EARLY CHILDHOOD VISION SCREENING GAPS

SOCIAL DETERMINANTS AND SYSTEMS FACTORS

- Direct Effect
- Contributing Factor
- Bi-directional Influence

Lack of Parent Awareness
- Unaware of vision development & need for screening

Insurance / Cost Barriers
- Limited coverage or high out-of-pocket costs

Long Wait Times for Specialists
- Delays in appointments and evaluation

Transportation Barriers
- Limited or no reliable transportation

Language & Cultural Barriers
- Difficulty understanding system or instructions

Limited Preschool Screening Programs
- Not routinely available for ages 3–5

Workforce Shortages
- Fewer providers specializing in pediatric eye care

Rural & Geographic Barriers
- Distance to care, fewer local resources

Referral & System Navigation Issues
- Confusing process, families lost to follow-up

LACK OF PRESCHOOL VISION SCREENING & FOLLOW-UP (AGES 3–5)

- Delayed diagnosis
- Missed critical developmental window
- Untreated vision deficits

Missed Amblyopia
"Lazy eye" not detected

Missed Strabismus
Eye misalignment not detected

Uncorrected Refractive Errors
Significant vision problems untreated

Brain Suppresses Weaker Eye Input
Leads to reduced visual development

Missed Critical Developmental Window
Ages 3–5 are crucial for brain visual pathway development

DEVELOPMENTAL CONSEQUENCES

Fine Motor Delays
Poor hand-eye coordination, writing readiness, dexterity impacted

Gross Motor Delays
Balance issues, coordination deficits, altered gait

Visual-Motor Integration Problems
Difficulty combining visual input with movement

Visual Tracking & Processing Deficits
Poor tracking, scanning, and visual sequencing

Depth Perception Deficits
Difficulty judging distance and spatial awareness

ACADEMIC CONSEQUENCES

Delayed School Readiness
Challenges with pre-academic skills

Early Literacy Challenges
Difficulty with letter recognition, reading readiness, comprehension

Attention & Learning Difficulties
Harder to focus, follow instructions, retain information

Reduced Classroom Engagement
Less participation, more frustration, behavioral challenges

PSYCHOSOCIAL CONSEQUENCES

Reduced Self-Esteem
Feeling different or "less than" peers

Social Stigma & Bullying
Teasing related to eye appearance or patching

Anxiety & Emotional Distress
Worry, frustration, and emotional burden

Reduced Participation in Activities
Avoiding games, sports, or social situations

LONG-TERM OUTCOMES

- Permanent Visual Impairment
- Lower Academic Achievement Over Time
- Reduced Quality of Life
- Lifelong Functional Limitations
- Persistent Health Inequities

PROTECTIVE FACTORS & SOLUTIONS (Where We Can Intervene)

Universal Preschool Vision Screening
Consistent, evidence-based screening in community settings

Improve Access to Care
Mobile screening, tele-ophthalmology, voucher programs, and local partnerships

Strengthen Referral Navigation
Clear communication, follow-up systems, and family support through the process

Caregiver Education & Awareness
Increase understanding of asymptomatic conditions and the importance of follow-up

School–Healthcare Partnerships
Integrated systems to ensure screening, referral, and information sharing

Policy & Systems Support
Sustainable funding, workforce expansion, and screening policies that reduce disparities