

Aravind Eye Care Systems - Vision 2020: Stepping Out of the Shadows of a Giant and the Journey Ahead

As he sat pensively during the first passing-away anniversary function of Dr. Govindappa Venkataswamy (Dr. V, 1918-2006), Dr. Namperumalswamy (Dr. Nam), a Retina care specialist and head of Aravind Eye Care Systems (Aravind), pondered about the three decades of eventful journey he had with Dr. V in building Aravind. Now in the driver's seat, Dr. Nam had to guide the fortunes of the institution that Dr. V founded. During his lifetime, Dr. V was a colossus, who had an expansive mission (Exhibit-1) and vision and enrolled Dr. Nam and many others to make that vision a reality. While Dr. V had founded the institution with the simple yet powerful core purpose of 'eliminating needless blindness,' and grown it from strength to strength, the challenge before Dr. Nam was to take the organization forward in the post-Dr. V era. Were the core ideology, mission and vision still relevant, or did they need to be changed? He was acutely conscious of the fact that Dr. V's presence was so overpowering even now, one year after his passing away. What added poignancy to the entire institution's founding was that it was started by Dr. V after his retirement from government service, with little capital. His entry into Ophthalmology itself was a coincidence, as he set out to pursue medical education despite very modest family background, to become an Obstetrics specialist, subsequently joining the Indian army, only to be discharged within four years, since he contracted a rare form of Rheumatic Arthritis, rendering him incapable to do surgery in Obstetrics. Despite these very heavy odds, he went on to eventually perform over 100,000 eye surgeries, and more importantly leave behind the legacy of a great institution, the Aravind Eye Care System (AECS) that he founded in 1977, which now looked up to Dr. Nam to guide its destiny.

Aravind Eye Care System

Madurai (Tamil Nadu)-headquartered Aravind Eye Care System (AECS or Aravind) is now a large conglomerate of institutions including hospitals, post-graduate medical college for ophthalmology, an organization for sharing the knowledge of the Aravind Eyecare System with other hospitals across the world (Lions Aravind Institute of Community Ophthalmology, LAICO), manufacturing facility to supply essential consumables for eye care (Aurolab), a research institute and many more. Under the Govel ('Go' for Govindappa, Dr. V's father; 've' for Venkataswamy, i.e., Dr. V; and 'l' for Lakshmi, Dr. V's mother) Trust are the Aravind Eye Hospital, associated post-graduate institute for training in Ophthalmology, optometric school, and LAICO, among other activities. Aurolab is constituted as a non-profit trust. Aravind Research Foundation is constituted as a non-profit society. Constituting these institutions as non-profit trusts/societies rather than as a corporate entity as most private hospitals are prone to do, itself reflects Dr. V's deep thinking of the role that the institution ought to play in society as well as profound thinking on his part about the institution beyond the life of the founder. AECS employs over 2500 people, and impacts directly the lives of a few million

people each year, mostly from the poorest strata of society, providing them with vision through free treatment primarily for cataract-related ailments of the eye. At the same time, it is based on a very pragmatic and sustainable business model that resulted in enviable financial performance (Exhibit-2).

The seed for Dr. V's concept of Aravind's business model came from the most unusual quarters: the global hamburger chain, McDonalds. Most people are wont to sneer at using the McDonalds model as an inspiration for providing eye care. Close associates of Dr. V in the initial years of Aravind just could not understand what the connection was between eye care and the global fast food corporation viz., McDonalds! The efficiency and standardization of McDonalds' product in any part of the world is what appealed to Dr. V, and he reckoned that if such a model could be replicated in eye care, the problem of needless blindness would be eliminated across the world. Dr. V intuitively understood the emerging environment, what role Aravind must play in it and what competencies are needed to fulfill the organisation's mission. In short, what Aravind's 'Theory of Business' ought to be was clear to him like a flash. He then went about systematically and patiently implementing his vision.

The Aravind business model envisages one paying patient who pays for two free patients, and still pays less than what he/she may pay for the same treatment in a private hospital. This is achieved through extraordinary efficiencies, wherein a typical Aravind doctor performs over 2000 eye surgeries a year as opposed to 250 for a typical doctor in a typical hospital in the country.

Dr. Nam recalled the humble beginnings of Aravind some 30 years ago, when Dr. V, having just retired from Government service, called upon his sister, Dr. Natchiar and her husband, Dr. Nam to join him on his mission to rid the world of needless blindness. Also joining them were Dr. Vijayalakshmi, Dr. Nam's sister and her husband, Dr. Srinivasan. It was a constellation of ophthalmologists, who converged to set up what has today emerged as a model for eye care in the world. Over the next several years, other members from the extended family joined, bringing their distinctive skills in areas such as administration (Dr. Thulasiraj, alumnus of IIM Calcutta), finance and project management (Mr. Srinivasan, Dr. V's brother), precision manufacturing (Dr. Balakrishnan), and many others, including presently over thirty members from the next (second) generation.

