

**TAKING  
EYE  
CARE  
INTO THE  
COMMUNITY**



**STUDY OFFERS OLDER  
NEW YORK CITY HOUSING AUTHORITY  
RESIDENTS VISION SCREENING  
AND FOLLOW-UP EYE CARE**



**BY ALEXANDER GELFAND / PHOTOGRAPHS BY JÖRG MEYER**

It's a sunny December day in Harlem, and Bernadette Lovett, a 69-year-old woman who suffers from blurred vision, has just had her eyes examined for the first time in five years.

The eye exam was conducted free of charge as part of a five-year CDC-funded randomized controlled trial run by Lisa Hark, PhD, professor of ophthalmic sciences. By offering free eye care and related support and services to New York City Housing Authority residents over the age of 40 in Washington Heights and Harlem, the Manhattan Vision Screening and Follow-up Study in Vulnerable Populations seeks to improve access to eye care and early detection of serious eye diseases, such as glaucoma, cataracts, diabetic retinopathy, and macular degeneration, among at-risk, underserved populations.

Judging by Ms. Lovett's experience, the program is succeeding.

After completing a telephone pre-screening with Dr. Hark, Ms. Lovett received on-site vision screening at the Central Harlem Senior Citizens Center at St. Nicholas Houses, located in the basement of a 14-story NYCHA residence

on West 131st Street. She returned to the center a week later to meet with optometrist Daniel Diamond, OD, instructor in optometric science, who reviewed her screening results, performed a thorough eye exam, then informed her that she may need cataract surgery.

For many people, this would not be welcome news. But for Ms. Lovett, the diagnosis came as a relief. Like many participants in the study, she worries about her vision but has not seen an eye doctor in years—largely because she gave up on receiving decent eye care. The various prescription eyeglasses that she has purchased proved so ineffective that she turned to over-the-counter readers instead. At one point, she grew so discouraged that she abandoned a \$250 deposit on yet another pair of prescription lenses that she figured would not help her.

"I never went back. I just gave them the money," she says.

But when the director of the Central Harlem Senior Citizens Center where Ms. Lovett works told her about the screening program, she decided to give it a try.

She's glad she did.

Ms. Lovett was afraid that she might have glaucoma, a leading cause of blindness for people over age 60. When Dr. Diamond explained that she had a cataract and referred her to an ophthalmologist for evaluation and possibly cataract surgery, she was more thankful than dismayed. (He also wrote her a new prescription for a free set of progressive lenses that will correct her vision for both distance and reading.)

"I feel so relieved," she says.

#### REACHING THOSE AT RISK

Ms. Lovett is reasonably certain that had she not heard about the screening program, she would not have sought medical attention for her vision problems. And that is not unusual.

Preliminary analysis shows that 58% of study participants, most of whom are Black or Hispanic, rate their vision as "fair," "poor," or "very poor"; 64% say they worry about their vision "some of the time," "most of the time," or "all of the time." Even though 96% of the study participants have insurance, most have not visited an eye doctor in at least two years. That may help explain why 78% failed the vision screening and required a follow-up eye exam.





These findings align with previous research by Dr. Hark and others. Studies have shown that glaucoma and diabetic retinopathy, another leading cause of blindness, disproportionately affect minority populations. Compared with whites, Blacks are three to four times more likely to develop glaucoma, while Hispanics are twice as likely to develop diabetic retinopathy. Yet 50% of people with glaucoma and 25% of people with diabetic retinopathy go undiagnosed.

“They recognize they have blurry vision—they worry about their vision getting worse—they’re not scheduling that eye exam,” Dr. Hark says. “We hope to solve that.”

Dr. Hark, who is director of clinical trials for the Department of Ophthalmology and also has an MBA degree, specifically designed the Manhattan Vision Screening and Follow-up Study to reach people where they live as a way to improve access and utilization of eye care services.

The study in 10 NYCHA housing developments can reach 6,000 people that most need eye care yet are least likely to receive it. Each development has a space for screenings, such as a senior center funded by the NYC Department for the Aging, and each is close to the Harkness Eye Institute

at Columbia or Harlem Hospital Center, where participants are scheduled for follow-up eye care. (Harlem Hospital Center, which is part of the NYC Health + Hospitals system, has an affiliation agreement with Harkness, and Noga Harizman, MD, associate professor of ophthalmology at VP&S, is chief of ophthalmology there.)

During telephone pre-screenings, Dr. Hark and her bilingual team assess eligibility, gather information on demographics and medical/ocular history, conduct quality-of-life surveys, and schedule vision screenings for those enrolled in the study.

During on-site screenings, participants read a Snellen eye chart to gauge their visual acuity and have their eye pressure checked for signs of glaucoma. They also have photos taken of their retina and optic nerve for remote analysis by ophthalmologists. Anyone who fails the on-site screening or whose images prove unreadable is scheduled to see an optometrist for an eye exam within three weeks at the same location. Participants whose images are abnormal, or in whom the optometrist finds signs of eye disease, are referred to an ophthalmologist at Harkness or Harlem Hospital for follow-up eye care.

**THE STUDY WAS SPECIFICALLY DESIGNED TO REACH PEOPLE WHERE THEY LIVE AS A WAY TO IMPROVE ACCESS AND UTILIZATION OF EYE CARE SERVICES.**



All participants who require corrective lenses receive a prescription, and everyone in the study will have a follow-up vision check after one year in the same location as the initial screening. Participants screened at an intervention site such as St. Nicholas receive free progressive glasses from Warby Parker, the New York City-based eyewear retailer and a study partner. They also are assigned a navigator who will schedule follow-up eye appointments and make reminder calls for 12 months.

