

**iCare HOME2**



**Easy and accurate IOP  
self-measurement**

For better perception **icare**



**Excellent ease of use and accuracy in home tonometry**

## **iCare HOME2** **Glaucoma management** based on real-world data

The iCare HOME2 tonometer revolutionizes glaucoma care by enabling patients to capture their intraocular pressure at different times of the day and night. The doctor is provided with relevant IOP data to support treatment decisions.

At-home measurements may help reveal IOP peaks, that would not have been recognized, had measurements only been taken during office hours, at the clinic. iCare HOME2 can support the diagnosis and management of patients with glaucoma by reliably determining peak IOP and patterns of fluctuations.

The iCare HOME2 applies the same rebound technology as iCare tonometers in clinics. iCare HOME2 is easy for patients to use as part of daily routines.

The probe touches the cornea rapidly and lightly, providing a comfortable and gentle measurement. Measuring requires no anesthesia, drops or other preparation.

Home IOP measurements make it possible for patients to contribute to glaucoma care by providing diurnal IOP data for their doctor.



The smart light guide assists the patient in finding the correct measurement distance and alignment. The device screen and the sound notifications provide further assistance. The patient is guided to make a quality measurement every time.



**“iCare HOME can support diagnosis and management of patients at risk of glaucoma by determination of peak intraocular pressure, as well as the extent and patterns of fluctuations.”**

Huang J, Katalinic P, Kalloniatis M, Hennessy MP, Zangerl B, Diurnal Intraocular Pressure Fluctuations with Self-tonometry in Glaucoma Patients and Suspects: A Clinical Trial, *Optom Vis Sci* 2018; Vol 95(2)

### **Position freedom**

With iCare HOME2, measurements can be made in a supine, reclined or sitting position. Taking supine measurements at night and in the morning can provide a full picture of IOP fluctuations.





## Clinical value and flexibility

Upon doctor's discretion, the patient can access IOP measurement results and upload them for doctors to review.

IOP data collected by the patient adds value to modern glaucoma management. Patients can follow their IOP with a smart phone or using a web browser, upon doctor's discretion. Doctor has access to the IOP results at any time and the iCare CLINIC can be configured to send the doctor an e-mail alert if the IOP rises above a preset limit.



## Modern approach to diurnal IOP monitoring

Adopting iCare HOME2 in clinical practice offers many benefits.

### Designed for professionals

iCare HOME2 and the iCare CLINIC software allow the doctor easy access to comprehensive IOP information, supporting clinical decisions. iCare CLINIC enables healthcare professionals to better visualize and detect important changes in patients IOP behavior.

### Accompanies every step of glaucoma treatment

Healthcare professionals can provide proactive care for their patients implementing iCare HOME2 in their patient management. Glaucoma diagnosis, medication changes and other treatment decisions are supported by in-depth IOP data.

### Improved medication compliance

The use of iCare HOME2 may improve patient compliance. Patients can visualize the effect that medication has on their IOPs and any potential need for surgery is easier for the patient to comprehend. The iCare PATIENT2 app installed on a smart phone allows the patient to upload the IOP data to the CLINIC for healthcare professional's review. The iCare PATIENT2 app also enables the patient to see their own IOP results graphically.

### A new service from your clinic, for your patients

Adopting home IOP monitoring in your clinical practice is easier than ever. Most patients can take iCare HOME2 into use without training, based on the intuitive support materials. Your patients will actively contribute to their care, feeling engaged and empowered. iCare HOME2 can be useful for facilitating safe follow-up of patients residing in remote and rural areas.



