

iCare HOME tonometers optimize patient care

Since 2020, the number of people with glaucoma worldwide has surpassed 80 million and is expected to pass 111 million by 2040.¹ While early diagnosis and intervention can significantly reduce the risk of vision loss for patients suffering with glaucoma, recent research suggests that measuring intraocular pressure (IOP) in a clinical setting may not always provide the full picture for this chronic disease, with variable IOP.

Studies confirm that diurnal and nocturnal IOP rhythms fluctuate, with spikes often occurring outside traditional office hours and often in the early waking hours.² In addition to elevations in IOP, wide fluctuations of IOP ranges have also been shown to contribute to glaucoma progression.³⁻⁵ As eyecare professionals, we manage glaucoma by lowering IOP, and we aim for a “target” IOP based on a maximum IOP. An ignorance in what the true IOP max is can lead to a delay in intervention, as well as a delay in providers identifying critical fluctuation trends and IOP spikes, that may otherwise influence the overall glaucoma management plan for a patient.

Improve glaucoma care with iCare home tonometry

The iCare HOME2 self-tonometer offers a uniquely collaborative, patient-empowering approach to measure diurnal IOP as well as responses to treatments long term, giving glaucoma specialists the ability to gather more IOP measurement data. There is no need for local anesthesia or specialized skills and compared with Goldmann applanation tonometry, the iCare HOME measurements are comparable.⁶

In a recent case study, several of our patients with “controlled” glaucoma that used an iCare HOME tonometer to measure fluctuating IOP outside of clinic office hours, saw spikes that were not captured during routine office visits. This information was critical to their management and many of the patients received a change in treatment because of these iCare findings⁷.

In contrast, I have also had patients with ocular hypertension and IOPs in the low 20s mmHg, who have not shown damage over the years; I’ll ask them to use the iCare HOME2 tonometer for a week, and we’ll see little to no IOP fluctuation. Home monitoring may often lead us to realize that we need to be more proactive, however, it could also give us the confidence needed to continue observing a patient without treatment.

Beyond chronic glaucoma IOP measurements, home



iCare HOME2 enables reliable and convenient IOP measurements at home.

tonometry can also be a highly useful tool for facilitating safe follow-up of patients residing in remote and rural areas after surgical procedures. I have used the iCare HOME tonometers to enable IOP monitoring of patients after trabeculectomies and values/ tubes as well as sustained release Durysta devices.

Successfully implementing iCare home tonometry

Implementing the iCare HOME2 tonometer as part of a comprehensive management plan gives the patient the opportunity to take a proactive role in the management of their glaucoma. As providers, we receive access to a larger dataset of patient IOP measurements that allows for more evidence-based and informed treatment decisions around how and when a management plan should be adjusted.

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