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CASE STUDY

South Asia• India

Vaatsalya Hospitals: Inclusiveness Through Proximity

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Executive Summary

Dr. Ashwin Naik and Dr. Veerendra Hiremath founded Vaatsalya in 2004 to address the inadequacies of healthcare services in rural and semi urban India. Most private hospitals in India are located in large cities and metropolitans, focusing on tertiary healthcare which is most profitable among healthcare segments. However, tertiary care accounts for roughly 10% of the total healthcare demand in India with primary and secondary healthcare accounting for 60% and 30% respectively. Ashwin and Veerendra realized that in order to address the healthcare needs of the semi-urban and rural population, they needed to setup a chain of hospitals so that they could significantly reduce the inconvenience and expenses their patients incur while travelling long distances to get good quality healthcare. Moreover, these hospitals needed to provide such services at low prices since the vast majority of the Indian population staying in semi-urban and rural India belong to the lower levels of economic strata.

Vaatsalya's biggest challenge in establishing good quality hospitals away from big cities was to attract high quality medical practitioners to such locations. Even though there is a large demand of healthcare services in smaller towns and cities, doctors faced great difficulties in establishing their practices because these places lacked the basic infrastructure and technology that doctors would need to deliver their services. Therefore, Vaatsalya decided to create a doctor-centric model where medical practitioners were carefully chosen based on their semi-urban or rural background and sufficiently incentivized so that they found working in Vaatsalya hospitals personally motivating and professionally rewarding. This was complemented by an operational model focused on reducing cost and developing long term relationships with patients and local medical practitioners. In their four and a half years of operation, Vaatsalya has setup nine hospitals across several districts in Karnataka, created a capacity of 450 beds and has and treated close to 175,000 patients, making it the largest chain of its kind in semi-urban India. In the next few years, armed with fresh funds of US$6.5 million from venture funds such as Seedfund and Oasis, Vaatsalya intends to setup 50 more hospitals spanning across several Indian states and reach out to more than a million patients a year. For their pioneering work in the area of inclusive healthcare, Vaatsalya and its founders have been receiving several national and international awards.

Vaatsalya hospitals are run as commercial entities that receive no charitable grants or subsidies. As a result, Vaatsalya hospitals need to charge their patients for the healthcare services that they render. While Vaatsalya is able to lower the price of its services by reducing its operational and capital expenses, its prices are still unaffordable for the poorest of the poor – the bottom 30% of the economic strata according to some estimates. Thus, Vaatsalya today is grappling with the challenge of extending its healthcare services to the bottom 30% of the economic strata and is actively considering tying up with micro-health insurance organizations, still a fledging concept in India, or waiting for implementation of national health insurance schemes introduced by the government for below-poverty-line citizens.

Introduction

Dr. Naik and Dr. Hiremath (*Photo credit: Vaatsalya)*

Dr. Ashwin Naik and Dr. Veerendra Hiremath founded Vaatsalya in 2004 to address a fundamental paradox of the Indian healthcare system. While more than 70% of the Indian population lives in villages and small towns, 80% of the hospitals employing 85% of India's qualified medical practitioners are located in metros and large towns. India spends about 5% of its Gross Domestic Product (GDP) on healthcare. Less than 20% of such expenditure is borne by the government, implying that the bulk of the Indian healthcare system is in the hands of the private sector. This has resulted in healthcare being available close to the most profitable markets in the urban areas. Not only is healthcare urban focused, it is also focused on the more profitable tertiary care segment, leaving a huge unmet demand in the primary and secondary care segments, especially in semi-urban and rural India.

As a result, patients from semi-urban and rural India are forced to choose, more often than not, between the local unqualified practitioner or free treatment provided at the nearest government run hospitals that are characterized by poor quality equipments, unhygienic conditions and perennial absence of appointed doctors and hospital staff. A survey of government-run health care centres revealed that only 15% of them have a paediatrician, 23% have a physician, 26% have a gynaecologist and 26% had a surgeon.[1]

As and when patients realize that neither of these two options – the local quack or the government hospital, is going to provide them the necessary cure, they undertake long journeys to reach hospitals in big cities. Sometimes, such delay in getting proper medical attention can result in irreversible damage to their conditions. Even when they are lucky to be cured, the total time and resources that they spend in the process leaves them economically impaired. Incidence of a major illness is often enough to obliterate an entire life's savings or to condemn an individual to lifetime of indebtedness. A World Bank Report on Indian Healthcare in 2002 noted that *"one episode of hospitalization is estimated to account for 58% of per capita annual expenditure, pushing 2.2% of the population below the poverty line. 40% of those hospitalized have to borrow money or sell assets."*[2] In order to meet to healthcare

[1] S. Srinivasan (2002), "Disease Burden in India, Public Health Infrastructure: What we need and what we have", NCMH Paper

[2] Unable to get the detailed reference for this – will continue searching and get back. I have got this figure from a presentation available on the Internet (Microinsurance in India by Dr. A P V Reddy). Unfortunately that does not provide detailed references. There are several sources that say that healthcare is the second most common cause of rural indebtedness.

needs of the semi-urban and rural population, Ashwin and Veerendra decided to setup a chain of no-frills-low-price hospitals in small cities and towns of the Indian state of Karnataka.

