

Impact of Vision Problems on Quality of Life

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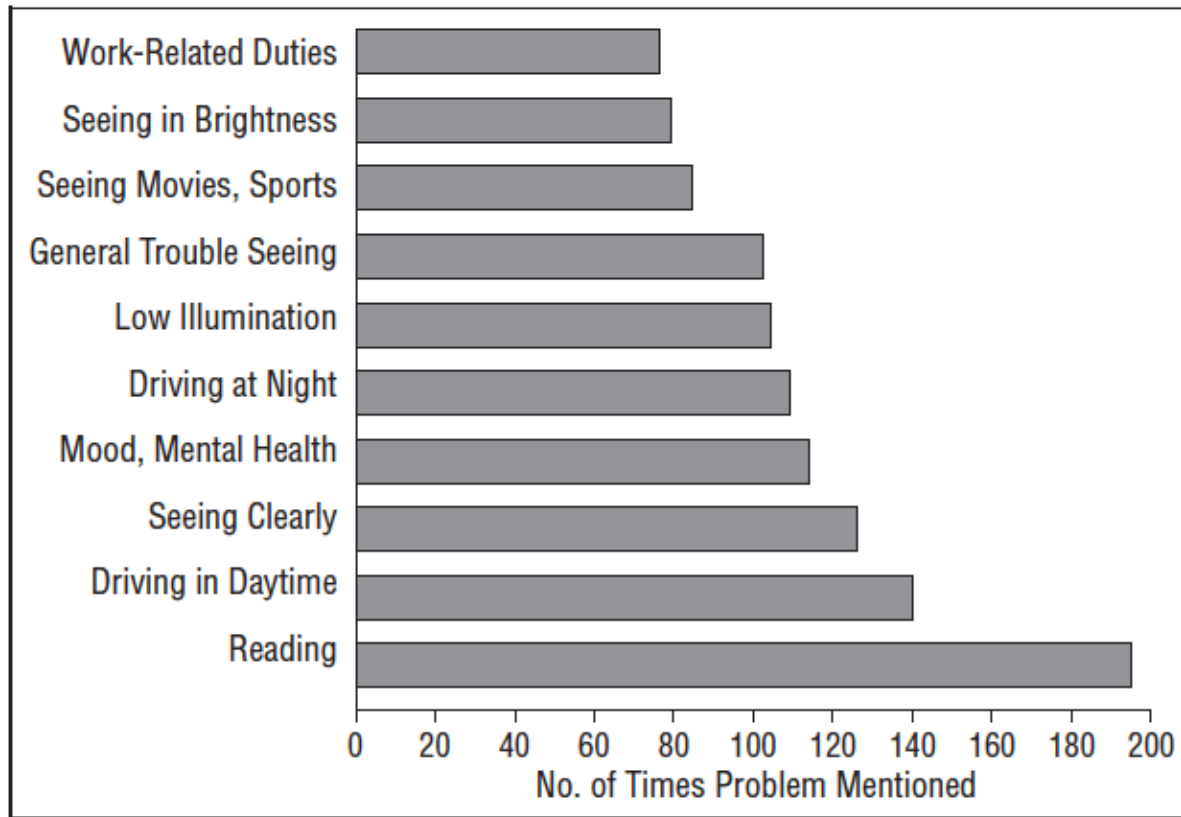
FOCUS ON EYE HEALTH
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 **Prevent
Blindness
America**
Our Vision Is Vision®

The “Personal Burden” of Vision Impairment



Reading and Driving Problems Most Frequently Cited by Patients



Mangione et al. Arch Ophthalmol. 1998;116:227-233.

A national survey of visual rehabilitation providers indicated that 86% of clients present with reading problems, and 68% present with driving problems.