Participants screened at a control site, on the other hand, receive a list of optical shops and are scheduled for their first appointment with an ophthalmologist, but they do not receive free glasses or ongoing support from a navigator.

The idea, explains Dr. Hark, is to evaluate whether interventions, such as navigators and free glasses, improve visual acuity and adherence to follow-up eye appointments.

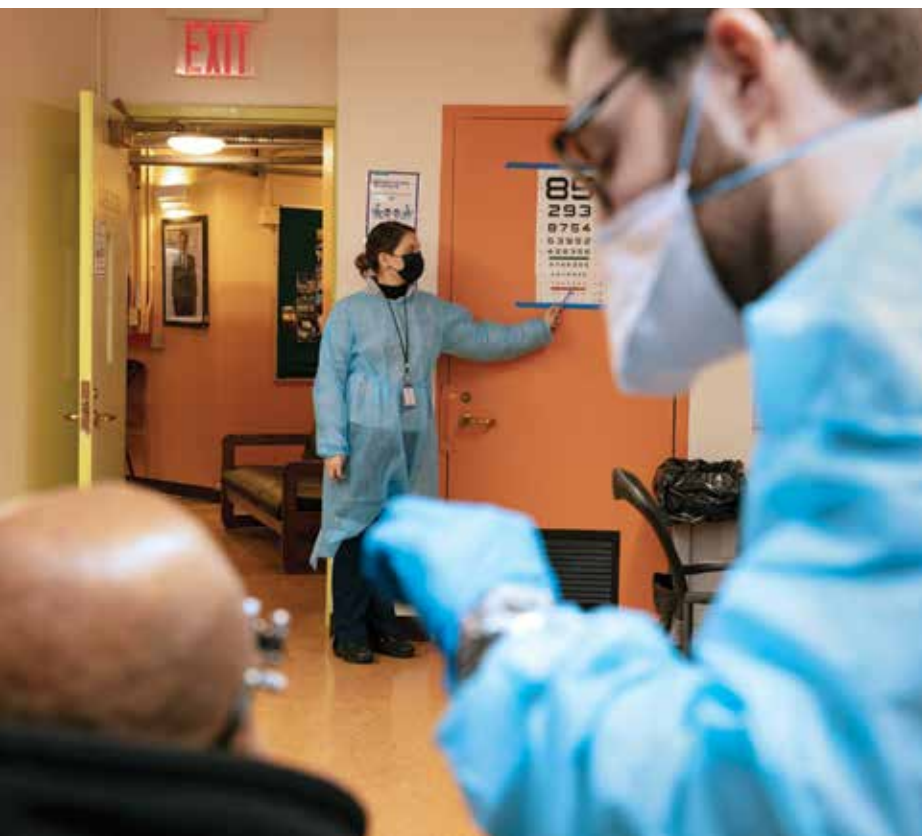
#### **SUCCESS IN MANY FORMS**

By the end of May, 709 people had been screened. Approximately 80% of participants who failed

their screenings or had unreadable images kept their appointments with the optometrist, a significant increase over the 20% who kept their follow-up appointments in previous community-based studies. “There is a great need for community-based vision screening and these show rates for the eye exam are impressive,” says Dr. Hark. “I suspect the success is related to the convenience and free service, because we are bringing eye care to where people live or visit every day, such as senior centers. There has been a very high level of satisfaction reported by participants in post-screening surveys. It’s a promising sign for boosting early detection and treatment aimed at preventing blindness.”

Ellen Caldwell, a 68-year-old retiree with hypertension and blurred vision, had an abnormal image. Like Ms. Lovett, she wondered if she might have glaucoma. “That’s the first thing you worry about: ‘Oh my god, am I going to go blind?’” Ms. Caldwell says.

Her eye pressure was normal, however, and after Dr. Diamond examined her, she was referred to an ophthalmologist. At her follow-up at





Columbia, she was told she had early signs of macular degeneration and is now being treated.

Like Ms. Lovett, Ms. Caldwell probably would not have had her eyes checked had she not heard about the study. “I attribute everything to age. I’m not 20 anymore,” she says. Yet the quality of care she received from Dr. Hark and her team, which also includes community health workers who help with screenings and bilingual study coordinators

who make reminder calls, left Ms. Caldwell feeling enthusiastic about her next appointment.

“They treat you like human beings. You ask questions, and they give you direct answers,” she says.

On-site screenings can occasionally be dramatic, with a handful of participants requiring urgent attention due to extremely elevated eye pressure, which can lead to blindness if left untreated. In one case, Dr. Hark personally walked a 67-year-old man whose eye pressure reading put him at high risk of vision loss directly to the medical center so that he could be seen immediately by an ophthalmologist. After he was diagnosed with glaucoma, she took him to the pharmacy to get the prescription eye drops that have since returned his eye pressure to normal.

But even less eventful cases also represent victories. Harriet Addamo, a 69-year-old with diabetes who heard about the study while exercising at the senior center at St. Nicholas Houses, noticed that she had to take off her glasses to read. But she wasn’t in any discomfort and probably would not have seen her eye doctor for “a couple more years” even though annual exams are recommended for diabetics. (Studies show that 50% do not get them.)

Ms. Addamo’s image proved unreadable, necessitating an on-site exam with Dr. Diamond. In the end, Ms. Addamo did not need a referral to see an ophthalmologist. But in addition to prescribing her a new set of progressive lenses, Dr. Diamond took the opportunity to emphasize just how important yearly dilated eye exams are for people who have diabetes.

Ms. Addamo got the message. “I’m elated,” she says of the care she received. And she is determined to get her next annual eye exam. ❖

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