Robust and sustainable model to deliver on the core purpose of the institution

At the time of its founding, Dr. V's idea was rather than starting a routine eye clinic, to start a hospital with the unique value proposition of providing vision to cataract-afflicted patients, two-thirds of whom would receive free treatment since they were in no position to pay for these services. This enabled such patients to get back to earning their livelihood, which they could not hitherto do, as they were practically blind in their cataract-afflicted condition. Being a realist, Dr. V understood that just setting up a facility would not drive his targeted patients to come on their own to the hospital as there were many mental and practical barriers that prevented them from coming for treatment, even

if it were free. This resulted in setting up an elaborate outreach program to regularly screen large numbers of potential patients at their door step, identify those needing treatment, motivate them to come to the Aravind system for treatment, and provide the entire logistics to get them from their homes to the hospital for treatment and get them back to their homes after treatment in the quickest possible time, so that they can restart their roles as bread-earners for their families.

In 1977, having just retired from government service at the age of 58, rather than live a peaceful retired life as most people are wont to do, Dr. V began his second innings. He had the dream and passion to start what was a truly idealistic institution in its conception. The idea was supported strongly by his proximate family. What he lacked were the human and monetary resources to launch such an ambitious venture. However true to the spirit of entrepreneurship and innovative thinking at every step of the way, starting from a modest 11-bedded eye hospital in a rented premise, to five hospitals with several hundred beds in each spread over Tamil Nadu, Aravind has come a long way. In myriad ways, such as not taking salary during the difficult founding years, Dr. V practiced what he preached: 'You must sacrifice something in the beginning to achieve something great in life.' In fact his whole life is one of sacrifice. Being the eldest member of his family, after the premature death of his father, he chose not to get married so that he could take care of his siblings.

Early years

Unlike most organizations that are obsessed with competition, Dr V was never concerned about it. Since the mission of eliminating needless blindness in the world was a problem of humongous dimension, he had inculcated in the top management of Aravind that there is enough work for all hospitals involved in this task, and hence it is unnecessary to be obsessed with competition. In the initial years of Aravind's founding (in 1977), all the way up to mid-1990, there was little competitive pressure, as there were few hospitals in the country offering quality eye care. What drove Aravind to continually excel was Dr. V's passion and dedication to the cause. Moreover, since it was focused on the unserved market right from the start, competition was not strictly relevant. In the recent years, the services offered by other eye care institutions in the country have also improved, which raises the bar in terms of expectations that patients have from Aravind. Since the core purpose of Aravind was to eliminate needless blindness in India and the world, and this could not be done by Aravind alone, right from its inception, Aravind willingly shared its know-how with other hospitals, helping them to improve. For this it set up LAICO as a vehicle to facilitate this sharing of knowledge.

Growth as a process

Much of the growth was not part of a master plan, designed upfront and executed with clockwork precision. Instead it was largely need-based. For instance, hiring good doctors initially was not very easy, and retaining them was an even bigger challenge. In response, Aravind started its own institute for providing post graduate education in Ophthalmology to medical graduates.

Likewise, with a view to leverage the scarce resource of doctors, an entire army of paramedics was developed, recruiting young girls (aged around 17) from surrounding villages, who need jobs badly to take care of their families, and imparting to them essential skills to take care of all support systems in the hospital, thereby freeing doctors to do what they are trained to do (viz., practice of ophthalmology). Today Aravind has over 1000 such girls, each carefully handpicked for their service attitude, dedication to work, culture of discipline, ability to work in teams, potential to sustain and strengthen the organisation's values and culture, etc. This approach has developed a fierce sense of loyalty among employees, and helped in developing a homogenous organization culture. Much of the recruitment of these paramedics occurs through word of mouth.

As imported intraocular lenses (IOLs) were expensive (US \$ 200 each), Aravind started its own manufacture and brought down costs to under US \$ 5. IOLs are used in cataract operations to replace the natural lens that is removed during the cataract surgery.

In all these forms of growth, Aravind's ability to network into the world, tie-up with like-minded institutions in order to get the right assistance and inputs, has been a unique competency, propelled by the spirit of service inculcated into the institution by its founder. For instance, Sight Savers (USA), and Royal Commonwealth Society for the blind (UK), just to name a few, were and continue to be strong support systems that Aravind has drawn upon over the years, in terms of accessing technology, research, training of Aravind's doctors in some of the top universities in the world, etc. Seva Foundation (USA) was an institution started by Larry Brilliant and his wife, was inspired by Neem Karoli Baba (India), and initially set up to eradicate small pox. Organisations such as these and many others have provided help during the initial years of Aravind, and continue to do so, by sourcing technology, providing a stream of volunteer medical experts from developed countries, helping Aravind to network with top institutions in eye care in the world, facilitating training of Aravind doctors, etc. Ironically there was little support from the central or state government in the country. Some of the initial attempts by Aravind to raise money during its difficult start-up years were also futile. As a consequence, a fierce sense of independence visibly pervades the institution.

