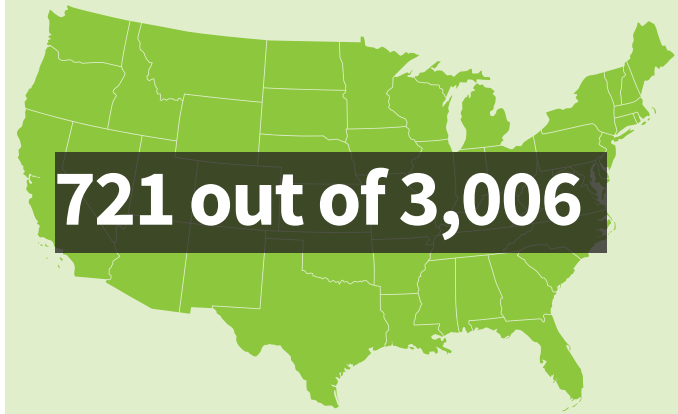




The Growing Impact of Vision Impairment

Eye disorders and vision loss are among the costliest, yet most preventable, conditions in the United States, costing \$168 billion in direct medical costs in 2019. It is estimated a full 96% of vision impairment and loss is avoidable. Without significant planning and intervention, research suggest national expenditures could rise to as much as \$717 billion by the year 2050, due in large part to the aging of the U.S. population.¹

Low-income, minority populations, women and children in particular tend to be at greater risk for undiagnosed and uncorrected eye and vision disorders and diseases than the general population.²



American counties have NO ophthalmologist or optometrist.

Quality of Life Impact Across the Lifespan

Loss of vision—whether it happens suddenly or over time—can have a major impact on one’s mental and emotional health given its significant role in interpersonal connection, engaging in hobbies or interests, independently managing one’s daily activities, maintaining independence, and remaining physically active. Children and adolescents may struggle with social connection and academic or athletic performance as a result of vision impairment. In addition, lack of social acceptance from using visual assistive devices (including eyeglasses) may deter children from adhering to eye care treatment. Older adults may face a compounding risk in health status stemming from inability to adapt mentally and emotionally to changes in vision, leading to distress, anxiety, or depression that may cause them to disengage from physical activity (which could lead to chronic illness) and social isolation.

Children from under-resourced urban areas, many of whom are considered ethnic minorities, experience more than twice the normal incidence rate of vision problems but are also less likely to be referred to and receive an eye examination by an eye doctor.³

For many underserved, low-income, and rural populations, their only feasible option for eye and vision care services is at their community health center.

29 million people

2.78%

29 million people visited community health centers nationwide in 2019.⁴

Of that 29 million, 2.78% received eye care services. In contrast, 22.50% received dental and 8.65% received mental health services.⁴

Considerations

Community Health Centers are perfectly positioned to meet the comprehensive eye care needs of patients while also reducing costs and preventing greater morbidity and inequity. The following are considerations and recommendations for assisting your health center in assessing and planning for the sustainability of integrating comprehensive eye care services for the benefit of your patients.

Questions to Ask⁵

- Do you have a process in place for patients who need glasses to obtain them?
- How are you assuring that your patients have access to an optical dispensary to fill eyeglass prescriptions and to have eyeglasses replaced, repaired or adjusted?
- Does your pharmacy have all of the eye care medications that your patients need?
- How are you assuring that your children receive comprehensive vision care to diagnose vision and eye problems that could affect learning (such as refractive errors, focusing problems, eye turns, and eye coordination problems)?
- Are you referring at risk individuals for annual eye exams, such as African Americans who have a higher prevalence of glaucoma and Latinos who have a higher prevalence of diabetic retinopathy as compared to Whites?
- How do you track results and need for follow up eye care in high risk patients?
- How are you assuring that all patients with diabetes and hypertension have annual dilated eye examinations?
- If patients are diagnosed with chronic eye conditions (e.g. dry eye, glaucoma) needing regular follow up and treatment, how are you assuring this is being done?
- How are you assuring that elders and those at risk for permanent vision loss are receiving comprehensive and preventive eye services?
- Are you assessing older patients in the area of falls prevention and providing them with falls prevention education?

“Among children aged 3 to 6 years, visual impairment is projected to increase in the U.S. by 45% among Latinx children and 14% among Black children from 2020 to 2060, while vision impairment is expected to decrease by 22% among white children of similar age during this same time period.”⁶

Recommendations for Integrated Vision Care Services in Health Centers⁷

1. Develop a sustainable business model

- Consider how your organization might integrate eye health and vision care into other existing patient assistance programs (e.g. Ryan White Program, Health Care for the Homeless program to help support the cost of services and prescription glasses)
- Develop local partnerships with eye care specialists who can see patients for acute issues and establish a workflow.

