
Alcon Introduces State-of-the-Art Virtual Reality Surgical Training Technology



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- Alcon Fidelis Virtual Reality Ophthalmic Surgical Simulator upskills surgeons-in-training through sight, sound, touch and remote coaching from anywhere in the world
 - Surgical simulators have been shown to help improve operating room performance and address key training barriers ¹
 - Fidelis VR Simulators will first be used in the Alcon Phaco Development program, focused on eye care access in developing markets, followed by teaching and residency programs later this year

Alcon, the global leader in eye care dedicated to helping people see brilliantly reinforced its longstanding commitment to surgeon training and education with the Alcon Fidelis™ Virtual Reality (VR) Ophthalmic Surgical Simulator, a portable VR tool for cataract surgeons-in-training. As part of the [Alcon Experience Academy](#), the VR simulator offers a high-fidelity, virtual operating room environment with haptic feedback to simulate the look and feel of cataract surgery.² The simulator can be used from any location around the world with the ability to invite others to join virtual instruction and training sessions.

Alcon's latest innovation in surgical training is an important step in increasing access to surgical simulators around the world. The eye care industry has already seen benefits of improved performance in the operating room (OR) through surgical simulators – with a study showing a 38% rate of improvement for surgeons with fewer than 75 independent surgeries performed.^{1*} Providing cutting-edge options for realistic, remote surgical training can help mitigate some of the time constraints ophthalmologists are facing, as well as provide access to educational tools for those in countries where training resources are limited.

"At Alcon, we have a long history of partnering with institutions and providing world-class training to support the development of Eye Care Professionals," said Rustin Floyd, Global Director and Head, Health Care Professional Training & Education. "Similar to our approach to product innovation, we continually strive to help ophthalmologists deliver optimal patient outcomes through innovation in training and education. By developing and offering these ophthalmic training tools, we are also helping enable greater access to quality eye care in underserved communities."

The portable Fidelis VR Ophthalmic Surgical Simulator features:

- A VR headset, two haptic engines and an integrated Centurion® footswitch
- A realistic virtual OR environment, complete with Alcon equipment
- The ability to connect with other remote users and instructors within the same virtual OR
- Real-time feedback and performance tracking over time to enhance surgeon technique

Alcon's Fidelis VR Ophthalmic Surgical Simulator will be introduced at the upcoming American Society of Cataract and Refractive Surgery (ASCRS) meeting, where surgeons can experience Fidelis first-hand. Following ASCRS, Alcon will be providing Fidelis VR Simulators to its Phaco Development (PD) program, which is designed to elevate techniques and skillsets of surgeons through training in developing markets to establish sustainable cataract and patient care services in underserved communities. The PD program is a core part of Alcon's corporate social responsibility efforts to increase access to quality eye care through training and skills-transfer, with the goal of improving sight for people around the world. Fidelis will be available to teaching and residency programs later this year.

"Providing new training and educational offerings is invaluable to surgeons who are learning about Alcon technology and honing their skills. The 3D view from the Fidelis VR Simulator will help my residents become acquainted with the ambience of an operating room – giving them even more confidence and preparation for surgery itself," said Jeff Caspar, M.D. at UC Davis Health Eye Center.** "The need for remote, digital resources in ophthalmology has never been greater. It's encouraging to see Alcon deliver these new technologies for surgeons-in-training."

The Fidelis VR Surgical Simulator will also offer virtual reality experiences on ocular anatomy and physiology to help educate Eye Care Professionals. Surgeons will be able to demo the Fidelis VR Simulator at the ASCRS Alcon booth #1411. For more information, please visit www.AlconExperienceAcademy.com.

Source: [Alcon](#)

References

1. Skou Thomsen A, Bach-Holm D, Kjaerbo H, et al. Operating Room Performance Improves After Proficiency-Based Virtual Reality Cataract Surgery Training. National Institute of Health. 2017 April. Doi: 10.1016/j.opthta.2016.11.015.Epub 2016 Dec 22. PMID: 28017423. Available at: <https://pubmed.ncbi.nlm.nih.gov/28017423/>.
2. Alcon Data on File, 2022.

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