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## Affordable eye care services: A case study on Aravind Eye Hospitals

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### ABSTRACT

*With the goal of giving affordable eye care services to a nation which has around 20 million blind citizens and 80% of it because of curable cataracts, at 58 years old, Dr V. Begun, the Aravind Eye Hospital. Famously known as the McDonald's of cataract surgery, with a bed quantity of in excess of 4000 beds and serving 0.25 million patients consistently, this is one of the world's biggest eye care frameworks cooking generally to the poor populace. Destitute individuals with cataract can recover their visual perception at a cost as low as \$40 or even free, on the off chance that they can't manage. It was exhibited by this non-benefit framework that it is for all intents and purposes conceivable to consolidate high quality, low cost, world scale, and maintainability. It has been viewed as one of a kind plan of action by numerous organizations and has demonstrated that care given at low cost can likewise yield maintainability and even gainfulness. Aravind framework's effective assembling unit, Aurolab, has created 6%-7% of the lowcost focal points worldwide in 2002, which were sold in excess of 100 nations. This Organization has been a wellspring of contextual investigations to national, however International offices too.*

**Keywords**— Case study, Affordable eye care, Aravind Hospitals

### 1. INTRODUCTION

Dr. Venkatswamy made a system for sight-sparing cataract medical procedures that produces advantageous restorative results in one of the most poverty-stricken parts of the world. Its quick extension more than three decades was not worked through government stipends, help organization gifts or bank advances. Rather, Dr. Venkatswamy made the unordinary stride of asking even poor patients to whatever point they could, trusting the volume of paying business would support the rest. Destitute individuals with cataracts in Tamil Nadu can get their sight repaired for about \$40. On the off chance that they can't manage the cost of that, it's free. Beginning with a 11-bed center in 1976, Dr. Venkatswamy's system is presently a five-emergency clinic system. His model turned into the subject of a Harvard Business School contextual analysis, and is being duplicated in medical clinics around the subcontinent. The inexpensive, high-quality implantable focal points the system produces are sent out to in excess of 80 focal points the system fabricates are traded to in excess of 80 nations around the globe, Aravind says. Dr. Venkatswamy's essential knowledge was that human services can be promoted to poor people if a program is firmly custom fitted to a neighborhood specialty, something that has come to be known as social advertising. In a nation with, by certain appraisals, 20 million blind eyes - 80% of them because of curable cataracts - the intrigue for patients was money related. "A blind individual is a mouth without any hands," is an Indian saying that Dr. Venkatswamy got a kick out of the chance to quote. With sight reestablished, the patient can come back to work.

The Aravind system offers services that run from a basic pair of glasses to optical oncology. The greater part of medical procedures is to treat cataracts - expelling the cataract and supplanting it with an artificial intra optical focal point. The sequential construction system approach is most obvious in the working room, where every specialist works two tables, one for the patient having surgery, the other for a patient being prepared. In the OR, specialists use best in class hardware, for example, working magnifying lens that can swivel between tables. Specialists regularly work 12-hour days, and the quickest can perform up to 100 medical procedures in multi-day. The normal is 2,000 medical procedures every year per specialist - about multiple times the Indian national normal. Regardless of the swarming and speed, complexity rates are vanishingly low, the system says. Outside the working rooms, conditions are as straightforward as the tables at a drive-through joint: Often just a straw tangle on a ward floor for postsurgical recuperation. Patients who pay more than the fundamental \$40 - about 30% of patients - can get cashier treatment, for example, private spaces for broadened recuperation, and meals.

## **2. CASE PRESENTATION**

The premise of the Aravind eye care is institutionalization and engineering cataract surgery for high volume creation. He opened his first medical clinic in 1977 with 30 beds and figured out how to produce a surplus in the principal year, private spaces for broadened recuperation, and a meal of work so a second 70-bed emergency clinic could be opened for poor people and offering surgeries for nothing out of pocket. In 1981 a fee-paying medical clinic with 250 beds was opened and another free emergency clinic with 350 beds followed in 1984; by the turn of the century, there were around 1500 beds (of which the larger part was free) in Madurai. The model spread out to different areas crosswise over Tamil Nadu so that by 2003 there were five Aravind medical clinics with an aggregate of 3649 beds of which 2850 were free.