All through its existence, quality of patient care and of recovery of vision of patients has been a top priority for the management of Aravind, and all its systems are geared to ensure that the institution actually provides benchmark standards in these areas. This has created an enormous reputation for Aravind in the villages in Tamil Nadu, creating continuous demand for its services.

Unique culture of service

Asked how the unique culture of service and dedication was instilled in the organization during its founding years, Dr. Nam had this to say: 'Discipline started from the top. Dr. V set an example of how to work. He was our professor in college. During that time, his typical working hours were 9 am to 1 pm; 2 pm to 5 pm and again in the evening from 5 pm to 9 pm. This continued into Aravind. No patient who came for treatment was ever

turned away and asked to return later because the consultation hours were over: in fact, there was no need for appointments. Work ended when the last patient was seen. Having paramedics from villages helped immensely strengthen this culture: they did not have the typical 9 to 5 culture. The same culture continues to this day.’

Reflecting on the leadership style of Dr. V, Dr. Nam felt that ‘giving freedom, allowing people to experiment and learn from failures, leading by example, fusing spirituality into the institution’s working (Dr. V tried to practice the philosophies of Shri Aurobindo and Mahatma Gandhi in his everyday work life), and instilling a culture of hard work, have enabled what seemed initially to be impossible, to become a reality at every step. When many such seemingly impossible things happen one after another, it develops a sense of confidence that so long as we stay true to our core purpose, even the most difficult obstacles can be overcome.’

Emerging challenges

Commenting on the changing environment and the way forward for Aravind, Dr. Nam had this to say: “There has been considerable change in the environment compared to the early founding days of Aravind. In those days, patients would accept whatever medical care we provided. Blindness caused by cataract was considered part of the ageing process, and the general perception was to accept it as a reality. In that scenario, we restored sight and people implicitly accepted what we provided. People are now much better informed. They demand the type of glasses they should be wearing. They want to get back to work as soon as possible after the operation. At Aravind, we have tried to evolve with the changing times. Some of these demands have forced us to continue to innovate. For instance, about ten years ago, only 10% of the patients we operated for cataract were given intraocular lens (IOLs). Now this figure is 90%. Use of IOLs enables patients to quickly get back to work.”

“Longevity of people is increasing. Hence the demand for the services we provide continues to grow. Technology in eye care is also constantly evolving. Integration of various technologies such as communications, digital imaging, computers, etc., into the field of eye care is happening at an accelerating pace. We have to keep pace with this. It requires us to constantly update our various training programs as well as the curriculum of our post-graduate program. This, coupled with our academic orientation helps us to retain doctors. We provide a strong academic and research orientation.”

“There is a misconception that since we have intensely addressed the problem of cataract, at least in Tamil Nadu, the need for our services will diminish. On the contrary, we are finding that the work that needs to be done continues to grow. Cataract is not the only cause of blindness. Lot of work needs to be done in the area of curing blindness caused by diabetes, retina-related problems, problems of blindness in children, and even simple things like educating large sections of population on the need to wear the right kind of glasses. For instance, 40% of people who need to wear glasses do not wearing them. 40% of people wearing glasses wear the wrong glasses. 9% of school-going children need glasses. In India alone, 41 million people have diabetes, and of them 20% or more will

have vision impairment. Given these staggering numbers, we need to start large-scale awareness programs and treatment programs for diabetic retinopathy. Glaucoma is another major eye ailment that needs urgent attention in the country. We need centers of excellence for various types of eye-related ailments. Aravind has to embark on addressing these on a large scale. In short, there is huge unfinished work for us, despite all the work that we have so far done, however impressive it may seem to an outsider.”

“Besides, there are a whole lot of life-style related eye ailments. Onset of cataract is now occurring much sooner than before. People in the age group of 40-50 years, as well as even children are now saddled with cataract. Consanguineous marriages are also throwing up new problems such as eye diseases of the new born. India with a population of over 1.2 billion people at various socio-economic strata, with different lifestyles and habits, is a hotbed for a large numbers of eye diseases not found in many other countries. We should also start focusing on moving from cure to prevention.”

“To cater to all these new needs, we are setting up the Aravind University, Aravind Research Institute, Dr. G. Venkataswamy Eye Research Institute, and many more. We are launching the Aravind Virtual Academy for which we are closely working with Indian Space Research Organisation (ISRO). Given the large and growing demand for eye care, we are now setting a target of one million surgeries per year, although not all of these will be done by us alone, since a significant proportion will be done by our partner hospitals to which we are constantly transferring our know-how. We are also contemplating to set up a facility to manufacture equipment such as cost effective laser for eye treatment, to enable more ophthalmologists in the country to have access to these essential equipment. For this, we are working with the Center for Advanced Technology, Indore, a Government of India organization. In the next few years, we hope to be able to bring to the market laser equipment at 1/3rd of the prevailing market prices.”

