

# THE RIGHT TO SIGHT : Eliminating avoidable blindness

Pellucid Consulting Group helps Aravind Eye Care and Vision2020 eliminate avoidable blindness through an award winning Tele-ophthalmology Network.



Performing over 1,000 surgeries a day, Aravind Eye Care spearheads VISION2020: A global initiative to eliminate avoidable blindness, which is a joint program of the World Health Organization (WHO) and the International Agency for the Prevention of Blindness (IAPB).

Teaming up with Pellucid Consulting Group, Aravind Eye Care built an effective and innovative solution deploying mobile screening vans, slit lamps and a scalable tele-ophthalmology network. The purpose built, computer aided diagnostic solution empowered paramedics to conduct eye screening. This freed up ophthalmologists for acute care such as surgeries and 2nd opinions.

The positive impact on community Healthcare has put the Aravind Tele-ophthalmology Network firmly on the Global map.

Aravind Eye Care has won several awards most notably the \$ 1.5 Million Conard Hilton humanitarian prize.

## Tele-ophthalmology network and computer aided screening for diabetic retinopathy

### CUSTOMER PROFILE

NAME: Aravind Eye Care

COUNTRY: India

INDUSTRY: Community Healthcare

WEB: [www.aravind.org](http://www.aravind.org)

### CHALLENGE

Conducting Eye screening at scale (1 ophthalmologist: 220,000 Population) without sending ophthalmologist to rural areas.

### SOLUTION

Aravind Eye Care worked with Pellucid Consulting Group to build an award winning tele-ophthalmology solution called Aravind Tele-ophthalmology Network (ATN) which made remote care possible

The computer aided diagnostic solution empowered mass screening of rural population by paramedics instead of ophthalmologists.

### IMPACT

Dramatic reduction in costs: Manned by paramedics, not ophthalmologists.

Active case finding: Over 1400 screening camps, with over 400,000 patients screened.

Scalable: 12 outposts has been scaled to 26, Government of Tripura plans to scale to 60 centers.

Award Winning: Winner of the 1.5 Million \$ Conard H Hilton award, António Champalimaud Vision Award, Gates Award for Global Health. Selected as the best IT solution for Health-care inclusion by NASSCOM.



## CHALLENGE

With over 50 million visually impaired people globally, blindness and visual impairment is a major health concern. The World Health Organization (WHO) has estimated that 87% of all blindness can be prevented through regular screening. Early detection and timely treatment can completely eliminate specific conditions such as diabetic retinopathy. But with limited access to specialist help in India

(1 ophthalmologist: 220,000 population), detection and treatment has generally been the prerogative of a limited group of the Indian population.

Aravind Eye Care's challenge was to screen large rural populations, with limited number of ophthalmologists.

## SOLUTION

**Empowering remote care:** Pellucid Consulting Group worked with Aravind Eye Care to build a tele-ophthalmology Network, allowing paramedics in remote outposts and mobile screening vans to send diagnostic images to retinal experts in the tertiary hospital. With a built in EMR, the follow up diagnosis and treatment procedure was simplified.

Remote live consultation too, was made possible via video transmission technologies.

**Intelligent screening:** The outposts and Mobile screening vans were equipped with a computer aided screening tool empowering trained paramedics to conduct 1st level screening for visual impairments.

## IMPACT

The Tele-ophthalmology network allowed Aravind Eye Care to conduct mass screening as the system was manned with trained paramedics instead of scarce ophthalmologists.

With over 400,000 screenings and active case finding at the community level, the tele-ophthalmology network is a proven success and is now being scaled across India.

The program has earned global recognition and is the recipient of the Conard H. Hilton Humanitarian prize, António Champalimaud Vision Award, Gates Award for Global Health, and NASSCOM's best IT solution for healthcare inclusion.

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