Description of the Business Model

EVOLUTION

Ashwin Naik and Veerendra Hiremath were roommates at Karnataka Medical College in Hubli. Like most medical students, they aspired to complete their higher studies and join a reputed private super specialty hospital. Ashwin thereafter went on to do his Master's from the University of Houston, Texas in the USA while Hiremath, two years junior to him in medical school, completed his Master's from the ASCII-Hinduja Institute of Healthcare Management in Hyderabad, India. Ashwin spent the next six years in the US, initially studying and later working for Celera Genomics decoding the human genome. After relocating to India in 2002, he briefly worked with a startup, Molecular Connection in Bangalore, before joining the founding team of Triesta Sciences in Bangalore, a clinical research organization that conducted advanced genomic research in the field of oncology. International organizations would outsource their clinical research to Triesta and Ashwin's mandate was to develop partnerships with clients and also with hospitals in India who could provide clinical data. While Triesta initially started with large urban hospitals like Apollo, they soon moved to hospitals in smaller cities and towns for data. It was during his visits to the smaller cities when Ashwin became aware of the acute shortage of basic healthcare facilities, driven largely by unavailability of medical practitioners. He was intrigued by the fact that despite a large unmet demand for good quality healthcare in these small towns and cities, doctors, even those that belonged to these cities (but had their medical education in some larger city), were not willing to establish their practices in such cities. On enquiring with his friends, Ashwin learnt that doctors faced great difficulties in establishing their practices in smaller towns and cities because these places lacked the basic infrastructure and technology[3] that they would need to deliver their services. If they wanted to practice what they had learnt in medical colleges, they needed to build the healthcare infrastructure from ground up, as well as attract other doctors to build a team that is necessary for addressing basic healthcare needs of the target population. It was around this time that Ashwin once again met his old roommate and found that Hiremath, who was till then working in Malaysia, had actually specialized in hospital administration from ASCII Hyderabad. The duo started discussing the idea of setting up a hospital that could address the unmet demand of healthcare in Indian hinterlands.

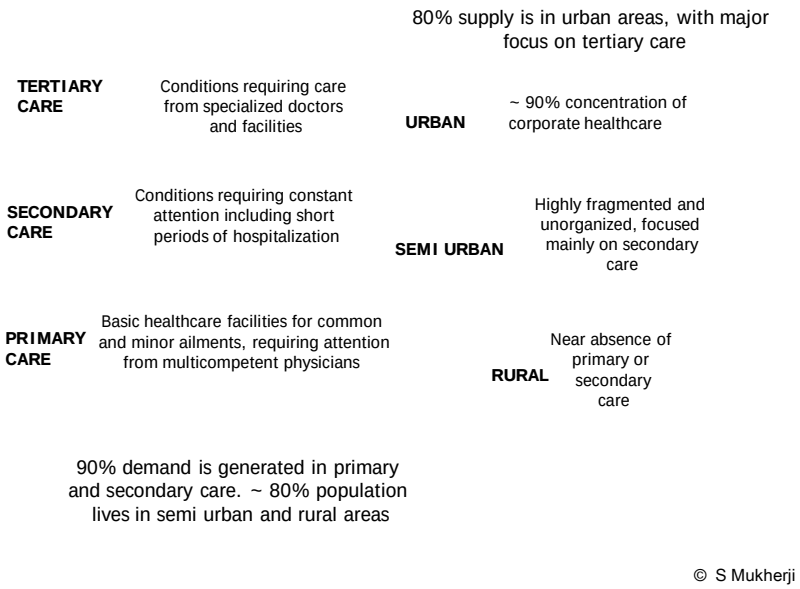
Ashwin and Hiremath realized that they needed to solve the problem from the doctors' point of view if they wanted to take good quality healthcare to second and third tier cities. Hiremath quit his job with the Malaysian company and started working on putting together an execution plan, while Ashwin wrapped up his engagement with Triesta. In September 2004, Ashwin quit Triesta and joined hands with Hiremath to give shape to their idea of creating a hospital that would address the healthcare need of semi-urban and rural India. *"We realized that there*

[3] Infrastructure and technology refers to hospital building comprising facilities like emergency room, operation theatre and medical equipment necessary for delivering primary and secondary care.

was not only an opportunity to do good, but also to have a sustainable business," recalls the 36-year-old.