SOCIOECONOMICS AND HEALTH SERVICES

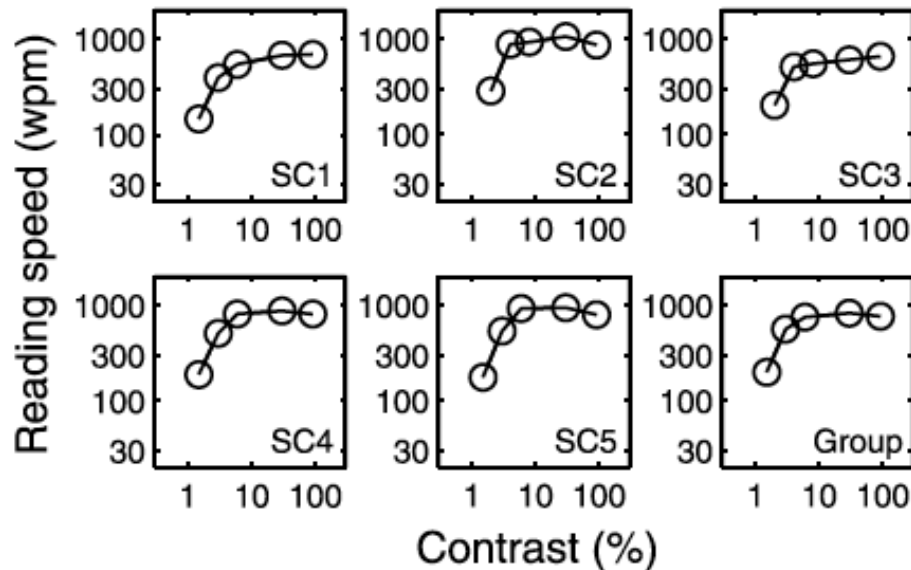
SECTION EDITOR: PAUL P. LEE, MD

Characteristics of Low-Vision Rehabilitation Services in the United States

Cynthia Owsley, PhD, MSPH; Gerald McGwin Jr, MS, PhD; Paul P. Lee, MD, JD; Nicole Wasserman, MPH; Karen Searcey, MSPH

Arch Ophthalmol. 2009;127(5):681-689

Reading speed is slowed when contrast is reduced since it reduces the visual span.



The visual span is the number of characters recognized in a single glance.

Legge et al. Journal of Vision. 2007; 7: 1-15.

Motor vehicle collision risk is elevated in drivers with contrast sensitivity impairment

	Contrast Sensitivity Impairment	Combined with Hearing Impairment
RR (95% CI)		
Unadjusted	1.50 (1.06 – 2.12)	2.12 (1.45 – 3.11)
Adjusted	1.42 (1.00 – 2.02)	2.41 (1.62 – 3.57)

Green, McGwin, Owsley JAGS 2013; 61: 252-257

Decreased visual function linked to depression

NEI VFQ subscales	Depressed Most of the Time	Depressed None of the Time
Dependency	79	94
Near Vision	70	85
Distance Vision	78	90
Peripheral Vision	82	91
Role Function	77	92

Paz, Globe, Wu, Azen, Varma for Los Angeles Latino Eye Study Group. Arch Ophthalmol 2003; 121: 1021-1027.

Blindness and eye disease rates in African Americans are 2 times higher than in Whites.

- Glaucoma is 3 – 4 times more likely.

Sommer et al. NEJM 1991;325:1412-1417.

Tielsch et al. JAMA 1991;266:369-374.

Eye care utilization rates in African Americans are reduced, thus less opportunity to detect and treat vision-impairing conditions before vision irreversibly damaged.

Wang et al. Ophthalmol 1996;103:1744-1750.

