

## The Power of Creative Constraints by Pavithra Mehta & Suchitra Shenoy

An almost incomprehensively ambitious vision unsupported by any sort of business plan may sound like a vision doomed to fail. Yet more than 35 years after the first Aravind Eye Clinic was set up in South India, Dr. Govindappa Venkataswamy's (Dr. V) mission to eliminate curable blindness in the country is surpassing even the most optimistic expectations. This excerpt from *Infinite Vision: How Aravind Became the World's Greatest Business Case for Compassion* describes how a precisely defined set of creative constraints, including never refusing to provide care, never compromising on quality, and never relying on outside funding for patient services, became the basis for a world-class organization. The story of Aravind's success, characterized by all the hallmarks of sustainability - financial health, massive scale, continued relevance, and longevity - demonstrates that charity and business can indeed be compatible.

"All meaningful design begins with empathy," says Tim Brown, "and to me, Aravind is a model of what can be achieved through design." Coming from him, this is no small praise. Brown is CEO of IDEO, one of the most influential design firms in the world, and he firmly believes that empathy has powerful implications for the creative process.

In 2005, Brown visited Aravind on a tour coordinated by Acumen Fund, an organization that uses philanthropic capital for social investments (Acumen had supported Aravind in a telemedicine initiative). "What I saw in India, and particularly at Aravind, played a big part in how I've moved forward with IDEO," says Brown. How so? "Innovation, in some fundamental way, is linked to constraints," he says, "and Aravind is an organization that operates within a very unique set of self-imposed constraints. That automatically eliminates ordinary solutions."

Brown's argument is compelling: Empathy and self-imposed constraints can force you beyond obvious options. What you then get, he points out, is "the chance of a breakthrough solution instead of an incremental innovation."

The developing world faces constraints of money, skilled labor, and other resources. But Brown is talking about something other than these obvious limitations. "Dr. V brought in his own set of constraints when he insisted on a particular mode of delivering care. He said it had to be high-quality, compassionate care, and that it also had to be affordable and sustainable," Brown says. He is referring to the unwritten rules that Dr. V decided Aravind would follow:

1. We cannot turn anyone away.
2. We cannot compromise on quality.
3. We must be self-reliant.

In summary, these rules meant that whatever Aravind chose to do, it would have to do it with uncompromising compassion, excellence—and its own resources.

Today, numerous initiatives in India provide free eye care to those in need, and at least a dozen of them offer quality that is world-class. Where Aravind differs dramatically from these other efforts is in the magnitude of its work and its astonishing financial self-reliance. No other eye hospital in the world comes close to handling Aravind's routine outpatient and surgical volumes. And no other organization in the field provides its services to the poor at this scale, within such a robustly self-sufficient model.

Over the years, Aravind has proved sustainable in multiple ways. It is an organization that has quadrupled its growth every decade, successfully navigated multiple leadership transitions, and consistently upgraded the quality and range of services provided. It demonstrates all the boons of sustainability: financial health, massive scale, continued relevance, and longevity.

Naturally it is Aravind's financial sustainability that attracts the most attention. In 2009–2010, Aravind made an operating surplus of approximately \$13 million on revenues of \$29 million. A *Forbes* magazine article in 2010 reviewing Aravind's profitability called it "a performance worthy of any commercial venture."

Oddly enough, financial self-reliance started out low on Dr. V's list of priorities. Certain unpleasant experiences bumped it up very quickly. Dr. V's first application for a bank loan to start Aravind was rejected, and his sole attempt at fund-raising yielded more embarrassment than riches. He had visited a neighboring industrial town to solicit donations, and "he came back with about 1,500 rupees [roughly \$33]," says his brother GS. "He said, 'Because people don't know us, they thought that this was some sort of begging.'" The misconceptions came as a painful shock. It had not crossed Dr. V's mind that people might view his fund-raising efforts as an attempt to secure easy cash for his retirement.

In retrospect, the sting of that experience proved invaluable. It spurred Dr. V to explicitly redefine the role of money in his organization. "We're not going to ask people for donations anymore," he announced to his brothers and sisters. "We just have to do the work. The money will follow." It became one of his most-repeated phrases: Do the work. The money will follow. This serve-and-deserve rule of Dr. V's forced the organization into an improvised independence that fostered novel systems.

In the field of international development, money can be a touchy subject. To carry out their core work, many nonprofit organizations rely on external funding from individual donations or grants from foundations. An unspoken assumption that business and charity do not mix often gives rise to a tension between purse strings and heartstrings.