“All strategic decisions such as these are taken by the top management. The top management structure is called the senior leadership team (SLT) and earlier comprised of Dr. Natchiar, Mr. Thulasiraj, Mr. Srinivasan, Dr. V and Dr. Nam. Since the passing away of Dr. V, the team has been expanded to nine members, including five other senior leaders including Dr. Srinivasan and Dr. Vijayalakshmi. The SLT meets once a month or whenever there are urgent issues to be addressed.”

The challenge of continuing to be a role model

In countries such as India, most hospitals especially in eye care are either in the private or voluntary sector, although there are a few government hospitals as well. The voluntary sector is the biggest of these, generally funded by donors. The predominant mindset is that the hospitals in the voluntary sector must serve the poor. Donors include many international organizations as well as Indian philanthropic agencies. The Aravind model has had a lot of influence on the model for functioning of the voluntary sector. It has proved that the voluntary sector should serve the whole community and not just the poor, thereby increasing the level of accountability. Having paying patients as in the Aravind case ensures that the bar is raised for the whole institution, since they will demand high

quality service. The Aravind model has also shifted focus of voluntary sector from being passive recipients of donors' largesse to becoming self-sustaining.

According to Mr. Thulasiraj, who heads LAICO, the changing environment is constantly causing Aravind to reinvent itself. Technology is constantly changing and needs constant updating. Aravind also has to focus on sub-specialty care within the broad realm of eye care. Due to the extensive work of LAICO, the Aravind know-how has been shared extensively with over 150 eye care hospitals all over the world. LAICO has been set up jointly by Lions International and Aravind for this purpose.

The positive fallout of Aravind's work till date is that cataract treatment has become commonplace and 'commoditised.' The disease profile is changing. New forms of eye disease are becoming wide spread, where the society expects Aravind to take a lead. Many of these diseases like retinal diseases, pediatric ophthalmology practice, cornea related diseases, tumors of the eye, Glaucoma (where the pressure in the eye increases to a level where blindness can result, if not treated in time), etc. require critical mass that cannot be treated by individual ophthalmologists. Many smaller countries with populations less than 10 million (there are over 80 such countries) cannot support such super specializations in eye care. In this sense, there is huge unfinished task ahead for Aravind.

Seeking vertical integration at every opportunity: The Aurolab experience

What is uniquely distinctive about the Aravind model vis-à-vis other eye-care facilities in the world is the end-to-end holistic approach and constant search for ways to expand the scope of its operations. The initiative to manufacture intraocular lenses (IOLs) by setting up Aurolab, headed by Dr. Balakrishnan in the late 1980's is an example. Before Aravind started making IOLs, cataract patients were given glasses. However often the poor patients would loose their glasses, causing them to be blind again. IOLs were very expensive, and it was not viable to use imported IOLs for the free patients. Dr. V's obsession to bring costs down resulted in inducting Dr. Balakrishnan, a Ph.D. in Manufacturing from University of Wisconsin into the Aravind system. His mandate was to explore ways of driving down costs of IOLs to less than 3% of prevailing international prices of US \$ 200, if made in-house. This led to large-scale adoption of IOLs in Aravind, with 95% patients being given IOLs, leading to higher production and cost efficiencies.

Having tasted success in IOLs, Aurolab has gone on to make inexpensive sutures, post-operative drugs for eye-care, pharma products, ophthalmic blades, and other high-cost consumables, with the sole purpose of driving down costs and thus making them more affordable. Aurolab is now in the process of moving into manufacture of equipment, diagnostic devices such as lasers, etc. Its products are exported to over 85 countries. At a new state of art facility on an 80-acre campus in Madurai, Aurolab, structured as a non-profit trust, but run on professional lines to ensure viability, is additionally exploring using its competencies to move into high-volume manufacture of items such as cardiac

sutures, which will be sold in international markets. With a staff of over 250, it hopes to reach annual revenues of Rs. 100 crores for its manufactured products by 2010.

Aurolab has to contend with high complexity due to huge product portfolio, large customer base both in domestic and international markets, wide array of distribution channels, changing technologies, etc. There are also significant issues to contend with regarding attracting and retaining good talent. With the IT boom across the country, talent has migrated into services sector. Aurolab would clearly be unable to match the salaries in these sectors. Creating a strong middle-level managerial cadre, fostering a culture of innovation to come up with constant stream of new products, retaining the unique Aravind culture as the organization grows and global marketing of its products are some of the other challenges that the top management of Aurolab is grappling with.