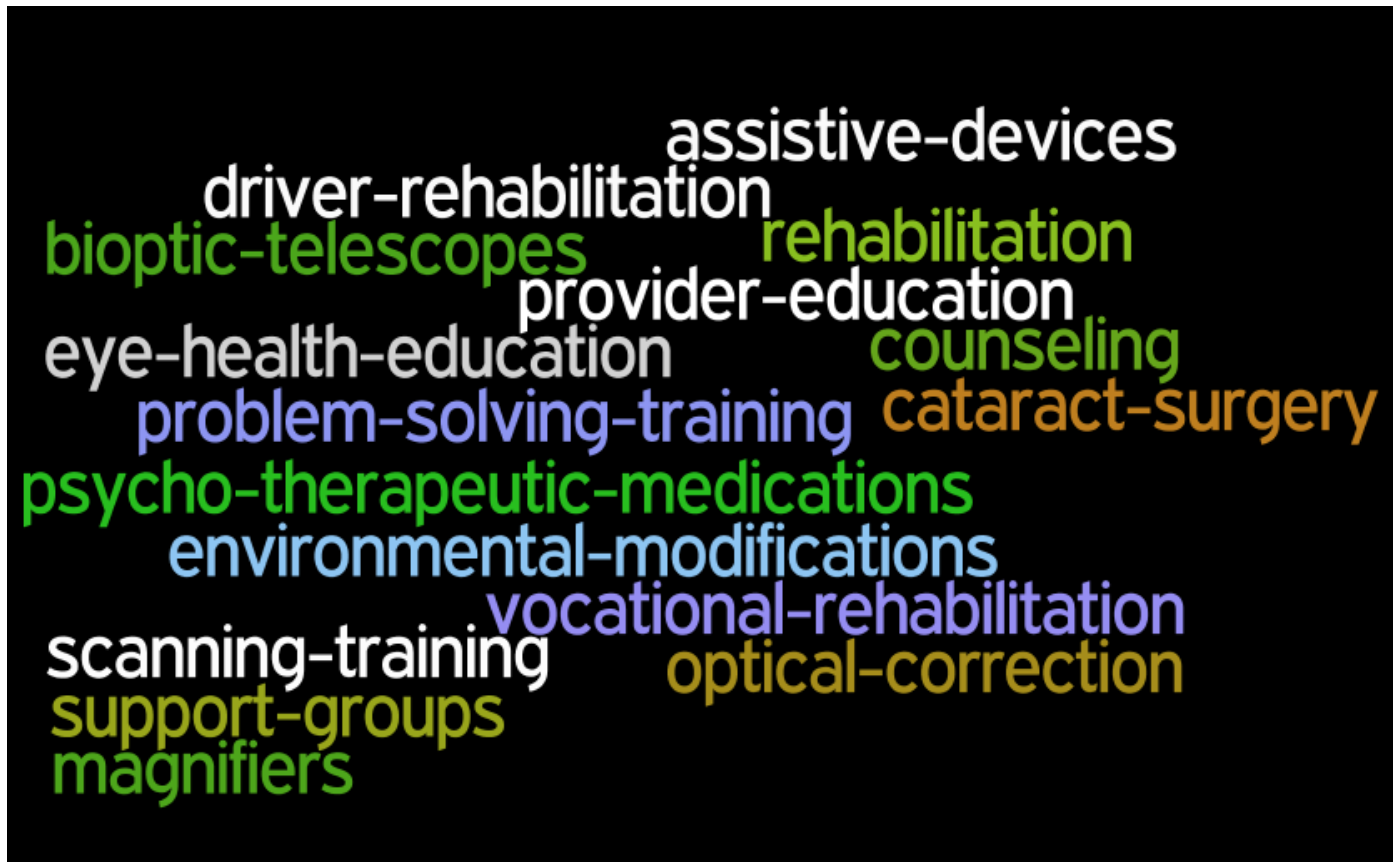
Barriers to care:

- Accessibility
- Cost
- Communication and Trust
- Knowledge about importance of preventative dilated eye exams

Owsley et al. Invest Ophthal Vis Sci 2006;47:2797-2802.



Strategies to Reduce Personal Burden



Correction of Refractive Error in Nursing Home Residents

Vision impairment rates 3-15 times higher in nursing home residents.

Most due to uncorrected refractive error.

Providing glasses to improve visual acuity *reduced depressive symptoms and improved quality of life.*



Owsley et al Arch Ophthalmol 2007;125:1471-1477.

Bioptic telescopes can make safe driving possible in some persons with vision impairment between 20/70 and 20/200



Wood, McGwin, Elgin, Searcey, Owsley. Invest Ophthalmol Vis Sci in press.

Improving the Accessibility of Eye Care

Bringing subspecialty detection and management of Glaucoma to at-risk populations in the community to improve accessibility and cost-effectiveness.

Through primary care optometrists and tertiary care ophthalmologists specializing in glaucoma working together through telemedicine with eye health education component.

Patient seen in own community; only needs to travel to tertiary care center in urban area if glaucoma is complex case or needs surgical Intervention.

