Aravind Eye Care: Contributing to global capacity building of eye care personnel

BCTA Commitment

Aravind Eye Care System joined the Business Call to Action in 2012 with the pledge to:

- train 650 rural women annually in eye care procedures using its Aurosiksha e-learning platform by 2014;
- build the capacity of 1,000 partner hospitals by 2015; and
- perform eye surgery on 500,000 patients annually by 2016, and 1 million by 2020.

Aravind now trains more than 650 rural women each year using Aurosiksha and has supported 320 partner hospitals in capacity building. In 2015, Aravind’s ophthalmologists performed over 400,000 eye surgeries.

In Short

An estimated 100 million people in India suffer from blindness or poor vision due to cataracts, yet 80 percent of these cases are preventable or curable. In 1976, Dr. Govindappa Venkataswamy established the Aravind Eye Care System to end preventable blindness in India. Aravind uses a simple yet innovative business model to efficiently expand its capacity and perform surgeries at a rate six times faster than the national average. The company has achieved this high level of productivity by training paramedic staff to conduct routine procedures, which allows doctors to focus on core operations. Forty years after its establishment, Aravind has reached over 40 million patients with high-quality, low-cost ophthalmological care.

Through a combination of direct training and supplemental online courses via its Aurosiksha e-learning platform, Aravind equips 650 rural women annually with the skills needed to become nurses, technicians and counselors. Most of these women are from rural areas and have completed secondary education, but lack formal professional training. After two years of training, the women can become paramedic staff in Aravind’s hospitals and clinics.

“The e-learning solution allows our paramedics to access continuous educational opportunities over the Internet and provides a valuable forum for our members and experts to exchange views and tap into the expertise of colleagues around the world.”

— R. D. Thulasiraj, Executive Director, Lions Aravind Institute of Community Ophthalmology (LAICO)

Key company facts

Country of headquarters: India
Year of foundation: 1976
Number of employees (2014): 3,500
Annual revenues (2010): US$29 million
The role of partners

Aravind has a large network of public, private, NGO and local community partners that provide financial and technical support to service delivery, training and research. Since 2003, the company has also collaborated with India’s Department of Science and Technology to develop an international center of excellence in research, training and blindness prevention – the Technology Information, Forecasting and Assessment Council Centre of Relevance and Excellence (TIFACCORE). In addition, Aravind has shared its expertise with the World Bank and India’s Government, supporting their establishment of a cataract blindness-control programme that performs cataract surgeries for India’s poorest communities.

For Aurosiksha, LAICO’s main partner is the Seva Foundation, a non-profit blindness-treatment organization based in Berkeley, California. Seva both provides funding and helps to find highly-skilled technical volunteers.

Business model

Aravind Eye Care System is India’s largest provider of ophthalmological services. In 2015, the company performed over 400,000 eye surgeries and provided 3.7 million people with outpatient services such as vision and refraction tests. To treat this large number of patients, the company has developed a standardized, efficient means of conducting eye surgery: each ophthalmologist is supported by five or six paramedic staff who perform routine tasks, enabling the ophthalmologist to focus on vital procedures. With this support, Aravind’s doctors are able to perform up to 2,000 eye surgeries each year – six times the national average.

Aravind’s paramedic staff – referred to as mid-level ophthalmic personnel (MLOPs) – are essential to the company’s productivity. MLOPs are young women, typically with a secondary education, from poor families in rural India. The women receive two years of in-house training from senior paramedic staff to become nurses, technicians and counselors. After completing their training, they are offered paramedic positions in Aravind’s hospitals and clinics. As of 2016, Aravind employed 2,200 MLOPs and another 900 were in training.

To supplement in-house training and leverage its 30 years of experience in eye care, Aravind set up the Lions Aravind Institute of Community Ophthalmology (LAICO) in 1992 with support from the Lions Club International Sight First Programme and the Seva Sight Programme. As Aravind’s training wing, LAICO seeks to improve the quality of eye-care procedures with teaching, training, research and technical support. Its services are offered to staff of both Aravind and partner healthcare organizations.

LAICO’s training facility established Aurosiksha – a free online educational portal for eye care personnel. By standardizing the training process, Aurosiksha has enabled the company to scale up its capacity greatly. The platform offers engaging and interactive online courses, and other resources on clinical and non-clinical eye care management. Supplemental training and continuing education courses are available to MLOPs as well as staff of Aravind’s partner organizations and the general public. Users who register on Moodle, an open-source online education tool, can access the courses and additional educational resources free of charge. Aurosiksha’s interactive materials include assessment and discussion tools, exercises, quizzes, blogs, a discussion forum and a question-and-answer forum.