2. Conduct comprehensive eye exams

- If possible, offer specialized testing including visual fields, fundus photographs, optical coherence tomography (OCT), and specialty contact lens fittings in an effort to reduce outside referrals and financial burden on the patient.
- Based on age and other risk factors, conduct dilated eye exams to detect and monitor certain chronic diseases with special emphasis on diabetic, hypertensive, and HIV+ populations.

3. Build in care coordination

- Establish a bidirectional referral process between the eye care provider and primary care provider(s).
- Eye care providers should be fully integrated into the health care team. Coordination of care for patients might be easier when all providers are under the same roof, but it still requires intentional planning and execution.

4. Engage in patient education and outreach

- Integrate eye care messaging into patient-facing technology (closed circuit TV, wait time messages for phones, patient portal, and/or text message campaigns).
- All members of the care team should be trained in offering basic eye health education to patients and offering referrals to eye health and vision care services in the health center.

Read the full recommendations here: [Integrating Eye Health and Vision Care for Underserved Populations into Primary Care Settings](#)

46.7% of adults aged 65 and older **with** severe vision impairment or blindness have also experienced a fall.

vs.

27.7% of adults over age 65 **without** severe vision impairment or blindness have experienced a fall.

Levels of Investment/Cost vs Reimbursement Analysis

Cost	Patient Type	Service Type	Reimbursement	Equipment/Space/ Recommendation
\$ Less upfront investment/ space	School-aged child on Medicaid	Comprehensive eye exam	Medicaid & Children's Health Insurance Program (CHIP) for all children under 21 reimburses for eye exams and eyeglasses	1 exam lane/no technician Kid-friendly eye testing materials
	Non-Medicaid and non-CHIP	Comprehensive eye exam	Essential Pediatric Vision Care Benefit (ACA 2010) and subsequent regulations provide annual eye exams by an eye doctor for all children from birth through 18, including glasses	(Optical recommended, but can find external sources for glasses)
	Uninsured/Self pay adults	Comprehensive eye exam	Sliding fee scale	1 exam lane/no technician Refer for ancillary testing/non-profit for glasses
\$\$ Mid-range investment/ space	Medicare/Medicaid beneficiary	Comprehensive eye exam	Medicare/Medicaid covers a comprehensive annual eye exam when medical diagnosis/diabetic screen/wrap around payments Many plans have vision riders for routine care/glasses	1-2 exam lanes/trained assistant Refer for ancillary testing/non-profit for glasses
\$\$\$ Full investment/ space	Medicare beneficiary/ Private insurance All age ranges and insurance/ self pay/ uninsured levels	Comprehensive eye and vision care/ management	Medicare/private insurance reimburses for a comprehensive medical eye exam with diagnostic testing/management and follow up for all medical problems including cataract, glaucoma and diabetes-related retinopathy/wrap around payments	2 exam lanes/eye technician Ancillary equipment like visual fields and OCT. Optical dispensary and staff

Among the Head Start population, Hispanic and Black children make up the top percentages of children who have not received an eye examination by an eye doctor.⁸

Q: What are the expected results of integrating on-site vision care into primary care?

A: Access to comprehensive vision care can help prevent and detect several chronic diseases in the early stages such as: hypertension, cardiovascular disease, Graves' disease, multiple sclerosis, herpes zoster, and tumors.⁷

A: It provides a one-stop shop for patients, reducing barriers to care while also promoting collaborative, multidisciplinary team-based care.⁷

Sample Business Plan for Integrating Eye Care Services

START UP/FIRST YEAR EXPENSES* EYE CARE SERVICE	Estimated unit cost (linked to optometry equipment)
STARTING CAPITAL AND IMPROVEMENTS (ONE TIME)	
Ophthalmic Equipment	\$185,794
Other handheld equipment	\$7,486
Optical (cabinets, inventory, etc)	\$57,735
Buildout/Lease Hold Improvements (estimated)	\$50,000
SUB-TOTAL ONE TIME START UP COSTS	\$301,015
OPERATIONAL EXPENSES	
Optometrist (with benefits)	\$150,000
Certified Ophthalmic Assistant/Technician (with benefits)	\$35,000
Optical Assistant/Receptionist (with benefits)	\$43,750
Billing Clerk	\$35,000
Clinic Supplies	\$11,500
TOTAL EXPENSES Year 1 with Start Up Costs	\$576,265

*for full investment
Business plan is available upon request.

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