



Prevent Blindness Position Statement: Children's Vision and Eye Health

Position Statement:

Childhood, particularly the early years (ages 8 years and younger), is a critical period for development of visual systems. It is essential that evidence-based and uniform systems leading to early identification and treatment of vision problems in children are implemented in the United States. Prevent Blindness supports national improvements in children's vision health surveillance, uniformity in screening, reduction of eye health disparities, and program accountability.

Discussion of Position:

The prevalence of vision impairment caused by refractive error, amblyopia, strabismus, and/or astigmatism is 5 to 10% of all children younger than age five.¹² Poor eye health outcomes for American children have been documented in recent population based studies showing that fewer than 13% of children aged 30 to 72 months with amblyopia had received treatment.^{1,2} Amblyopia treatment is influenced by a child's age, with children younger than 7 years of age being more responsive.¹⁹ The authors of these studies concluded that the rates of amblyopia (1% to 2.6% depending upon race/ethnicity and geographic location^{1,2}) "reflect the natural frequency of pathology in the absence of effective surveillance and intervention, indicating the full magnitude of the public health challenge".¹

Strabismus and amblyopia have been associated with reduced quality of life in young children and adults,⁴⁻⁶ and an increased risk of vision loss^{7,8} in the fellow eye, increasing the importance of improving approaches to vision assessment, eye health education, and dissemination of information about vision care resources. Early detection is necessary in order to initiate treatment of vision problems and eye diseases, including amblyopia strabismus and high refractive errors.¹⁻⁴ The United States Preventive Services Task Force recommends that children between the ages of 3 and 5 years be screened at least once to detect the presence of amblyopia and amblyogenic risk factors such as strabismus and significant refractive error.¹²

Research has shown that infants and young children with visual deficits can have delayed motor development milestones.⁹ Additionally, many children with special medical needs²³⁻²⁶, children born prematurely (less than 32 completed weeks gestation), and those with a family history of vision problems are at increased risk for vision and eye health issues.²⁹⁻³² Improved surveillance, education, and outreach initiatives to support earlier identification of vision problems and appropriate referral to eye care in these vulnerable populations will result in improved potential for better vision, thereby contributing to a child's readiness to learn.

Timely intervention and effective treatment lead to long term improvements in children's vision and eye health and potentially that of the population at large. Evidence-based methods of vision screening and uniform vision data collection as well as measures of program

performance will lead to better use of limited resources for vision programs and a targeted response based on population needs.²⁸

Policy Recommendations:

In the interest of reducing the occurrence of unidentified and untreated vision problems in children, Prevent Blindness makes these recommendations:

- Children with known neurodevelopmental disorders (e.g., motor abnormalities such as cerebral palsy, cognitive impairment, autism spectrum disorders, hearing impairment or speech delay*) should be referred directly to an optometrist or ophthalmologist because these children have a higher rate of vision problems than those without neurodevelopmental abnormalities.^{9, 23-26}
- Children with systemic diseases or using medications known to have associated eye disorders, and children born prematurely also should receive comprehensive eye examinations rather than be screened.
- Legislators should support quality approaches to children's vision and eye health, including:
 - An annual vision screening or eye exam for children ages 3 through 5;
 - Use of scientifically sound vision screening methods;
 - Professional education and training programs for all stakeholders in the vision and eye health continuum; and
 - Establishment of data systems to facilitate the vision health process and monitor overall system performance at the population level.
- The recommendation from the Office of Inspector General to require States to report vision and hearing screening data collected as a part of the EPSDT visit for children participating in Medicaid should be implemented. (*Office of the Inspector General, CMS Needs to do More to Improve Medicaid Children's Utilization of Preventive Screening Services, OEI-05-13-00690; November 2014*)
- National and state level reporting measures for children's vision and eye health should be implemented. (Such as HEDIS, NQF, and Title V Programs)
- Funding should be made available to support the public health infrastructure for children's vision and eye health.
- Increased educational efforts should be taken to ensure that those covered by health plans under the Affordable Care Act are aware that children's vision coverage is included as an essential health benefit. Educational materials should be included in plan descriptions of health coverage provided as a part of the Affordable Care Act.

**Note this does not represent a comprehensive list of conditions requiring direct referral to an eye care provider.*

Approval:

This statement was approved by the Prevent Blindness Board of Directors on March 7, 2015

Review date: The position statement will be reviewed again in 2017.

Background Information

- Vision health in children younger than age 6 is a national priority.^{13, 14}
- The prevalence of amblyopia among children aged 36 to <72 months in the United States (U.S) is approximately 2%.¹
- Strabismus, a contributor to amblyopia and a disorder with significant psychosocial consequences^{16, 17} has an estimated prevalence of 2.1 to 3.6% in preschool children.^{1, 17-18}
- Optical correction of significant refractive error may influence timely attainment of developmental milestones²⁰ and improve school readiness.^{21, 22}
- Children with known neurodevelopmental disorders (e.g., hearing impairment, motor abnormalities such as cerebral palsy, cognitive impairment, autism spectrum disorders or speech delay) also should be referred directly to an optometrist or ophthalmologist because these children have a higher rate of vision problems than those without neurodevelopmental abnormalities.^{9, 23-26}
- Providers of vision screening services may be unaware of previous screening attempts on an individual child, the results of those screenings, or whether the child accessed appropriate diagnostic and treatment services, which leads to poor coordination of services for patients.²⁷
- Comprehensive measures are increasingly important to monitor the quality of preventive child health services, to evaluate the performance of the system of vision screening for young children and to respond to requirements for program accountability²⁸. Examples include:
 - Title V (*Social Security Act of 1965 §501, 42 U.S.C. §701-710 (2010), US Department of Health and Human Services Health Resources and Services Administration (HRSA) Maternal and Child Health Title V Maternal and Child Health Services Block Grant Program (<http://mchb.hrsa.gov/programs/titlevgrants>). Last accessed January 19, 2015*),
 - CHIPRA (*Dougherty D, Schiff J, Mangione-Smith R. The Children's Health Insurance Program Reauthorization Act quality measures initiatives: moving forward to improve measurement, care, and child and adolescent outcomes. Acad Pediatr. 2011, 11(3 Suppl): S1-S10.*)
 - The Affordable Care Act (*Goldstein MM, Rosenbaum S. From EPSDT to EHBs: the future of pediatric coverage design under government financed health insurance. Pediatrics, 2013; 131 Suppl 2:S142-8.*)

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