Accelerating the journey through managed hospitals

Aravind has made its first forays into managed hospitals to help eradicate needless blindness on a much larger scale and wider geographic arena. A good example of this new direction is the Aravind-managed hospital in Amethi, Uttar Pradesh. Mr. Rahul Gandhi, the Member of Parliament from Amethi approached Aravind to provide the managerial and medical expertise to set up and run the hospital in this relatively rural hinterland of the country. According to Mr. Thulasiraj, 'Vis-à-vis the Aravind-owned hospitals such as the ones in Madurai, Theni, Coimbatore, Pondicherry and Tirunelveli in South India, managed hospitals are a relatively new phenomenon for Aravind. However we realize that we cannot achieve our core purpose of eliminating needless blindness in India and the world just by ourselves, given the magnitude and geographic spread of the problem. Hence it makes sense to partner with others to accelerate the pace of our work. In the case of managed care, we have to deal with three ecosystems: First there is the internal ecosystem in the managed hospital, where we run everything within the hospital. Then there is the intermediate ecosystem, which includes dealing with suppliers, etc., for which we expect the local partner to help in the short-term. Eventually the intermediate ecosystem will be managed by the hospital itself. Finally there is the external ecosystem, dealing with the community, politicians, etc., that is the responsibility of the local partner. Our challenge is to transplant the well-oiled Aravind system, culture and core values to the managed hospital. In the Amethi managed hospital case, we provide the know-how, administration, the operating room in-charge, the head of nursing, the head of refraction and Information technology. In return, Aravind gets a small percentage of patient revenues. What we are finding is that the choice of partner for success of the managed hospital is very critical. We must have a strong overlap of interests. It is better for us to get into Greenfield projects rather than attempt to turn-around an existing set-up. We like to work in a geographic area where we can make significant impact. By 2015, we hope to have 100 managed hospitals. In our goal of 1 million operations per year by 2015, we expect to do 600,000 operations in our own hospitals and 400,000 through managed hospitals. We expect staff retention in the managed hospitals could be a significant issue since doctors and other key staff trained there may not have the motivation to continue there on a long-term basis.'

Key success factors

According to Dr. Natchiar, who also heads the Human Resources function at Aravind, ‘a large part of our success lay in our attracting from the early days of Aravind, rural girls to complement the work of the doctors, so that the latter could concentrate on their work, and use their time in the most effective manner. Thus we created the MLOP (Mid-level Ophthalmology Personnel) cadre, largely driven by need to provide good patient care and leverage our scarce Ophthalmology doctors’ time, allowing them to operate on four patients per hour on a consistent basis, which is an international benchmark. Bringing in professional management, heralded by the induction of Mr. Thulasiraj in the early days (1980) also let doctors focus on their profession, and brought in strong management practices.’

‘In our MLOP program, we typically put a carefully selected 17-year old girl from rural background through intense two-year training. The training program has a strong focus on eye care. After two years, they become MLOPs. Our recruitment criteria for these girls is stringent. We do not look for high academic accomplishments in their schooling. Instead, we look for commonsense, rural background, people from large families who need these girls to have a job to send money home, and a service orientation. There are eight branches to which they are assigned, based on their aptitude. These include: Medical Record Technician, Catering, Refraction, Operation Ward, Counseling, House Keeping, among others. Our program to train them is affiliated to a US university, and hence well-recognised. The training program is very rigorous. The girls wake up at 4.30 am. They are fiercely loyal to the institution and manifest a strong sense of psychological ownership. Dr. V’s own strong spiritual anchoring has enabled the Aravind system to be imbued with strong values and a distinctive culture. This has resulted in unique culture which is most visible in the MLOPs. They manifest selflessness, compassion, discipline and hard work directed at improving human welfare. Staff turnover at this level is relatively low, and hence the MLOPs are the primary carriers of the unique Aravind culture. Since they are the primary point of contact with patients, the Aravind culture can be clearly experienced by the patients.’

‘The discipline that you observe here is both internal (integral core of every individual) as well as external (through our systems and processes). We know every one working here intimately. Recruitment is the key for us to develop and sustain the unique Aravind culture. For instance, interviews of the rural girls for MLOP training are done along with the parents of the girls. Today we have over 1500 MLOPs who form the backbone of Aravind. However as we move to new geographies such as in our managed hospitals in places like Amethi, this is becoming a challenge, as we have to reckon with the local mores and work ethic, which are very different compared to what we are used to. One other aspect that is unique to the Aravind culture is a fierce sense of independence. This has its origins in our initial unsuccessful attempts to raise money from banks, and other funders. Many of these attempts in the early years resulted in disappointment, and inculcated in us the need for financial self-sufficiency from our very early founding days.’

Challenges galore

Dr. Natchiar reflects on the challenges ahead: ‘What are our challenges? As I see it, the founders are getting older. How do we retain our sense of purpose and unique culture despite the growth and consequent diversity of our workforce at all levels?’