Ashwin and Hiremath started off with a pilot project with the idea of selecting a small town, build a large hospital and attract good doctors. However, they soon realized that given the size of the problem, one hospital in a town will not have any impact – they needed to have a model that can be replicated across several towns and small cities so that they are able to cater to a larger spectrum of the underserved population. They also decided to focus on primary and secondary healthcare and not on tertiary healthcare. Even though tertiary healthcare is the most profitable segment, it accounted for only 10% of total volume in India, with primary and secondary healthcare accounting for 60% and 30% respectively. This demand supply mismatch in the Indian healthcare system is depicted in Figure 1 below. Moreover, by not catering to tertiary care they were able to de-risk their employment model, since the availability of specialist doctors needed for running a tertiary care hospital was far less compared to doctors needed for primary and secondary care.

Figure 1: INDIA'S HEALTHCARE SYSTEM IS URBAN CENTRIC [1]



In those days, it was difficult to raise money in India for healthcare ventures. While investors were willing to fund business ventures related to information technology, startup hospitals were not considered worthwhile ventures. Therefore, Ashwin and Veerendra made emotional appeals to friends and relatives, many of who were from small towns and villages, for funding their venture. They were able to raise about US$150,000 from such angel investors and Vaatsalya was setup as a private limited company in November 2004. In February 2005, the first of the Vaatsalya hospitals was opened in Hubli.

Table 1: Vaatsalya's Financial Performance

	05-06	06-07	07-08	2012*
OUTREACH	9361	17,279	42,300	2,000,000
REVENUE	2.4	4.5	20	1379
OPERATING EXPENSES	5.1	7.4	40	663
PROFITS	-3.4	-4.3	-20	479

1. Revenue figures are in INR Million. INR 50 ~ 1.0 US$
2. (*)2012 figures are estimates

Source: Presentation available on Vaatsalya's website

Subsequently, in middle of 2005, Aavishkaar India Micro Venture Capital Fund decided to invest an additional US$150,000 for two more facilities in Gadag and Karwar. *"We've been investing in rural businesses for 8-9 years and Vaatsalya offered a compelling business proposition. It was a real initiative and I don't think very many initiatives like this exist in India,"* Vineet Rai, CEO of Aavishkaar India pointed out. In April 2008, Vaatsalya obtained its second round of funding, US$1.5 million, from Aavishkaar and Seedfund, another venture fund, to rollout ten more hospitals within a year. *"They were not profitable when they came to us. But we liked the price point that they were addressing and decided to fund them to test the model,"* says Anand Lunia, CFO of Seedfund.[4] In May 2009, Vaatsalya obtained funding of US$4.2 million from Luxemburg-based Oasis Fund. *"In terms of innovation, scalability and management strength, the company and the business model are right up there"*, says Eric Berkowitz, Investment Executive, Bamboo Finance, which promotes Oasis Fund.[5] Table 2 below provides Vaatsalya's source of funds.

Table 2: Source of Funds

EQUITY		**INR (Million)**	**US$**
	Oasis Capital	190	4,200,000
	Seedfund	50	1,020,000
	Aavishkaar	27.2	597,000
	Angel Investors	7.6	167,000
DEBT			
	State Bank of India	2.5	55,000

Source: Company Documents

[4] Quoted in Outlook, July 11th, 2009, "Low Cost Cures"
[5] Ibid

Today, 40% of Vaatsalya's equity comes from institutional investors who expect financial returns from their investments in the long run. Therefore, almost since its inception, the founders of Vaatsalya have been focused on making their venture commercially viable and profitable, even while the purpose of Vaatsalya's existence has been to address the unmet healthcare needs of a largely impoverished population. Vaatsalya's hospitals in Gadag and Hubli today are profitable and the founders acknowledge that support from strategic investors such as Aavishkaar and Oasis have been able to reorient Vaatsalya from a social organization to a social enterprise that can balance the social objective with financial viability. Table 1 gives financial performance of Vaatsalya. *"We have found that there is capacity to pay, provided you offer the right services,"* says Ashwin.

HOSPITAL OPERATIONS

Most of Vaatsalya hospitals cater to the four basic specializations of Gynaecology, Paediatrics, General Surgery and General Medicine, which enable them to address about 70% of the needs of the local community.[6] Below, Table 3 explains the various specialties addressed by Vaatsalya hospitals.