**“Self-tonometry has the potential to improve patient engagement, while also providing a more complete picture of IOP changes over time.”**

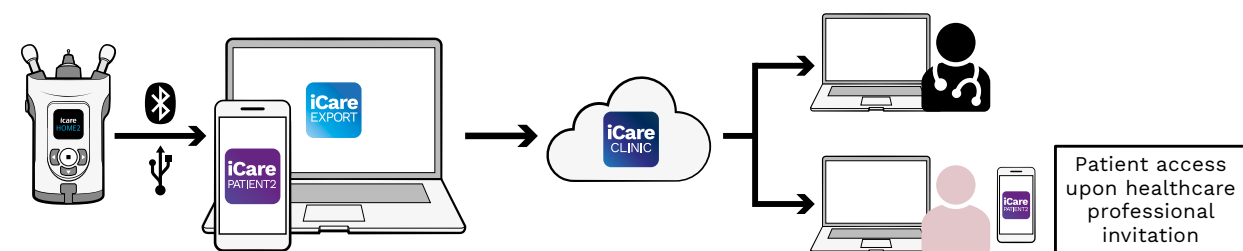
Pronin S, Brown L, Megaw R, Tatham AJ, Measurement of Intraocular Pressure by Patients With Glaucoma, JAMA Ophthalmol. 2017 Oct 1;135(10):1-7.

# Versatile reporting tools and easy connectivity

The iCare CLINIC software platform enables the collection and analysis of IOP information measured with iCare HOME, iCare HOME2 and iCare IC200 tonometers, providing healthcare professionals an in-depth overview of changes in their patients IOP status. The IOP data and a variety of analysis options are displayed in an intuitive user interface.

With the cloud version of iCare CLINIC, all information is conveniently accessible for the healthcare professional using a web browser. The patient can be provided with access to his or her own IOP information in CLINIC.

For those preferring a non-cloud based solution, the CLINIC On-Premises provides local data storage and access. CLINIC On-Premises can be used within a practice or within a hospital.



**iCare CLINIC is the heart of the iCare HOME2 solution providing ample data review and reporting options.** iCare CLINIC is available both as a cloud based and on-premises solution.



**iCare PATIENT2 is a smart phone app for transferring IOP data to iCare CLINIC. For patients, iCare PATIENT2 provides easy access to their IOP measurement history with Android or iOS mobile devices.**



**iCare EXPORT allows IOP measurements made with iCare HOME, HOME2 or IC200 to be uploaded to iCare CLINIC using a PC.** iCare EXPORT also provides basic IOP data viewing and reporting functions.



**iCare HOME2 and iCare CLINIC are great tools for monitoring the effectiveness of a surgical procedure.**

With the iCare HOME2 device, post-surgical monitoring can be started much sooner than with other techniques.



**iCare CLINIC's built-in graphical tools support management changes.**

The Compare periods feature enables plotting different time periods for easier comparison.



**Intraocular pressure can have a repeating pattern or vary daily.**

With iCare CLINIC's Diurnal report, the daily IOP pattern can be analyzed and medication adjusted accordingly.



# Research supports the clinical benefits of diurnal IOP monitoring

Studies have shown that undertaking frequent IOP monitoring often results in changes to clinical management. Diurnal IOP monitoring resulted in a change in glaucoma treatment in 56%, 36% and 79% of patients in studies by Sood, Barkana and Hughes, respectively <sup>(1-3)</sup>.

According to Dr. Ike Ahmed, IOP measurements performed with iCare HOME can be instrumental in understanding why some patients progress despite reasonable in-clinic IOPs <sup>(4)</sup>. Diurnal monitoring performed by the patient can also help in evaluating the success of a pressure lowering procedure <sup>(5)</sup> and in comparing the effect of different medications <sup>(6)</sup>.

iCare HOME can help recognize diurnal intraocular pressure patterns for individual patients and determine the timing of their peak intraocular pressure <sup>(7)</sup>, hence assisting in finding an optimal drug instillation schedule.

The doctor can also be notified via e-mail of higher than desired IOPs, which may be useful after surgery or with patients at higher risk for elevated pressures <sup>(8)</sup>. Because of the gentle measurement technique, iCare HOME can be used soon after surgery.