In this context, Aravind manages to hold two seemingly contradictory values with ease: self-sustainability and universal access to its services. Dr. V seeded these values in the organization without a preset plan. But the founding team, over time, evolved effective systems for working within these conditions. "In our experience, self-sustainability is a

dynamic process, not a static destination,” says Thulsi. “It emerges from a complex interaction of organizational, technical, and human factors.” He maintains that Aravind’s own financial health and independence are not values in and of themselves, but by-products of careful attention to pricing structures, free and paying patient volumes, effective resource utilization, standardization, and an extremely cost-conscious leadership. In other words, at Aravind, self-reliance is more of an ethos than an end goal.

“Zero can be a legitimate price point,” declares Thulsi. This is his succinct response to the to-charge-or-not-to-charge dilemma. Aravind’s pricing strategy goes beyond the traditional notions of free care. It positions free service not as a charitable handout but as one of many options in a self-selecting fee system. Its price range—from zero to market rates—is built around a culture that respects every patient’s right to selection.

“Choice is fundamentally important,” says Dr. Aravind Srinivasan, the hospital’s administrator. “We all exercise it when we go to a supermarket and choose what we want from an array of options. Our choices are based on subjective combinations of aspiration and affordability. We believe in empowering our patients with that kind of choice.”

The organization also believes that a pricing model offering free service as one option within a broader range can serve more patients in need than a system that does only charity. Aravind’s consulting work with an eye hospital named Sadguru Netra Chikitsalaya, in the town of Chitrakoot in rural Madhya Pradesh, is a case in point.

Until 2002, the Chitrakoot hospital relied heavily on donor funding and focused exclusively on the very poor. The hospital’s trustees believed that charging patients would corrupt the institute’s charitable focus. Most of its patients paid nothing, and the hospital ran at a loss. But when Dr. B. K. Jain, the hospital’s director, visited Aravind, he experienced the power of a different approach.

With Aravind’s assistance, Jain persuaded the Chitrakoot trustees to adopt a tiered pricing system and to broaden its patient base to include wealthier patients. They sought Aravind’s expertise to put together a detailed plan of action. Along with implementing the new fee structure, they developed the skills to do cataract surgery with intraocular lens implants (replacing a less advanced procedure) and also began running free eye camps in the community. The ripple effect was dramatic. Five years later, for the first time in its existence the Chitrakoot hospital was breaking even. And it was actually making a surplus.

Most significant was the fact that the number of free and highly subsidized patients served annually had increased by as much as 45 percent, and the hospital’s cataract surgery volumes had more than doubled. The profits from paid services made it possible to provide cataract surgery with IOLs for its free patients as well—something it had not been able to do before. In addition, the hospital was able to develop specialty services and retain five times the number of ophthalmologists, drastically reducing its earlier dependence on volunteer medical expertise.

In these ways, the user-fee system at Chitrakoot, far from compromising the mission, proved a tremendous tool for reliably reaching more people in need. It also enabled significant upgrades to services and overall program strength. To Aravind’s leadership, financial autonomy is important not in and of itself, but precisely because it allows for this greater command over the many dimensions of quality.

People often wonder if mistrust creeps in when organizations serving the poor charge market rates for some patients. “That kind of confusion doesn’t happen at Aravind,” says Thulsi, “because our prices are transparent and compare favorably with local markets.”

Aravind’s pricing strategy aims to make it easy for patients to seek treatment; there are no hidden costs. “We don’t add on charges for individual tests—like refraction, ocular pressure, urine sugar,” Thulsi explains. “To us, it is unethical to offer those services with separate price tags. These are basic tests that need to be done. They are all included in the \$1 consultation fee that is valid for up to three visits.” This outpatient fee (which applies only to paying patients) has not been increased in over ten years.

“From the very beginning, our systems have been designed so that there is no incentive for us to exploit a patient financially,” Thulsi says. “For instance, we don’t accept commissions for patients that we refer outside for MRI or CAT scans.” The management regularly reviews clinical protocols to eliminate any tests or medications that do not contribute to improving outcomes or patient comfort. Meetings are held to analyze the number of re-operations, lengths of stay at the hospital, and the reasons behind postponed surgeries. Prescriptions for medicines and tests are scrutinized to ensure that they are advised only when necessary and of real benefit to the patient. The overall goal is to reduce any needless cost and inconvenience to those seeking care. It is an approach that continuously builds fiscal and operational efficiency into the system, as well as patient trust.