Table 3: Vaatsalya Hospital Data (as on 1st October, 2009)

Hospital	Hubli	Gadag	Bijapur	Mandya	Raichur	Hassan	Mysore	Gulbarga	Shimoga
Launched in	Feb 05	Jun 05	Sep 08	Feb 09	Apr 09	Apr 09	Jul 09	Aug 09	Sep 09
No. of full time doctors	3	2	7	4	1	4	4	4	4
No. of external doctors	12	5	14	20	11	10	64	0	0
Total no. of employees	42	48	120	73	27	58	112	58	54
Number of beds	15	25	43	72	18	48	58	63	84
No. of Star Specialties	10	3	2	3	1	3	5		3
No. of other services		3	7	5	4	1	15		2

Note: Star Specialties comprise Gynaecology, Paediatrics, General Surgery, General Medicine, Nephrology, Paediatric Surgery, Neonatology, Anaesthesia, Urology and Orthopaedics. Other Services comprise some of the above and ENT, Plastic Surgery, Physiotherapy, Urosurgery, Oncology, Angiography. Start Specialties and Other Services together contribute 80% of the hospital revenue.

The exact operating model of Vaatsalya hospitals in terms of its size, location and type of doctors was not apparent to Veerendra and Ashwin at the outset. They experimented with three different models at Gadag, Hubli and Karwar. The hospital at Gadag had 20 beds and offered a comprehensive range of healthcare services in the primary and secondary segment;

[6] Approximately 90% of healthcare needs are in the primary and secondary segment, out of which most major ailments are addressed by Vaatsalya hospitals.

Karwar was a 'Clinic' where patients were provided treatment without any provision for admissions[7] and Hubli was designed as a 'Day Care' with additional facilities for minor surgeries and admission of patients for observation.

While the hospital at Hubli had ten beds, patients could be admitted only during the day and there was no provision for admitting patients overnight. The initial plan was to create a 'hub and spoke' model, where a full service hospital such as the one at Gadag will act as a hub to the smaller units such as those at Karwar and Hubli, which can provide primary care and shift patients to the hub when there is need for secondary care. The 'hubs' will not only be larger, but will provide additional specialized services such as Dialysis, Intensive Care Units, Diabetology and Neurosurgery. Services that are provided at the hubs are essential but not viable to be provided at the spokes because of low demand. Therefore such services need to be pooled. Dr. Renganathan, Vice President of Alliances at Vaatsalya said that "*Most healthcare outfits have this model in one form or another. Hub will be a central large hospital with facilities for providing advanced medical care and the spoke will be either smaller hospitals or clinics mainly considered as feeder units. Our earlier plan was to create several spokes for each of our hub hospitals thereby creating one small network of 'hub and spoke' at a time. However through experience we found it is much easier to build the hubs first. That is where we are focusing now, rather than building the smaller networks of hub and spoke"*.

After experimenting with several sizes, Vaatsalya settled on a 50-bed hospital as most suitable size for the kind of places where they operate from. Larger size hospitals need to have super specialties, which is unsuitable for Vaatsalya, given the dearth of such specialist doctors in small towns and cities. A hospital with less than 50 beds was found to be inadequate to differentiate the hospital from small clinics and government health centres that already existed in similar localities. Moreover, it is usually difficult to attract good doctors at lower scale and scope of operations.

A typical Vaatsalya hospital has three or four full-time specialists and total staff strength ranging between 60 and 100, including nurses, matrons, administrator and social workers. Vaatsalya hospitals also use the services of a large number of external doctors depending on the local demand and supply conditions. Table 3 provides details of Vaatsalya hospitals in terms of staff composition and other physical parameters. Apart from surgical suite, a basic diagnostic laboratory and intensive care facility, each of the hospitals have a pharmacy attached to them. Vaatsalya charges INR 100-300[8] (US$2.20-6.60) per bed per night, while consultancy fees range from INR 25-100 (US$0.55 – US$2.20). These prices are 15% to 20% of what an average hospital would be charging its patients in an urban hospital. The medicines, however, are sold at market price, since Vaatsalya has no control over price of medicines. Vaatsalya doctors prefer to prescribe branded generic medicine to avoid any chance of exposing their patients to spurious or adulterated medicines that are very common in small cities and towns in India.

