were returned for the 1,856 students who failed their vision screenings. Eye exams were only given to students with a signed consent form. The primary factor in the low return rate of consent forms was the lack of involvement of school staff in conducting outreach to parents. Vendors called and sent mailings to parents, but school staff involvement was critical because of their established relationships with parents. The level of involvement of school staff varied across schools and was reflected in the number of returned consent forms in each school. Additionally, variations in who the principal appointed to handle the pre-exam logistics created more challenges in the consent form collection process. Project staff believe that the lack of a consistent champion can be a significant barrier to screening initiatives. In total, seven schools did not have any eye exams, simply because no consent forms were collected.

Other complications arose from school staff resistance with vendors and scheduling. Scheduling was often hindered by school staff who expressed displeasure with pulling students out of class twice (once for the initial screening and another time for the subsequent eye exam). School calendars also conflicted with scheduling eye exams. Many schools refused to have eye exams between spring recess in April and citywide academic testing in early May. Therefore, securing dates was challenging if schools did not have eye exams by mid-April.

For the vendors, the number of claims billed to Medicaid was lower than expected. Sixty percent of the participating students were projected to be Medicaid-eligible; however, only
Challenges & Lessons Learned (continued)

38% of the parental consent forms indicated that a student had Medicaid coverage. Moreover, the vendors were unable to bill Medicaid for all of the indicated students; only 21% of the exams and 22% of the glasses were successfully billed to Medicaid. In the majority of cases, the vendor was unable to reach a parent to clarify incomplete or incorrect Medicaid plan information indicated on the consent form. Another recurring issue was terminated Medicaid coverage resulting from recertification issues or incidents where the eye exam/glasses benefit had already been accessed within the coverage term.

Although the pilot proved to be more cost-effective than OSH’s previous model of service delivery, the project revealed issues in the pilot’s design. The vendors found the logistical structure to be problematic, and neither vendor would want to provide services again using this format. Their primary concerns were the difficulty in securing signed consent forms, the lack of accuracy in Medicaid billing information, and the inability to consolidate screenings and exams to one visit. Vendors felt strongly that consolidating screenings and exams to one visit would have allowed for much better operational efficacy.
Looking Ahead

Although the pilot project encountered challenges, the model was proven to be a cost-effective approach. With some adjustments, the model shows promise for any future programs, including any adopted by the City, that seek to address vision health services for school children. The generous Medicaid reimbursement rate serves as a strong financial incentive for third-party vendors, but the role of school staff as program champions is key to the success of such programs.

Since the completion of the pilot, the assistant commissioner of OSH has spearheaded an effort to share the cost information results of the pilot with policymakers and has started discussions with appropriate DOE and DOHMH administrators to build support for the project’s continuation and expansion. Building on lessons learned from this pilot, OSH is considering a new model that would incorporate the use of the universal health needs consent form in conjunction with a modified version of the pilot’s vendor-based system. A possible modification of the pilot would be to set a requirement for principals to secure a predetermined number of returned consent forms to be eligible to receive vision services. Another modification that has been identified as a key focus for future policy reform by OSH is to broaden the mandate for vision services to also include middle and high school students. This can be done by expanding the use of the DOE universal health needs form that is distributed to parents at the beginning of each school year, where parents provide their child’s insurance billing information, to give school administrators blanket consent for the provision of all health services.

THE PUPILS PROJECT WITH WARBY PARKER

Since the close of this grant, the City of New York, DOE’s Office of Community Schools, and OSH embarked on a separate pilot with the eyewear company Warby Parker—the Pupils Project. Informed by lessons of the NYSHealth-funded pilot, the Pupils Project provided free vision screenings, eye exams, and glasses to students enrolled in 224 New York City community schools. OSH and the Children’s Health Fund provided vision services, but unlike the NYSHealth-funded pilot, the project did not seek Medicaid reimbursement. Instead, Warby Parker provided glasses to the students as part of the free vision screenings. By the end of 2018, approximately 26,000 glasses were distributed by Warby Parker.

During his 2019 State of the City Address, Mayor Bill de Blasio announced that starting in fall 2019, all New York City kindergarteners and first graders will receive prescription eyeglasses if they need them. Officials anticipate the expansion will involve 140,000 vision screenings and 33,000 new pairs of eyeglasses.