There is an interesting flip side to the issue of public perception. Most of Aravind’s paying patients, while aware of Aravind’s vast work in the community, have no idea that by choosing to pay for services, they are indirectly contributing to someone else’s care. Aravind deliberately steers clear of advertising this pay-it-forward angle to its high-end customers. Touting charitable services can work against your reputation in a world where quality and charity are not necessarily linked, and Aravind leadership believes that when it comes to personal health, value for money and quality of care, are priorities that tend to outweigh generosity.

“I would very much like to come to Aravind Eye Hospital to spend some time learning and to seek your advice” is a sentiment that Thulsi encounters in his inbox with increasing frequency. It is March 2010, and the man writing in is Dr. Bharatendu Swain, a plastic surgeon with decades of experience at one of India’s well-known corporate hospitals. His passion, however, is Aakar Asha, a grassroots, nonprofit initiative he founded. It performs free restorative surgery for people who are motor impaired and unable to afford the medical attention they need. Swain has studied Aravind’s model from a distance and wants to learn more about it in order to better shape his own initiative.

The easy accessibility of Aravind’s leadership would surprise most in the private sector. The door to Dr. V’s office, for instance, is always open. Anyone can walk in without an appointment. Thulsi’s response to Swain is swift, warm, and encouraging. He intuits a genuine dedication and resonance of approach, and soon after Swain’s e-mail, a full two-day itinerary is set up, including meals and a stay at the Aravind guesthouse. In Madurai, Swain will tour the hospital, watch live surgeries, meet Aravind’s senior management, and be escorted to an eye camp. This hospitality is typical of

Aravind—even, as in this case, with a stranger whose work is tangential to its own mission.

Swain has a neatly trimmed salt-and-pepper mustache and a courteous air. Seated in Thulsi's office, he quickly turns the discussion to questions of scale. His team is now doing 500 complex reconstructive surgeries a year, at no cost to their patients. Swain wants to expand to do ten times that number and asks Thulsi for his thoughts. Thulsi is candid in his answer: "Where large need exists, you can build a much more sophisticated organization with a roadmap aimed at scale. Boutique interventions, even if they bring some kind of personal satisfaction, won't make the needed impact. What's the estimated need where you are?" Swain has done his homework. "Roughly 415,000 people in my home state suffer from disability issues that we can treat," he says. "There's your case for scale," says Thulsi.

The people whom Swain's organization treats are typically healthy, apart from their motor impairment. All they require is a one-time surgical intervention. The needed intervention has low morbidity and next to zero mortality rates. The transformation in a patient's life is dramatic (in all these respects, the treatment parallels cataract surgery). But Swain must consider the issue of sustainability as his initiative grows. He is curious about Aravind's enviable patient equation that balances its services between the very poor and those able to pay.

"So how did you arrive at the 60:40 ratio between your poor and well-to-do patients?" Swain asks. Thulsi smiles. "It just happened," he says, adding, "that ratio isn't fixed—the break-up is actually slightly different now." In Aravind's initial years, he explains, free services were provided on an ad hoc basis at the discretion of its doctors. If the attending surgeon knew or suspected that a patient could not afford surgery, then he or she waived the charge. Often the hospital had sufficient income to cover the expense, but when it did not, Aravind's founders dug into their own pockets to make up the difference. By 1980, the leaders created a formal policy around their decision, giving patients the freedom to choose whether or not to pay for services. The 60:40 ratio of nonpaying and ultrasubsidized patients to those paying market rates emerged organically from there. In recent times, with the growth of the economy, that ratio has shifted to 53:47.

"Currently at Aravind, for every 100 patients treated, the typical breakdown is that 47 will choose to pay close to market rate, 26 will come to us on their own and opt for care at very minimal cost [roughly \$15], 27 will choose to come in through our outreach efforts and be treated for free," Thulsi tells Swain. "The annual growth rate in terms of patient volume is about 10 percent," he says, "but the revenue growth rate is much more, because we are finding in recent years there is a real migration from free to paying. Our eye camps influence health care-seeking behavior in the community. Now the percentage of patients opting for free treatment is coming down, and the percentage electing to pay steeply subsidized rates is increasing."

While the paying-to-free ratio is not set in stone, it is closely monitored. Trust must be built and maintained across the entire patient spectrum. If either end loses faith in Aravind's services, the entire ecosystem of the organization is thrown off balance. Losing free patients increases unit costs, affects Aravind's reputation in the community, and reduces training capacity. Losing paying patients augurs a different set of ills. The organization knows this from walking the delicate balance between the two.

