

Building Sustainable Eye Care in Developing Countries

Alcon Marks the 40th Anniversary of Fruitful Partnership with Orbis International

It was 1979, the year Sony made music mobile with the introduction of the Walkman¹, Margaret Thatcher made history by becoming the UK's first woman prime minister², and scientists triumphantly announced the worldwide eradication of a deadly disease called smallpox.³

That same year, away from the glare of the headlines, Alcon and Orbis International quietly began partnering to help people in developing countries where blindness is widespread. About 80 percent of visual impairment and blindness – four out of five cases – are preventable or curable if caught and treated early. Nearly ninety percent of the world's blind and visually impaired people live in low- and middle-income countries and have limited access to healthcare services.⁴

For 40 years now, Alcon has been donating ophthalmic equipment, pharmaceuticals and supplies for global programs conducted by Orbis, a non-governmental organization dedicated to saving sight worldwide by training eye professionals in underserved communities. Alcon biomedical engineers and technicians have also been sharing their technical skills and knowledge to help Orbis partners operate and maintain equipment and local eye care infrastructure. Finally, the Alcon Foundation has been sponsoring Orbis training programs in countries that include China, Ethiopia, India, Indonesia, Mongolia, Myanmar, Panama, Peru and Vietnam.

It was in Myanmar that Alcon and Orbis associates, joined by a cadre of local partners and ophthalmic volunteers from across the globe, celebrated the 40th anniversary of the partnership in early October. [An anniversary video commemorates the historic event.](#)

"Alcon has been with Orbis from the beginning. We've been working together for 40 years to improve the quality of eye care and access to eye care around the world," said Danny Haddad, MD, Orbis's Chief of Programs. "It's not just about the Alcon Foundation funding Orbis programs, but a true partnership of two organizations working closely together to

improve the quality of eye care in the world. It's incredible for a company to partner with an organization for that long."

Shared Mission

Commitment to the shared mission of helping people see is at the heart of the longstanding partnership between Alcon and Orbis, according to Hunter Cherwek, MD, Vice President of Clinical Services at Orbis and a former Alcon employee.

Orbis's mission differs from that of other worthy organizations that are recognized for deploying volunteer medical teams to developing countries to perform hundreds of cataract surgeries over a few days. The distinction is Orbis's commitment to sustainable eye care, perhaps expressed best in a familiar parable: Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime.

Orbis builds sustainable eye care in countries where little or no eye care exists by training local eye care teams, including in partner hospitals. These teams include not only ophthalmologists, but anesthesiologists, nurses, technicians and auxiliary personnel, such as biomedical engineers, who are responsible for maintaining surgical and other equipment.



"Both Orbis and Alcon are focused on eye care and global health. We pride ourselves on our use of technology and believe the best way to build capacity is to train not just doctors, but nurses, engineers and technicians," he said, characterizing the partnership as "an ideal collaboration of talent, technology and training."

Airborne Asset

The most visible of Orbis's assets is its Flying Eye Hospital, an airborne training facility that boasts operating and recovery rooms, as well as a classroom that seats up to 60, all housed in an MD-10 aircraft. Orbis's Volunteer Faculty – which includes some 400 ophthalmologists, nurses, anesthesiologists and biomedical engineers from more than 30 countries – donate a week or two of their time to train local doctors on board the aircraft

and in local partner hospitals. The goal is to provide practical education that local eye care teams can apply to patient treatment long after the Flying Eye Hospital and Volunteer Faculty have departed.

Among the most prized resources made available by Alcon are its biomedical engineers, who “work with us shoulder to shoulder” in training sessions, maintaining and repairing the airborne equipment, according to Hunter. Field engineers, such as Alcon’s Bo Min and Goh Chun Kiat, who supported Orbis’s program in Myanmar, generously share their expertise with local teams on the ground.

“Without a biomedical engineer, every piece of technology breaks down and needs troubleshooting, preventive maintenance, you name it, and a lot of these countries don’t have the technicians and engineers to do that,” Hunter said. “For me, what really separates Alcon and makes them a great partner is the fact that they provide their people, who volunteer to help regardless of what needs to be done, from unloading boxes to upgrading our latest cataract surgery machine.”

Telemedicine Platform and Beyond

While the Flying Eye Hospital is an impressive tool, it isn’t the only one in the Orbis toolkit. As Hunter pointed out, “The Flying Eye Hospital is an inspiring icon, but it’s only 20 percent of what we do.”