There are three pillars that contribute to the success of Aravind: Management, Doctors and the paramedical workforce. Dr. Aravind, the son of Mr. Srinivasan, is a second-generation family member, who along with other second-generation family members such as Ms. Prajana (Training), Dr. Kim (Diabetic retinopathy), Dr. Usha, Dr. Kalpana (Coimbatore), Dr. R D Ravindran (Pondicherry), etc., are being groomed to take up leadership roles in the Aravind system. He fondly recalls his early childhood, being mentored by Dr. V, who was very magnanimous. He had a style of functioning that was non-threatening to any one. However he had the unique skill of bringing out the best out of each person. Dr. Aravind, besides being an Ophthalmologist, is also driving the managed care initiative. While being legitimately proud of what they have collectively achieved, Dr. Aravind warns that it is easy to become complacent about past success. ‘If one generation is very successful, as has been the case with us, there is a general tendency on the part of the creators to protect what they have built. It could lead to a degree of conservatism. It is for us as members from the next generation to break this conservatism. A real danger is if we get caught up in our comfort zone. What people speak about us five years hence is what we collectively do from now on, not what the first generation has done over the last three decades! Aravind system is now in transition. We must create our next crop of leaders. I believe Aravind will be known in the next ten years for managed care, as much as for eye-care it provides in its own hospitals. It is not easy to start a fully owned hospital for us in different geographies. Starting our own hospitals in different geographies in India and overseas requires large capital investment and management bandwidth. Managed care provides us the reach, which is not possible otherwise. In the future, I see that a lot of innovation will come from the periphery to the center. At the center (Madurai), since we have a strong and successful leadership, people will be very cautious and will not like to experiment (with its attendant chance of making mistakes). In such a situation, breakthrough innovation will be hard to come by.’

India needs 8 million eye surgeries per year. Currently the total number of eye surgeries being performed is 4.5 million per year. In Tamil Nadu which has a population of 6 crores, the Aravind system with its five hospitals (including in nearby Pondicherry) does a total of 2.75 lac operations per year. In sharp contrast, Uttar Pradesh (UP) has a population of 17.5 crores, with very inadequate eye care facilities. Underscoring the need for managed hospitals as the way forward for Aravind, Dr. Aravind opines: ‘Where will all the operations needed by UP be performed? There are many groups such as the M. P. Birla Group, Rajiv Gandhi Trust, and many more that want to give back to society, and one way they have identified that they can achieve this end is through eye-care. They have enormous financial resources at their disposal but do not have the expertise in this domain. We have the expertise. Our challenge will be to learn to partner with these groups to accelerate the provision of eye-care in the country. In most of these states, there

is no continuity of the Government. We need these partners to manage these external interfaces.'

'There is also increasing need for specialty eye-care other than cataract. In 2000, 75% of eye surgeries in the country related to cataract and the remaining 25% to specialty surgeries. This has changed in 2006 to 63% and 37% respectively. The rate of growth of cataract surgeries in India is 7-8% per annum against 36% rate of growth of the specialty surgeries. 1% of the 6 crores population of Tamil Nadu are potential glaucoma patients, i.e., 6 lacs people need glaucoma treatment. Most of them are presently receiving no treatment. We need to do a lot of research to address these large-scale problems. As I see it, specialty eye-care, research and managed eye-care will be the future growth drivers of Aravind's growth. Only organizations like Aravind can handle complex ailments like glaucoma treatment, which involves multiple technologies, much equipment that are capital intensive and deep specialization. In contrast, cataract is relatively easy to treat and a competent ophthalmologist can treat cataract. A population of 100,000 can support the practice of one ophthalmologist for cataract treatment. India has total ophthalmologist strength of 12000. I feel that the target of 1 million surgeries per year by 2015 that Aravind has set for itself (through own hospitals and managed hospitals) is very modest, since it will account for only 10% of eye surgeries performed globally.'

Aravind has a lot of family members who occupy pivotal positions in the running of the hospital. Given such a high concentration of family members, would Aravind have to grapple with potentially divisive forces as happens from time to time in family-run organisations? Reflecting on this, Dr. Aravind has this to say: 'If not for Dr. V and his grand vision, all of us would have been private practitioners, each doing his/her own practice. He had a quality of extracting the best out of each of us, and making us dream big. For us, Aravind is the goose that lays the golden egg. Without it, what standing would we have in society? Today the country's and even the world's who-is-who drops by to meet us and see for themselves the spectacular achievements of Aravind. Aravind has been structured as a Trust. It is no one's private property for being divided among family members. For each of us in the next generation, it is clear that we either stay within the Aravind system, adhering to its core values, and further its core purpose. If not, any one of us is free to leave and start our own practice. From this perspective, I feel it will not be easy to break Aravind the way it has happened in a lot of family businesses in the country. Moreover, each of us from the family have found our own space. For instance, Dr. Nam specializes in diabetic retinopathy. Mr. Thulasiraj heads LAICO. Mr. Srinivasan is responsible for all new construction. Dr. Natchiar heads paramedic training and cataract surgery. Each of us have found our own niche, in line with our passion.'