Thulsi briefly sketches for Swain a situation in the late 1990s when the proportion of paying patients at Aravind plunged to 18 percent. Projections showed that in as little as two years that figure would plummet to 10 percent. Senior leadership held a series of emergency hospital-wide meetings. It wasn't just the percentages that triggered the red flag. "The real concern was that we were off-sync. We weren't reflecting the market," Thulsi says. There was an upward mobility in the environment that was not showing up in Aravind's patient trends. Once the crisis was spotted, patient surveys were conducted and the results scrutinized for insights. Aravind's leaders learned that the problem was not because something had changed—it was because not enough had. As India's economy had grown and standards of living had gone up, patients were willing to pay more for a more comfortable and modernized setting. But in the 25 years since its inception, Aravind's inpatient facility had not undergone any major renovations.

It was time to update more than the hospital's accommodations and amenities. Aravind's leadership also realized that it needed to place more emphasis on additional services beyond cataract. The market for cataract surgery had matured and was becoming highly competitive. Pushed by this reality and by its own mission, the leadership decided to identify other areas of dormant need in eye care. Community surveys for the potentially blinding conditions of glaucoma and diabetic retinopathy revealed a high number of undiagnosed patients. Not as common as cataract, these conditions would require a certain scale to make delivery viable and to develop the necessary treatment expertise. With its ability to provide high-quality, high-volume care, Aravind was well placed to provide such treatment. A more deliberate focus on subspecialties was thus born.

"We also looked at the surgical acceptance rate, patient counseling methods, waiting room ambience, and cafeteria food," says Thulsi. "Then we worked on improving all these different things simultaneously. It took us about two to three years to course-correct and bring the ratio back to healthy equilibrium."

The experience strengthened the case for paying patients in the Aravind system. While providing high-quality eye care to those who can afford to pay little or nothing is an integral part of serving its mission, Aravind's paying patients are key drivers for advancing quality, service breadth, and medical expertise. "We look at financial viability as an indicator of our relevance," says Thulsi. "If people are willing to pay [for something], then there is a need for it. Serving people who can pay helps keep you on your toes."

He has a word of caution for Swain: "The distribution of the disability in your field will be different." He draws attention to the fact that cataract affects both the rich and the poor, and that the well-to-do tend to be reasonably active in accessing care. Paying patients make up a reliable portion of Aravind's patient load, which is crucial for a cross-subsidization model. "In your case, there may be more trauma-related disabilities in the labor class that can't afford to pay for treatment," Thulsi tells Swain. "If incidence is primarily among the poor, then you may need to follow a model that exclusively does charity work. You will want to look into the causes of these disabilities and do some thinking on this front," he says.

"Do you have a donor strategy?" Swain queries. Thulsi breaks into one of his infectious laughs. "We're not a good group to ask that question to because fund-raising really isn't one of our strengths," he says. "Dr. V chose to grow slowly and with internal resources."

He shares that Aravind's core patient care services as well as all of its new hospitals are entirely funded by revenue from its paying patients. "The founders did not want the eyesight of the community held ransom by external resources," he explains. "In the past,

we have even turned down people's offers to support our free surgeries." He then makes an important clarification: "But for other areas, like eye care research, we welcome outside funding, and for many of our pilot initiatives we often actively seek grants."

Over the years, Aravind has received funding and technical support from an array of foundations, grant agencies, companies, and individual donors. These contributions are expressly earmarked for areas outside of core patient services and represent only a small percentage of Aravind's total income. In 2009, for instance, grants and donations accounted for 6 percent (roughly \$1.8 million) of Aravind's income, compared with the 72 percent that was earned through patient revenue.

There are some exceptions to Aravind's funding policy. The organization does, for instance, allow well-wishers to contribute to its Food for Sight program, which covers meals for Aravind's free patients, and to its Youth Vision program, which provides free eyeglasses to schoolchildren at its screening camps. But as Thulsi points out, neither of these programs is dependent on external funding. "If the donations dried up, we would absolutely still continue to provide these services. They are not controlled by money from the outside."

Ultimately, in Thulsi's view, where money comes from is not nearly as important as how it is put to use. One organization might be extravagant with earned resources while another is frugal with donations. Based on Aravind's experience, Thulsi has come to believe that self-reliance is more about a mindset than it is about money. It is a particular way of viewing your resources and putting them to the best use possible.

