

Advancing the global vision care paradigm with disruptive new technology

QuickSee in clinical care and global health

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Dr Srinivas (Sri) Sastry



QuickSee handheld autorefractor

Dr Srinivas (Sri) Sastry, an ophthalmologist practicing in Bethesda, Maryland, experiences vision care delivery at its extremes: from a modern hospital setting in the US to missions in rural and under-resourced communities in India.

A retinal specialist who has also served as Chair of Ophthalmology at Suburban Hospital, Sastry studies and utilizes technologies from around the world to improve eye care and prevent blindness. “I travel the globe to see how different health systems are working in countries in Asia, Europe, and India, specifically, where I have spent a lot of time working on health and prevention of blindness challenges,” he said. “I have seen remarkable transformation in how health systems are evolving to provide care for a larger populations.”

This transformation, he says, is driven by three factors: The ability to develop world class facilities where they’re needed; education of well-trained eye care specialists and technicians, and advancing technology.

“QuickSee is a tremendous example of how new technology can disrupt practices,” Dr Sastry observed. The handheld autorefractor, he said, advances the care paradigm “by providing a very high quality, high technology, durable device that can be taken out into the field to provide accurate assessments of refractive error in vast populations.”

“I’ve seen that firsthand in global healthcare,” he continued, noting his experience with the Sankara Eye Hos-

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pital in Bangalore, India, where he and colleagues conducted a clinical study to compare handheld autorefractors to the gold standard of subjective refraction for older adults. Their research, published in PLOS ONE¹, found QuickSee could be “used successfully as refraction screening tool in epidemiologic studies of adults in India and other low-resource settings.”

The study found QuickSee had the highest accuracy of the devices tested (which also included the Nikon Retinomax and EyeNetra Netra). Further, the authors observed, “[QuickSee’s] robust construction is an advantage in rural areas and extreme weather conditions, and is also an affordable option for large-scale studies.”

Dr Sastry attributes QuickSee’s potential for impact in large scale vision care improvements to three factors. “First, it provides reliable accurate technology; second, its cost effective; and third, it’s built for durability which can withstand travel to remote locations and harsh conditions,” he said.

“And I see a similar evolution here in the United States where I use QuickSee as an adjuvant to help improve flow in my own clinic. I see its potential in different clinics across the country as it becomes more popular.” Dr Sastry believes QuickSee is especially valuable to practitioners establishing their new clinics, expanding to new locations, and preparing for mobile care. It can help their staff get patients in and out of the eye clinic theoretically faster, thereby helping their cost effectiveness.

Having used QuickSee in the clinic and abroad in the field for several years, Dr Sastry believes it is a valuable tool for vision care professionals in diverse care settings. “If somebody wants to grow their practice, whether that’s in a clinic, a hospital, or a community center, or global eyecare, QuickSee gives them ability to provide high quality refractive assessment.” ●

1. Agarwal A, Bloom DE, deLuise VP, Lubet A, Murali K, et al. (2019) Comparing low-cost handheld autorefractors: A practical approach to measuring refraction in low-resource settings. PLOS ONE 14(10): e0219501. <https://doi.org/10.1371/journal.pone.0219501>



QUICKSEE KEY FEATURES

Binocular and open view

Reduces patient accommodation for more reliable measurements

Wavefront aberrometry

Provides the most comprehensive method to measure ocular aberrations and refractive errors

Dynamic measurements

Produces results with high confidence

BENEFITS

Accurate binocular measurements in 10 seconds

Strong agreement with subjective refraction

Easy to learn and use

User and patient friendly; accommodates patients with physical disabilities

Field durable

Calibration free, works indoors and outdoors, rechargeable battery

SELECTED PUBLICATIONS

Rubio, Marcos, et al. “Validation of an Affordable Handheld Wavefront Autorefractor” *Optom. Vis. Sci.*, vol. 96, no. 10, pp. 726–732, Oct. 2019.

Durr NJ, Dave SR, Lim D, et al. Quality of eyeglass prescriptions from a low-cost wavefront autorefractor evaluated in rural India: results of a 708-participant field study. *BMJ Open Ophthalmology* 2019;4:e000225. doi:10.1136/bmjophth-2018-000225

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