'There is huge work waiting to be done by Aravind. For instance, for the Amethi managed hospital we have drawn on resources from all our hospitals. The retina team is from Coimbatore. The paramedics team for the UP managed hospital is from Tirunelveli. The doctor team is from Madurai hospital.'

‘The current leadership started Aravind when they were in their 40’s (except for Dr. V who had just retired). All of us from the next generation saw it happen and we know what has gone into making it. Hence I believe the organisation is in safe hands for the next generation as well. Presently we are too dependent on the first generation for leadership. The transition of leadership has to happen smoothly. The current leadership should repose confidence in the next generation and facilitate smooth transition. This will require them to demonstrate risk-taking and magnanimity in trusting and handing over the reins progressively to the next generation. Since all of us, both from the first and second generation of leaders have imbibed the spirit of Dr. V, I believe this would happen smoothly.’

During the first decade of its existence (1977-1987), Aravind had cumulatively performed 1,25,000 surgeries. In the second decade, Aravind had cumulatively done 500,000 surgeries. In the third decade (1997-2007), this number has gone up to 2 million surgeries. Thus every decade, the cumulative number of operations performed during the decade has quadrupled. ‘What I have found is that in the first half of each decade, we essentially plateau at the level where the previous decade left off. During this time we get our act ready for the next thrust. The growth is not visible externally. However during this time, we a great deal of preparation is occurring internally, taking concerted steps to grow the organization. This growth is visible in the second half of the decade. Going by this past trend, 2007-2012 will be the time for us to prepare for the next phase. The actual results of this preparation will be visible during 2012-2017. Among other things, managed care will change the horoscope of Aravind during the 2007-2017 decade. By 2012, I see 400,000 operations per year being performed through our managed care. A lot more can be done. However in India, as in many developing countries, politics and healthcare are strongly coupled. There is an urgent need to decouple these if health care must reach larger numbers of people, although I am not sure how in the larger canvas, this will happen.’

Exhibit-3 provides the ‘gives’ and ‘gets’ for Aravind and the partner group for managed healthcare. Given the increasing complexity of running eye hospitals, like in most other industries, consolidation is expected to happen. Aravind will be called upon to run more and more eye hospitals. Getting into a pre-existing hospital poses its own set of problems from the perspective of Aravind’s entry. There are also international requests to contend with. Aravind is currently training the staff of two hospitals in Bangladesh. There is no dearth of financial resources in most countries to set up eye care hospitals. The bottleneck is expected to be availability of a dedicated, motivated and competent human resource pool. Aravind will be called upon to play a significant role in this arena. A large Sri Lankan group recently approached Aravind to set up a hospital in Sri Lanka. While in India, 4500 surgeries are performed per year per million population, the equivalent figure in China is 500. The eye-care in China is at its infancy. Similar is the situation in many other countries. Aravind has to balance the pressures for extending its services and expertise globally with a lot of work that remains to be done in India itself. Aravind has to decide on whether to proactively and aggressively offer its services to prospective groups that are seeking to enter eye-care, or alternately, to wait for serious groups to approach Aravind and offer its services in a reactive manner. The selection of groups to

partner with would also determine the emerging culture of Aravind and could either aid or hamper the continued growth of Aravind, depending on the choice of its partners. The way forward on leveraging its expertise in eye care is thus far from being simple. Given its roots in Tamil Nadu, it is likely that any expansion in South India would be through own hospitals. Thus managed care would essentially be for growth in other parts of India and outside India, although there was no fixity on this either.

‘At one level, it is tempting for Aravind to rest on its laurels. Growth requires us to constantly push the organization. Such energy can come primarily from the next generation. The first generation could possibly take a conservative approach with regard to growth. Getting buy-in from a large and expanding leadership team is also not trivial, as each member of the leadership team would have differing views on the way forward. While there is huge market opportunity and also resources, what Aravind needs is huge ambition and a commensurate vision, to occupy its rightful place in the sun. The dynamics of family members and non-family professionals is also an issue that requires mature handling.’

Reflecting on the distinctive Aravind culture, Mr. Srinivasan succinctly summed it up: ‘At Aravind, the cornerstones of our culture are: simplicity, transparency, equality and fairness. In fact, even to this day, we are careful about whom we get our children married to. We want their spouses to come from simple family backgrounds, so that they can continue to uphold the traditions of Aravind.’