Other Orbis programs include advocacy for children’s eye care, which includes eye screenings and the establishment of more than 30 children’s eye centers in India staffed by ophthalmologists, pediatric anesthesiologists, optometrists and social workers. India is home to the world’s largest number of blind children in any one country, and is handicapped by a severe shortage of eye care professionals.⁶

Orbis has also distributed 44.5 million doses of Zithromax between 1998 and 2018 to treat an infectious eye disease called trachoma in sub-Saharan Africa. Trachoma is the leading cause of preventable blindness worldwide and the subject of an elimination effort by the World Health Organization.⁷ And in locations where a plane or other physical presence isn’t possible due to cost, logistics or security concerns, telemedicine is helping Orbis reach and train eye care professionals.

A tool of growing importance is [Cybersight](#), a telemedicine platform that enables Orbis's Volunteer Faculty to teach and support eye care teams using internet and mobile technologies. Through Cybersight, Orbis provides online training and mentorship for eye care professionals all over the world through lectures, live webinars, case discussions and consultations.

"With Cybersight, we can literally reach doctors and patients anywhere," Hunter noted. "Now, anyone in the world can watch the surgeries. Sometimes we'll have more countries watching the surgeries than there are seats in the classroom on the plane."

Beyond the ability to watch and learn from the eye surgeries and lectures, Cybersight makes tele-mentorships possible between doctors thousands of miles apart. "We're now setting up a tele-mentorship for a doctor in Cameroon who's learning on an Alcon machine, the same machine we have on the Orbis plane and in New York City, and he's receiving live tele-mentoring from a European expert."

Today, with the support of Alcon and the Alcon Foundation, Orbis runs long-term projects in 27 countries and reaching 165 countries via Cybersight. Numbers aside, Danny and Hunter say they are gratified by the professional progress of eye care professionals who have participated in Orbis programs. Hunter singled out some Mongolian ophthalmology residents who participated in an Orbis cataract surgery training program.

"Now when you go back to Mongolia, they invite you into the operating room where you see that they're providing the same quality cataract care" that is available in the United States and Europe, Hunter said with satisfaction.



Continuing Collaboration

With Alcon's support, Orbis will continue its mission of saving sight worldwide by training eye professionals in underserved communities, according to Orbis President and CEO Bob Ranck.

"Orbis is where we are today thanks to the commitment and generosity of Alcon over the past 40 years. Alcon literally got us off the ground in the very beginning with their first

pledge to donate equipment for our Flying Eye Hospital in 1979, and their sponsorship of our first program in Panama in 1982," Bob said.

"Since that time, Alcon's support has been incredible and unwavering, not only through valuable financial support, but also dedicating skills, time and resources. I'm immensely grateful to the people of Alcon for their passion in supporting Orbis in our mission to transform lives through the gift of sight."

#

References

- 1) Haire, Meaghan. "A Brief History of the Walkman." Time.com. *Time*, accessed 16 September 2019.
<http://content.time.com/time/nation/article/0,8599,1907884,00.html>
 - 2) Young, Hugo. "Margaret Thatcher, Prime Minister of the United Kingdom." Britannica.com. Encyclopedia Britannica, accessed 16 September 2019.
<https://www.britannica.com/biography/Margaret-Thatcher>.
 - 3) "Dec. 9 1979 CE: Smallpox Eradicated." National Geographic.org. *National Geographic*, accessed 16 September 2019.
<https://www.nationalgeographic.org/thisday/dec9/smallpox-eradicated/>
 - 4) "Fact Sheet: Blindness and vision impairment." *who.int*. World Health Organization, accessed 16 September 2019.
<http://www.who.int/mediacentre/factsheets/fs282/en/>
 - 5) "Vision 2020 The Right to Sight: Global Initiative for the elimination of avoidable blindness, Action plan 2006-2011." *who.int*. World Health Organization, accessed 16 September 2019.
https://www.who.int/blindness/Vision2020_report.pdf
 - 6) Sinha, Kounteya. "India has largest blind population." *timesofindia.indiatimes.com*. The Times of India, accessed 16 September 2019.
<https://timesofindia.indiatimes.com/india/India-has-largest-blind-population/articleshow/2447603.cms>
- "Trachoma." *mayoclinic.org*. Mayo Clinic, accessed 16 September 2019.
<https://www.mayoclinic.org/diseases-conditions/trachoma/symptoms-causes/syc-20378505>