**“Monitoring of IOP in patients with glaucoma progression despite apparently adequate IOP control at office visits, detected higher average mean IOP, peak IOP, and range of IOP fluctuation.”**

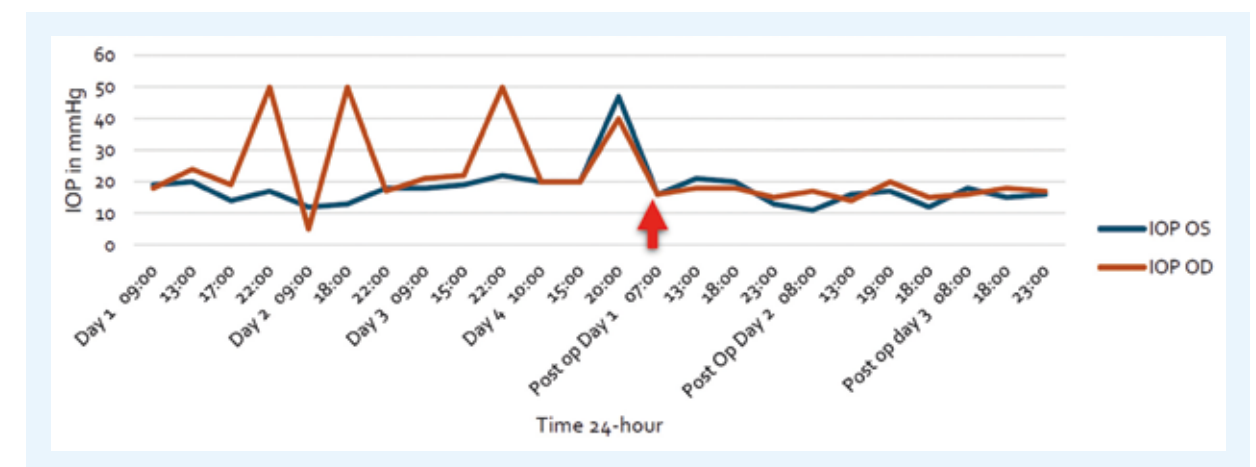
Cvenkel B, Velkovska MA, Self-monitoring of intraocular pressure using iCare HOME tonometry in clinical practice, Clin Ophthalmol 2019;13 841–8474



# Proven accurate and easy to use in several studies

The predecessor of iCare HOME2, the iCare HOME, has been proven reliable and accurate in several studies, which have compared the IOP readings from the iCare HOME tonometer to Goldmann applanation tonometry. The reported mean differences between the iCare HOME and GAT measurements range from -1.31 mmHg to 0.7 mmHg in multiple studies <sup>(9-11, 13-18)</sup> with one study giving a difference of -2.7 mmHg <sup>(12)</sup>.

iCare HOME is easy to use and well accepted by most of the patients <sup>(9-17, 19)</sup>. Learning to use the iCare HOME takes about 20 minutes <sup>(9)</sup>.



In a case study by Prof. Jamie Craig and Dr. Mona Awadalla <sup>(20)</sup>, they measured IOP fluctuations of a patient with iCare HOME pre- and post-cataract surgery. “iCare HOME was able to shed a light on the possible cause of the IOP spike in this patient, which was secondary to the cataract in the right eye with a phacomorphic mechanism.”