Outside Aravind-Madurai, an orange bus rumbles down the street, lopsided with four young men hanging on for dear life in the open doorway. Behind it comes a man on a bicycle, egg crates stacked higher than his head, wobbling precariously. There is a widespread talent in India for carrying more than what is considered sensible, and doing so with unruffled ease. You see it at Aravind too. Throngs of patients that would overwhelm many care providers are considered par for the course here. Aravind's hospital in Madurai alone sees roughly 2,000 patients every day. Collectively, its entire network of hospitals examine 7,500 patients daily.

While the large volume of patients at Aravind forms the engine of the model, the system needs a regular flow of patients in order to be optimally efficient. "Managing demand fluctuation is critical to maintaining quality and controlling costs," says Thulsi. Patient volumes are regularly scrutinized. Using data from past years, seasonal trends, and real-time monitoring, the management works hard to smooth out demand patterns and protect against dramatic peaks and troughs that stress the system. For the convenience of their patients, Aravind's hospitals have a walk-in, no-appointment-needed policy that makes it harder to control volumes. This vulnerability is further compounded by Aravind's practice of conducting eye camps.

In the mid-1980s, the surgical load on Mondays would shoot up drastically because of the busloads of people brought in from weekend camps. By Wednesday, patient numbers would drop back to a more normal level. Dealing with this spike-and-dip cycle was frustrating for staff and created inefficiencies. Aravind's approach to the feast-or-famine situation was interesting. Instead of doing the most obvious thing and redistributing camps across the week to comfortably flatten the spike, it looked for ways to increase patient volumes throughout the whole week—so that the surge on Mondays would be the

norm, not an aberration.

To pull this off, Aravind's leaders first analyzed the bottleneck in patient admissions. Looking at the data, they realized that a considerable number of patients were dropping out of the system after being told by a doctor that they needed surgery. Further investigation revealed a need for an additional step in the process. Patients needed an opportunity to have their doubts and fears about undergoing surgery addressed at length by a staff member. A cadre of counselors was promptly conceived and a new division for patient counseling implemented.

Aravind's hospital network now has 164 patient counselors. Its systems ensure that a counselor meets with each patient advised to have surgery; she explains the entire process, along with all the various options available, and fields any questions the patient might have. Within two years of introducing counselors, direct admissions per week increased fourfold. In the same period, Aravind's eye camp volume also increased by 20 percent. But by then, the systems in place were robust enough to handle the increase without a hitch.

This approach to bottlenecks and capacity barriers at Aravind leaves no room for complacency. Dr. Usha Kim, one of the organization's senior doctors, recalls walking into Dr. V's office with two other colleagues in 1999 after first hearing of his plans to build a fifth hospital in Pondicherry. "We said to him, 'Look, this is a bad idea. We don't even have enough doctors in Madurai right now. We have four hospitals already; we're not interested in starting another one,'" says Usha. Dr. V listened to them quietly and nodded his head. "If you feel that way, we won't do it," he said. "But then after that, he called us each in to meet him individually," says Usha, laughing at the memory. "He called me the next day and said, 'You know, when you think you've grown enough, that's when you start to decline. It means you're walking downhill instead of climbing.'" Aravind-Pondicherry was inaugurated in 2003, and Dr. V's perspective on growth would slowly filter through the organization's leadership. "I've matured to the idea that when you're in a comfort zone, you start to deteriorate," Usha says. "You need to have some kind of pressure or you don't evolve. Dr. V was right—it isn't about staying where you are and feeling cozy."

## The History of the Aravind Eye Care System

In 1976, Dr. Govindappa Venkataswamy, a retired surgeon, founded an eye clinic in South India with his siblings and their spouses. Dr. V, as he became known, didn't have a business plan or money, but he had a mission to eliminate curable blindness. Today, the Aravind Eye Care System is the largest and most productive blindness prevention organization in the world. During the last 35 years, its six eye hospitals have treated more than 32 million patients and performed more than 4 million surgeries, the majority either ultrasubsidized or free. Even more remarkable, Dr. V has insisted on financial self-reliance, resolving not to depend on government aid, private donations, or foreign funding. The organization invests tremendous energy in bringing eye care to villagers too poor to seek out its services. Its policies ensure that all patients get the same high standard of care. The same doctors work across both free and paid services. Defying the assumption that high-quality surgery cannot be performed at high volumes, Aravind's doctors are among the most productive in the world, averaging 2,000 cataract surgeries a year, against the United States' average of under 200. The efficiencies that enable this achievement help make Aravind one of the lowest-cost, highest-quality eye care systems in the world. Dr. V passed away in 2006, but Aravind continues to thrive. Based on his vision, the Aravind model demonstrates the



power of integrating innovation with empathy, and business principles with service.