Aurosiksha model and key actors

What are the Results?

Link to the SDGs

3 Ensure healthy lives and promote well-being for all at all ages.
4 Ensure inclusive and equitable quality education, and promote lifelong learning opportunities for all.
5 Achieve gender equality and empower all women and girls.
8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
Business results

Since 1976, Aravind has evolved from an eye care hospital with 11 beds and four doctors into the largest provider of eye care treatment in the world. Today, the company operates ten large hospitals and 40 vision centers – permanent clinical centers that offer face-to-face or remote consultations via video conferencing. Aravind has also conducted over 2,600 eye care camps – half-day programmes in which 150 patients per day receive free eye care services. In 2015, the company performed over 400,000 eye operations, an increase from 350,000 annually in 2012.

The company has received several awards for its innovative business model and its groundbreaking research in ophthalmology and public health. In 2010, Aravind was awarded the Hilton Humanitarian Prize, which included funding to continue its research on confronting sight loss. In 2008, the company received the Gates Award for Global Health for its global contribution to service and research in eye care treatment and blindness prevention. Aravind has also gained international recognition as a leader in professional training through the work of LAICO. The World Health Organization designated the company as a collaborating center for the prevention of blindness.

Development results

Through LAICO, Aravind has developed one of the largest professional eye care training facilities in the world: over 300 ophthalmologists are trained annually along with more than 650 MLOPs – mostly women from rural India. The 2,000 women currently employed as MLOPs within Aravind’s hospitals and clinics are a critical component of the company’s success. These women, who make up 60 percent of Aravind’s workforce, receive formal training and good salaries to support their families.

Over the past two decades, LAICO has also contributed to the global knowledge base on eye care provision. Through LAICO and Aurosiksha, Aravind builds the capacity of eye care personnel around the world and promotes the standardization of training procedures for paramedic staff. The company has reached over 2,000 users on six continents with high-quality educational resources on eye care management. While the majority of these users are based in India and Bangladesh, many are connecting from Africa, Europe and North America as well.

As of 2016, 320 hospitals in 30 countries have used LAICO’s free consultancy services, adopting Aravind’s efficient eye care delivery model to increase the volume and quality of their treatment. By sharing its successes with the eye care community, Aravind can further expand its impacts on preventable blindness worldwide.

On average, hospitals that receive capacity-building training through LAICO perform 50 percent more eye surgeries each year than before the training. Since the addition of Aurosiksha to Aravind’s training process, the company’s ophthalmologists have been able to raise the number of eye surgeries performed each year from 350,000 in 2012 to 400,000 in 2015 – a 15 percent increase. Of these surgeries, 300,000 were provided at low or zero cost to India’s poorest people.
Key challenges and solutions

Aravind plans to roll out a new downloadable online training programme that can be used by any eye care hospital or clinic to train its paramedic staff. By October 2016, it is expected that LAICO will provide 200 online courses to internal staff at selected Aravind hospitals. By 2017, the programme will include 400 courses and instructional delivery techniques, and will be available to both internal and external eye care hospitals.

Future plans

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Key challenges and solutions

Aravind has not been able to train as many people through the Aurosiksha programme as initially expected. As a result, Aurisiksha is being shifted from a supplemental resource programme to an online tutor-support platform with pedagogic materials.

However, the Aurosiksha team is facing challenges developing the new platform. There is a large gap in knowledge about how to train personnel with skills and knowledge that can be applied across different job roles. To address this issue, the team has recruited two educational designers who are advising on how to prepare the pedagogic resources. Additional volunteers have been recruited to develop the curriculum and create a framework for each lesson. With a catalogue of over 400 courses – each containing several lessons – it is an ambitious and lengthy process.

Redesigning Aurosiksha with input from Aravind’s senior staff has proven to be challenging. With such a high volume of patients, staff members have very little time to contribute their expertise on course subject matter; this has significantly delayed Aurosiksha.

The next challenge will be finding a useful and intuitive user interface for the platform. To achieve this, Aurosiksha will first test the programme internally at satellite hospitals. The team will then collect and incorporate user feedback to perfect the final version before making it available to partner healthcare organizations.