## List of references

1. Sood V. et al. J Glaucoma (2016) Oct;25(10):807-811.
2. Barkana Y. et al. Arch. Ophthalmol. (2006) 124(6):793-797.
3. Hughes E. et al. J. Glaucoma (2003) 12(3):232-236.
4. Liu J. et al. Clinical Ophthalmology (2020) 14 4031–4045

5. Awadalla M. et al. Clin Experiment Ophthalmol. 2020;48:328–333
6. Rojas CD. et al. Ophthalmology Glaucoma (2020) 3(5), 403–405.
7. Huang J. et al, Optom Vis Sci 2018; Vol 95(2)
8. Tranos P. et al. Eye (2004) 18(7):673–679

## List of references

9. Quérat L. et al. Acta Ophthalmol (2017) Aug;95(5):525-529.
10. Valero B. et al. J Fr Ophtalmol (2017) Dec;40(10):865-875.
11. Takagi D. et al. J Glaucoma (2017) Mar 31; 26(7):613-618.
12. Pronin S. et al. JAMA Ophthalmol (2017) Oct 1;135(10):1-7.
13. Mudie L.I. et al. Ophthalmology (2016) 123(8): 1675-84.
14. Termühlen J. et al. J Glaucoma (2016) Jun;25(6):533-8.

15. Noguchi A. et al. J Glaucoma (2016) Oct;25(10):835-841.
16. Chen E. et al. Acta Ophthalmol (2016) Dec;94(8):788-792.
17. Priya L.D. et al. Br J Ophthalmol (2015) 100(8):1139-43.
18. Cvenkel B. et al. Eur J Ophthalmol (2019) Jan 11:1120672118823124
19. Mihailovic N. et al. Ophthalmologie 2016 Apr;113(4):314-20
20. Awadalla M.S. Case Study in Flinders Uni. Aus. (2017) Oct



## Technical description

iCare HOME2	
Type	TA023
Dimensions (WxHxL)	50 mm x 94 mm x 152 mm (supports extended to maximum) 2.0" x 3.7" x 6.0" (supports extended to maximum)
Weight	205 g (without batteries) / 0.45 lbs (without batteries) 300 g (with 4 x AA batteries) / 0.66 lbs (with 4 x AA batteries)
Power supply	4 x 1.5 V, AA, non-rechargeable batteries, alkaline LR6
Measurement range	7 – 50 mmHg
Accuracy	±1.2 mmHg (≤ 20 mmHg) and ±2.2 mmHg (> 20 mmHg)
Repeatability	(coefficient of variation) < 8 %
Precision of display	1 mmHg
Display unit	millimeters of mercury (mmHg)
Bluetooth module	RN4678 Bluetooth 4.2 Dual Mode

### System requirements for iCare CLINIC

- Internet connection
- Minimum web browser versions: IE 11, Chrome (v 58), Firefox (v 53) and Safari (5.1.7)

### Minimum system requirements for iCare PATIENT2

- Android smart phone or tablet with USB OTG support, operating system v 6.0 or newer or iPhone with operating system iOS 12 or newer
- USB OTG C male – C male cable, supplied with the tonometer
- Internet connection
- To verify the required USB OTG support in the smart phone or tablet, use the OTG? application available on Google Play Store or another application providing similar functionality.

### Minimum computer requirements for iCare EXPORT

- x86 or x64 1 GHz Pentium processor or equivalent
- 512 MB RAM
- 512 MB of hard disk space (in addition, 4.5 GB if .NET not already installed)
- USB 2.0 connection
- 800 x 600 resolution display with 256 colors
- DirectX 9 compatible graphics card
- .NET Framework 4.6.1 or greater
- Operating System: Windows 7, Windows 8, or Windows 10
- Internet connection
- Using Bluetooth requires a computer with Windows 10 version 1703 or newer and Bluetooth BLE card / chip.



## A new era of glaucoma management

With iCare HOME2, the doctor has access to comprehensive, real-world IOP information to support glaucoma care.

## iCare. For better perception.

iCare is a trusted partner in ophthalmic diagnostics, offering physicians fast, easy-to-use, and reliable tools for diagnosis of glaucoma, diabetic retinopathy, and macular degeneration (AMD). Our product assortment includes automated TrueColor imaging devices, perimeters and handheld rebound tonometers.

We believe that ophthalmic care should be accessible, effortless, and reliable, and we aim to establish the next level of eye care.



TA023-083-EN-21



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