

AAP Vision Screening Guidelines Reduce the Risk of Developing Amblyopia, a Leading Cause of Vision Loss



In January 2016, the American Academy of Pediatrics (AAP) released the “Visual System Assessment in Infants, Children, and Young Adults by Pediatricians”.¹ This comprehensive clinical report is an updated vision screening policy statement for pediatricians. It was co-authored by the AAP and the American Association for Pediatric Ophthalmology and Strabismus (AAPOS) among others.

The biggest update? Instrument-based vision screening, performed using a photoscreener, is recommended as a clinically valid method to fill a care void.

Why? When you photoscreen, you catch vision issues early, when treatment is most effective.

Learn why the AAP updated its vision screening guidelines to recommend photoscreening and ensure you have the knowledge to meet the guidelines and provide the best care for your patients.

Why Did The AAP Recommend Photoscreening?

Delayed Amblyopia Detection

Vision impairment is one of the most prevalent disabling condition among children.²

A principal reason is amblyopia, the #1 cause of preventable vision loss in children.³ Regular vision screening assessments in early childhood reduce the risk of persistent amblyopia at 7 years of age by more than 50%.⁴ Additionally, the most common type of amblyopia, refractive amblyopia, is often invisible to both parents and pediatricians.⁵

What this means: if you wait until a patient can perform a visual acuity test (e.g., Snellen chart) you run the risk of detecting amblyopia risk factors when treatment outcomes are much lower and learning has already been negatively affected.

Bruckner Test Is Not Sufficient

A common myth we hear among pediatricians is that a Bruckner test is sufficient for finding refractive disorders in young patients.

Although red reflex testing with an ophthalmoscope can detect high refractive errors, photoscreeners are designed with the referral criteria suggested by AAPOS. This referral criteria is specific for refractive errors that indicate a risk for amblyopia.⁶

Furthermore, a 2001 study by Evelyn Passe found a significant difference in the accuracy of detection of amblyopia using the Bruckner red reflex test (65%) and a photoscreener (82%).⁷ Since then, photoscreening technology has vastly improved.

Low Positive Predictive Value of Visual Acuity

Studies also suggest that a child cannot fully comprehend a visual acuity test until they are 5 or 6 years old.

In a 2008 study, for example, April Salcido found a 0% positive predictive value for traditional screening methods like a Snellen chart exam for 3 and 4-year-olds. In comparison, photoscreening had a 73% positive predictive value for the same age.⁸

The study concluded that photoscreening is more time efficient than traditional screening and has a significantly higher PPV in 3 and 4-year-old children.

Why Aren't All Pediatricians Photoscreening?

Dr. Sean Donahue, Chief of Pediatric Ophthalmology at Vanderbilt University Medical Center and lead author of "Visual System Assessment in Infants, Children, and Young Adults by Pediatricians," says this about photoscreening adoption: "despite the long-standing recommendations from various professional societies and organizations for all young children to be evaluated, implementation into regular clinical practice has remained less than ideal. As a result, fewer than 20% of children receive adequate screening."⁹

There are three primary reasons a low percentage of pediatricians are meeting AAP care standards.

1. The Awareness Gap

The fact that you are reading this article makes us very happy. The awareness gap is something we can overcome by sharing this article and the AAP clinical policy reports with the pediatric community, and if you are already photoscreening, your success stories with your peers. Through knowledge, more pediatricians will be aware of this recommendation and void in care and feel compelled to adopt photoscreening at their practice.

2. High Cost

In the 2012 AAP vision screening policy update “Introduction of Instrument-Based Screening,” economics was cited as the primary barrier to photoscreening:

“The instruments (photoscreeners) themselves often cost thousands of dollars, in addition to the costs of printers and supplies for each test performed. There are additional indirect costs, including space and staff time required to perform these tests, as well as physician time to interpret them.”¹⁰

3. Variable Reimbursement

Photoscreening is reimbursed via CPT codes 99174 and 99177. In a controversial 2017 ranking, the United States Preventive Services Task Force (USPSTF) ranked the photoscreening test a “B” in children aged 3-5 and an “I” in children under the age of 3.¹¹ This grade of “B” means that the USPSTF recommends the service and ACA compliant plans must reimburse for it under the Affordable Care Act. The grade of “I” means that there is insufficient evidence to recommend paying for the service.

Dr. Donahue said this (and much more) in an editorial response to the “I” ranking titled “The 2017 US Preventive Services Task Force Report on Preschool Vision Screening:”

“Although the results of the large Multi-Ethnic Pediatric Eye Disease Study and the Baltimore Pediatric Eye Disease Study were cited, the study observations that amblyopia risk factors are present and can be treated prior to age 3 years were not mentioned. Also not mentioned were the results of a large photoscreening program in Iowa that demonstrated a similar benefit for children screened when younger than 3 years compared with those screened later...”

By now, you know that photoscreening is an important test; one that is recommended by the AAP and many renowned pediatric ophthalmologists like Dr. Donahue. But do you really have to choose between buying a photoscreener that costs thousands of dollars and hoping for sufficient reimbursement or continuing without a photoscreener and potentially sacrificing children’s wellbeing?

There Is A Better Way

When it comes to meeting the AAP photoscreening recommendations, we understand that you may feel stuck due to high device costs and cumbersome workflow requirements.

But by leveraging mass produced hardware like iPhones and applications on the phone, we ship photoscreeners to you that have the easiest deployment, giving you the potential to be cash flow positive even in a low-reimbursement area.

To summarize, Dr. Donahue says this about GoCheck Kids:

“The availability of GoCheck Kids is particularly intriguing. Its photoscreening functionality efficiently detects risk factors for amblyopia in real-time. A real advantage of GoCheck Kids is that it is a mobile application and, therefore, portable, affordable, and easily accessible... For a monthly subscription, a physician is provided unlimited utilization.”⁹

We know you got into pediatrics because you are passionate about helping children. If children grow up with amblyopia, they will not see their full potential. Sign up for GoCheck Kids today. Why? Because your patients deserve it, now more than ever.

See why thousands of providers have used GoCheck Kids to screen over 5 million children.

Questions? Contact us [here](#)

Learn more: <https://www.gocheckkids.com/>

Schedule a demo [here](#)

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MKT-Doc-321 Rev 01

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