According to Dr. Kim, also a second generation family member, who specializes in diabetic retinopathy, ‘With increasing focus of Aravind on specialized eye care, new challenges have to be addressed. How do we take these to the masses? In the case of cataract, which has been our mainstay till date, pre-screening of patients in their villages and surgery at Aravind hospitals are relatively easier. The cataract surgery takes between 10-20 minutes. In contrast, screening for glaucoma, diabetic retinopathy, cornea and tumors of the eye (ORBIT) require a lot more skill, and the operations take much longer times. Usually patients need to be operated multiple times to treat these ailments, unlike cataract, where the operation is done just once. Consumables and drugs used are much costlier, and hence our traditional model of free treatment needs to be looked at afresh. A lot of innovation is called for to reach these specialized eye-care to the masses, especially the poor people. We are working with companies like Philips to come up with a low-cost viewer to identify glaucoma patients through mass screening camps. We also need to work with local general physicians and diabetes specialists who can pre-screen patients for the diabetic condition and send them to us for diabetic retinopathy screening. Otherwise we will end up looking for patients of these ailments among vast populations, akin to looking for a needle in a haystack. Unlike most healthcare facilities in India, at Aravind, money has never been a criteria for people to gain access to high quality eye-care. Even if someone has no money, our primary objective is to provide treatment to him/her first. We do not think twice about providing treatment to a patient who cannot pay. All of us from the family have imbibed these core values: as we have been brought up in this culture.’

‘Surely there are challenges galore as we gear up for the next phase of our journey. How do we sustain the values that Dr. V had founded this institution upon? What should the leadership do to provide continuity and continued energy to the organization? As we grow bigger, diverse individuals with differing perspectives, both from within the family and outside occupy key leadership positions. In the past, if there were any differences, Dr. V’s word was final. Now the leadership is a lot more diffused. In case of differences, the final word comes from the SLT. I have personally found that they are very open to suggestions. Surely in such a large and high caliber group, there will be diverse views on the way forward. Some may prefer a more calculated and cautious approach. Some others may be more bullish and aggressive about growth. We need to balance the various viewpoints and move on. We try to take care of the sensitivities of competent non-family members within the Aravind system, so that they feel the same sense of belonging as the family members within the system. We try to abide by the lasting principles instituted by Dr. V about the way things should be done here. Given our scale and volumes, and how we have continued to grow despite many challenges, we feel there is a great power out there looking over us and taking care of us. How do we continue to tap into this power to guide us?’

Exhibit-1
Aravind Eye Care System

Mission

To eliminate needless blindness.....

Aravind Eye Hospitals

...by providing compassionate and high quality eye care

Community Outreach

...through extending the reach of quality eye care to the poor and needy – through active community involvement, screening camps, and IT enabled Vision Centers in rural areas.

Lions Aravind Institute of Community Ophthalmology (LAICO)

...through teaching, training, capacity building, research, publications and advocacy to governments and voluntary agencies.

Aravind Postgraduate Institute of Ophthalmology

...through education and training programs to develop ophthalmic human resources

Aravind Medical Research Foundation

...by providing evidence through research and by translating existing evidence and knowledge into effective action.

Aurolab

...by making high quality ophthalmic products affordable and accessible to the vision impaired worldwide.

Aravind Eye Banks

...through eye banking; cornea retrieval, evaluation and distribution, training, research and public awareness programs

Aravind Tele-Ophthalmology Network

...by employing IT to link ophthalmic specialists with patients in rural communities and getting geared to impart education and training in eye care with a global reach.

Aravind Managed Eye Hospitals

...through working with partners in underserved areas of India and other developing countries

Exhibit-2
Income & Expenditure, 1997-98 to 2003-2004 (Rs. Million)

Year	Income	Expenditure	Surplus
1997-1998	180.3	81.7	98.6
1998-1999	239.5	123.2	116.3
1999-2000	276.3	143.2	133.1
2000-2001	340.4	156.6	183.8
2001-2002	388.0	177.5	210.5
2002-2003	423.6	204.7	218.9
2003-2004	454.3	259.2	195.1

Exhibit-3
Gives and Gets to Aravind and Partner Group in a Managed Hospital Partnership

Aravind	
Gives (What does Aravind bring to the partnership?)	Gets (What does Aravind get from the partnership?)
<ul style="list-style-type: none"> • Know-how on eye-care • Vision for the managed hospital (beyond the near vision) • Building sustainable operations • Selection of staff • Training • Business Plan • 30% of initial staff from Aravind system • 70% if initial staff trained at Aravind hospitals 	<ul style="list-style-type: none"> • Experience for the next generation to develop leadership skills • Confidence • Ability to implement large projects • One time payment and 5% of revenue as on-going management fees
Partner Group	
Gives (What does the partner group bring to the partnership?)	Gets (What does the partner group get from the partnership?)
<ul style="list-style-type: none"> • Vision for the partner group constituency • Infrastructure • Capital • Managing the political system 	<ul style="list-style-type: none"> • Building organization with larger purpose • Socially responsible and self-sustaining organization • Hassle-free running of the hospital since Aravind provides training, strategic and operational management expertise as well as domain expertise