

Portable vision screening devices accurately identify vision problems in young children

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Portable screening devices allow pediatricians to successfully screen children for vision problems, including amblyopia, according to an abstract presented Oct. 25 at the American Academy of Pediatrics (AAP) National Conference and Exhibition in Orlando.

Approximately 15 percent of [children](#) ages 3 to 5 have [vision problems](#) that can threaten normal visual development. In "Practical Validation of Plusoptix, iScreen, SPOT and iCheckKids Photoscreeners in Young and Developmentally Delayed Pediatric Patients," researchers tested the effectiveness of four state-of-the-art portable [vision screening](#) devices in 108 [pediatric patients](#) in Alaska.

The children were ages 6 months to 10 years. Each received a comprehensive exam, followed by screening with each of the four vision screening devices, including the iCheckKids device which attaches to a smartphone.

All four devices performed well, according to the study authors. The devices' sensitivity/specificity ratings were comparable: iScreen had a 75 percent/88 percent sensitivity/specificity reading; SPOT, 80 percent/85 percent; Plusoptix, 83 percent/88 percent; and the iCheckKids, 81 percent/91 percent. The outcomes were similar for preschool-age children and developmentally delayed children.

"Photoscreening is exquisitely capable of detecting the most common, and the most treatable amblyopia risk factor, such as insufficiently

accommodated hyperopia or farsightedness," said lead author Robert Arnold, MD. "A simple snap of your camera shutter will save a child's sight for life."

These new devices, combined with the AAP's updated vision screening guidelines and a reimbursement code (99174) for these services, "promise to improve early screening for [amblyopia](#)," Dr. Arnold said.

More information: To view the abstract, "Practical Validation of Plusoptix, Iscreen, SPOT and ICheckKids Photoscreeners in Young and Developmentally Delayed Pediatric Patients," go to aap.confex.com/aap/2013/webpro ... ress/Paper20691.html

Provided by American Academy of Pediatrics

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