Similarly, like Ford, McDonalds and Toyota concentrated on consistently improving and broadening their system models, so the Aravind Eye Hospitals continuously moved to turn into the Aravind Eye Care System. Key components were included – for instance, a committed manufacturing plant for creating lenses, a training centre to provide key skills, ophthalmic research centers, and a global eye bank. Of specific significance has been the Aravind Eye Camp model which takes the system out to country areas, offering exhortation and determination and nourishing patients into the center medical clinics where the high profitability model can treat them. This brings a component of preventive prescription into the system – by recognizing early side effects, especially among youngsters, moderately low-cost measures, (for example, restorative glasses) can be actualized. There is currently a broad instruction program connected to the camps which contacts rustic networks. (For instance, in 2002 around 70,000 youngsters were screened and 3000 offered glasses to address refractive blunders).

Another essential component in the system approach is the consideration given to training to guarantee a satisfactory supply of key skills. 900 ophthalmic trainees are taken on and trained every year to help the pro specialists, while different abilities, for example, guiding and instruction are likewise created by means of devoted instructional classes. Fundamentally enlistment and inspiration are still emphatically connected to the guiding principle of Dr V – there is a solid social welfare duty which implies that staff regularly work for short of what they could gain in different pieces of India's wellbeing system.

Vital to the achievement of the model has been financial matters. Target costing is a notable instrument in item advancement for building the plan of generation systems, and on account of the first cataract task, Dr V. set this as being around \$50/activity (expecting no inconveniences resulted). This looks at to around \$300 as a normal cost for treatment in a traditional Indian medical clinic (and \$1650 in a US emergency clinic). Creating and refining the system has implied that the normal cost in the Aravind system is \$25, in view of an extent of patients paying somewhere in the range of \$50 and \$300 however over 60% being treated free. In 2003 Aravind turned into the biggest single cataract surgery supplier on the planet. The key is in the volumes – around 200,000 patients are treated every year, in view of the high volume/low edge sort of plan of action which Henry Ford utilized on the Model T and which currently drives the low-cost carrier industry. Definitely, the methodology included reexamining the basic model. In an ordinary Western emergency clinic, an eye task would ordinarily take 30 minutes – yet the Aravind system needs just 10. This high efficiency is accomplished by huge procedure advancement driven by a close examination of significant worth including time. For instance, every specialist works at two surgical tables then again, and is upheld by a group of paramedics to do less-expertise subordinate angles, for example, washing the eye, putting in sutures, giving anesthetic injections and so forth 70% of exercises are done by a group of 4 medical attendants supporting the specialist, 2 helping legitimately and 2 going about as running attendants' bringing fresh instruments from the sterile area. Of extensive significance is the way that this treatment isn't given at low cost by settling on quality. A key measurement in medicinal consideration is disease rate – and the Aravind system really has preferred execution over numerous Western emergency clinics. For example, in 2004 it was around 4 for every 10,000 cases at Aravind, while the UK distributed rate was 6 for each 10,000. (Curiously having two patients in the equivalent working area is disallowed in numerous US medical clinics in view of fears of contamination). Aravind additionally works a nearby result observing system, particularly for cataract surgery, where each case sheet on release is fed into the computer and then analyzed. Thus this feeds a persistent improvement process – estimating, checking on and after that evolving.

## **3. BUSINESS SENSE OF THE MODEL**

This model bodes well since it's in a general sense based on a couple of center standards. The first is regarding market advancement and through that request age. This is a procedure of changing over a need into interest and in the process we get a huge level of this to our very own offices. The second center guideline is magnificence in the execution of guaranteeing a high dimension of proficiency in giving the treatment, including outpatient services and medical procedures. The third center guideline is one of quality. The point is to guarantee that the patient paying little heed to whether he is a free or a private patient gets an incentive for his interest in cash or time. The fourth guideline is of manageability wherein they set the costs less dependent on what it costs us yet on how much the different monetary strata of the network can stand to pay. It at that point work in reverse to contain the costs inside these evaluations. This prompts money related practicality as well as a higher request of the board, just as teaching a specific culture in the association.

The blend of these four standards constructs a supportable program as they have shown in the course of the most recent three decades and recreated with comparative outcomes in more than 200 other eye emergency clinics.

## **4. CONCLUSION**

Aravind has demonstrated that by utilizing human resource productively and by acquiring development in healthcare, affordable services with high principles can be given even at the remotest piece of the nation. It has likewise brought this idea for discussion that the systems and mediations utilized in any Industry can be effectively utilized in the Healthcare Industry. At last, it resuscitates the idea that if an organization is happy to serve the majority with quality product and services, it will undoubtedly produce income and win benefits. Following a system which relates to and is inspired by Henry Ford's assembly line for the Model T, Aravind Eye Care System has revolutionized eye care in for poor people in India.

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