Project title: **Eye Care Quality and Accessibility Improvement in the Community (EQUALITY)**

Setting: Two Walmart Vision Centers

Population: ~ 50% African American

Geographic location: Urban and rural Alabama

Demonstration program funded by

Centers for Disease Control and Prevention's Vision Health Initiative (1U58DP004061)



EQUALITY

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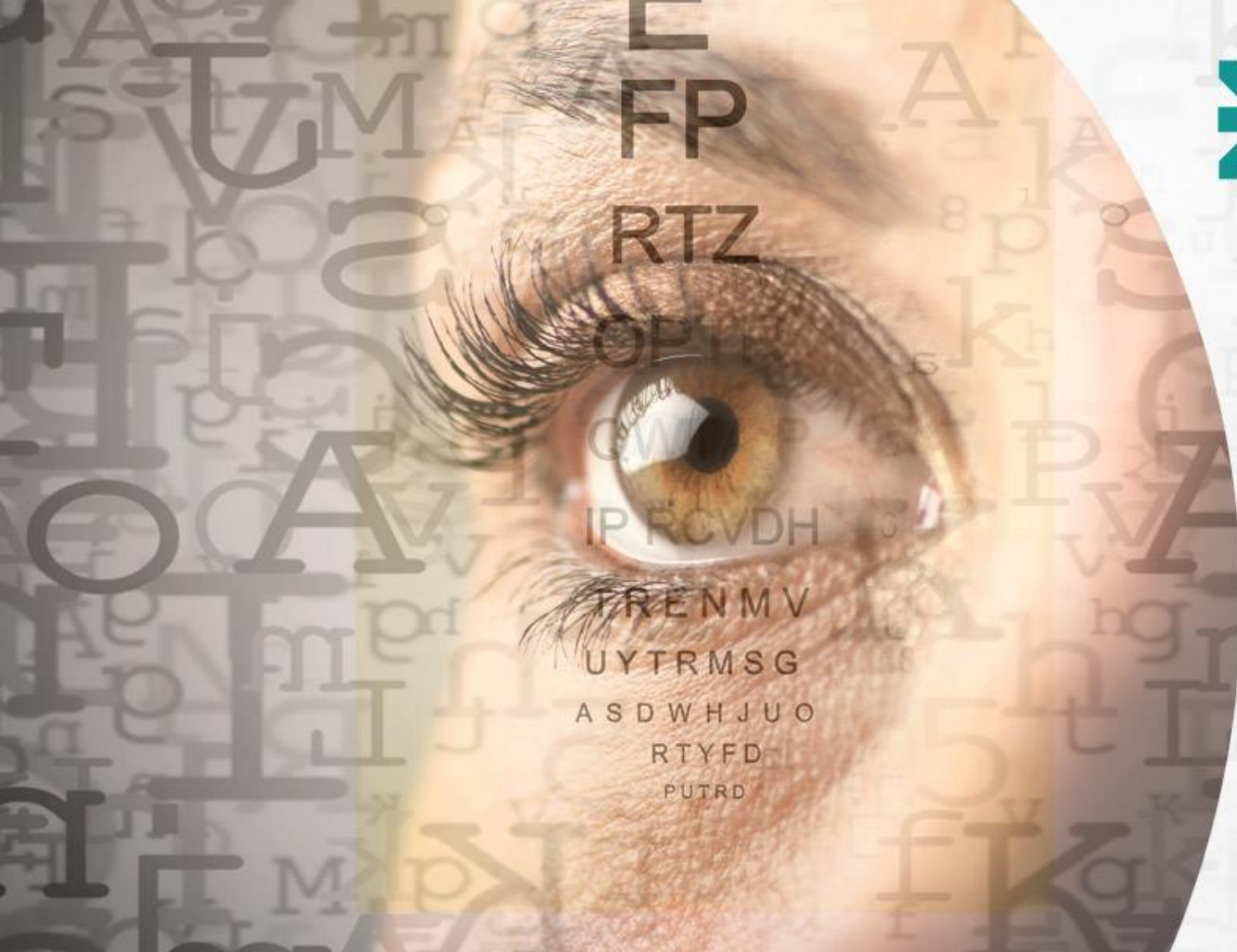
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