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Viewpoint

Broadening Access to Eyeglasses in the US

Olivia J. Killeen, MD; Paul P. Lee, MD, JD

Author affiliations and article information are listed at the end of this article.

There is a device that can safely treat 160 million cases of visual impairment and blindness worldwide: eyeglasses.[1] Uncorrected refractive error (URE)—or simply the need for eyeglasses in most cases—is the leading cause of visual impairment and the second leading cause of blindness in adults worldwide.[1] In the US, more than 16 million people are expected to have visual impairment and blindness due to URE by 2050.[2] This may be associated with substantial costs to society and individuals. In the US, direct medical costs, lost productivity, and informal care associated with URE are estimated to amount to $5377 per person annually, whereas treating URE in the US is estimated to save more than $87 billion over 10 years.[3] Visual impairment is associated with negative health outcomes, including depression, dementia, automobile accidents, cardiovascular disease, lung cancer, and mortality.[1] In children, URE is the leading cause of visual impairment and is associated with worse school performance.[1] The materials for simple, high-quality eyeglasses cost approximately $1.[4] Why are eyeglasses inaccessible for many individuals in the US?

High Cost of Eyeglasses in the US

There are limited data on the cost of eyeglasses in the US, but according to a 2019 Consumer Reports survey of 65 000 members who purchased eyeglasses in a store at 33 retailers, the median cost per pair of eyeglasses was $234.[5] The pricing may be distorted because a few companies own a large share of the eyeglass market. EssilorLuxottica controlled 42% of the $13.5 billion global corrective eyeglasses market in 2019.[6] This vertically integrated company owns top lens brands, frame brands, retail outlets such as LensCrafters and Ray-Ban, and EyeMed, a vision insurance company.[7] As a result of significant market control, large frame and lens companies can charge high markups.[8] Although there is a market for luxury eyewear, high costs are the main barrier to obtaining eyeglasses for individuals with low income in the US. Eyeglasses are primarily a medical device, and patients should have high-quality options available at an affordable price.

Limited Insurance Coverage for Eyeglasses in the US

Although Medicare covers medical eye examinations for conditions such as dry eye syndrome, cataracts, and diabetic retinopathy, it does not cover routine examinations, eyeglasses, or contact lenses except in special circumstances (eg, after cataract surgery). This creates a troublesome distinction between routine and medical eye care. Lack of coverage may exacerbate disparities in care, because Medicare beneficiaries who are older, have impaired health or limited income, and are from racial and ethnic minority groups have the least access to vision care. Because the Patient Protection and Affordable Care Act did not designate vision care as an essential benefit for adults, most private health insurers follow the same distinction as Medicare. Medicaid coverage for routine eye care and eyeglasses varies by state.

Unlike for the adult population, pediatric vision care is an essential health benefit under the Patient Protection and Affordable Care Act and must be covered by Medicaid, the Children's Health Insurance Program, nongrandfathered individual plans, and fully insured small group health plans. Although specific insurance plans differ, they often offer 1 eye examination and 1 pair of eyeglasses per year for children. However, numerous other barriers ensure that many children who need

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eyeglasses do not receive them. Not all states require school vision assessments to identify possible eye problems, and in states that do, at least half of the children who fail the assessments do not receive appropriate follow-up. Pediatricians test vision as part of well-child examinations starting at 3 years of age, but children who do not routinely attend well-child visits are less likely to receive vision testing.[9] Furthermore, there are disparities in access to pediatric eye care based on race, ethnicity, and socioeconomic status; for example, Hispanic children are less likely to receive vision testing than are non-Hispanic White children, and children with public insurance or no health insurance are less likely to receive vision testing than are those with private insurance.[9] These disparities in access to eye care may be magnified by the COVID-19 pandemic, during which school vision assessments and well-child visits have been disrupted.

Expanding Access to Eyeglasses in the US

Uncorrected refractive error is a public health issue and requires interventions at multiple levels of society. In the private sector, the eyeglass industry is in need of innovation and newcomers. To reduce costs, US companies could adapt concepts from low-income countries, such as the modular system with precut plastic lenses used by OneDollarGlasses.[4] It is encouraging to see newer companies such as Warby Parker and Zenni Optical enter the market, offering eyeglasses at a lower price through an online platform. These options improve access for some patients, but many patients may have concerns about obtaining eyeglasses online. Ophthalmologists and optometrists should consider using existing staff members to help patients navigate the eyeglasses marketplace, including purchasing affordable eyeglasses online. This could improve patient satisfaction and empower patients by offering access to affordable options.

With regard to public policy, eyeglasses and routine eye examinations should be considered an essential benefit covered by Medicare, Medicaid, and private insurers. Expanding Medicare coverage for eyeglasses was debated as part of the Build Back Better Act. Although most Democratic and Republican voters supported the Medicare coverage expansion,[10] the version of the bill that passed the US House of Representatives included hearing but not vision insurance coverage. This bill is currently stalled in Congress.

School-based or other forms of vision assessment should be mandatory in all 50 states, and national standards should be introduced to ensure that all children receive evidence-based assessments. Such programs should continue despite the COVID-19 pandemic, and there are a number of resources that school vision programs can use to design socially distanced assessments. During the pandemic, pediatric primary care physicians should follow the American Academy of Pediatrics guidelines to continue well-child visits, including vision testing, on a regular schedule. Schools and primary care physicians can work with optometrists and ophthalmologists to ensure that children who fail school or clinic-based vision assessments receive appropriate follow-up care. Comprehensive eye care programs are distinct from screening programs because they provide examinations and treatments; incorporating comprehensive eye care into school clinics can help decrease barriers to follow-up for students who fail screening assessments. Pediatric primary care physicians can help educate children and families on the importance of timely follow-up after failed screenings.

Conclusions

In the 21st century, we believe that it is unacceptable that URE is the main cause of visual impairment in the US and worldwide. Unlike myriad other public health challenges, URE can be easily addressed. We have the opportunity, without new research and development, to harness an existing technology (ie, eyeglasses) to improve sight for millions of individuals in the US, improve health outcomes, increase productivity, offer children better futures, and lessen multisector disparities. We would be myopic not to act now.

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Corresponding Author: Olivia J. Killeen, MD, Kellogg Eye Center, 1000 Wall St, Ann Arbor, MI 48105 (okilleen@med.umich.edu).

Author Affiliations: Department of Ophthalmology and Visual Sciences, Kellogg Eye Center, University of Michigan, Ann Arbor.

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