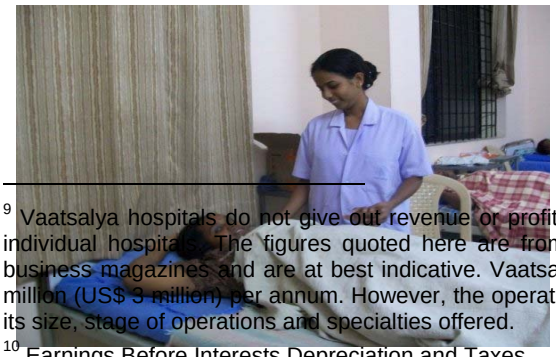
[7] A 'Clinic' is like an OPD (Outpatient Department) of a regular hospital.
[8] Currency exchange: US$1 equals INR 50.

Vaatsalya hospitals are setup and run to minimize non-core expenditure and provide 'no frill' service. While the setup costs are between INR 10-20 million (US$220,000 and US$439,000), operating costs are about INR 2 million (US$44,000) per month.[9] Vaatsalya minimizes capital expenditure by leasing its hospitals rather than buying real estate, thus taking advantage of lower prevailing rents in semi-urban locations. The hospitals do not own or operate ambulances and the equipment purchase is kept to the essentials such as X-Ray machines, ultra sound and ventilators. Bed categories are designed to accommodate equal number of general, private and critical care beds. For example, a typical 60 bed hospital will have 20 beds in the general ward, 20 in semi-private and private category and the rest in critical care (general, paediatric, surgical and neonatal ICUs). The interiors and furniture are spartan and most of the rooms do not have air conditioning. Operational expenses are minimized by not having complementary facilities such as a cafeteria. A common kitchen is provided to the patients' families to cook their food. Vaatsalya also saves on wages for non-clinical or support staffs who are hired locally. Moreover, Vaatsalya has centralized all its procurement that has resulted in cost savings of more than 20%. Bulk procurement and increased Vaatsalya's bargaining power vis-à-vis its suppliers who provide Vaatsalya with favourable terms since they perceive that Vaatsalya has a large potential for growth and it would be beneficial for them to be associated with Vaatsalya.

The no-frills approach implied that Vaatsalya hospitals did not invest in diagnostics and completely outsourced pharmacy. However, over the course of time, Vaatsalya realized certain advantages of owning the pharmacy themselves, especially in terms of having control over availability and quality of medicines and are now in the process of integrating pharmacy within their fold of operations. For diagnostics, they are getting into revenue sharing arrangements with local partners who will be making the capital investment in setting up diagnostic facilities on the premises of Vaatsalya hospitals.

At a steady state, with a capacity utilization of 80%, Vaatsalya hospitals earn annual revenues of INR 25 million (US$549,000). Close to 40% of their expenses are accounted for by compensation given to doctors, another 20% is for staff salaries. Vaatsalya hospitals spend 10% of their expenses on rent and another 10% on utilities such as electricity and water. After meeting all these expenses, Vaatsalya, on an average, earns about 15% to 18% in earnings before interest, depreciation, taxes and amortization (EBIDTA).[10]

A DOCTOR CENTRIC MODEL



(Photo credit:Vaatsalya)

Ashwin and Veerendra realized that they have to create a doctor centric model if they wanted to realize their objective of providing affordable healthcare in semi-urban and rural India, since availability

[9] Vaatsalya hospitals do not give out revenue or profitability figures either for the entire venture or for individual hospitals. The figures quoted here are from secondary sources such as newspapers and business magazines and are at best indicative. Vaatsalya today has an operating expense of INR 150 million (US$ 3 million) per annum. However, the operating expenses per hospital will vary depending on its size, stage of operations and specialties offered.

[10] Earnings Before Interests Depreciation and Taxes

of dedicated and high quality doctors was essential for sustaining their hospitals. *"It was only those doctors who have a deep connection with rural or semi-urban India who would be willing to establish their practices in these locations,"* says Veerendra. *"It is unrealistic to expect that someone who has been born and brought up in urban India will be willing to establish his practice in a small town – he might do it for a while, but it is unlikely that he will like to build his career there."* Therefore, Ashwin and Hiremath started to scout for doctors who originally belonged to small towns and villages, still had their roots there, but had gone to big cities and towns for their medical education. A few among them, they found out, were willing to go back to their places of origin because they liked the idea of settling down within their community. Since the supply of medical practitioners is very high in urban India, it takes a long time for a doctor to establish oneself or ones independent practice. Contrasted to that, a doctor can establish oneself and earn reputation a lot faster in a small town that is devoid of qualified medical practitioners. To attract such doctors, Ashwin and Veerendra decided to offer them a compensation that was 20% to 25% higher than the market rates prevailing in urban hospitals.[11] The fact that the cost of living in small towns is comparatively lower made the compensation even more attractive.

At Vaatsalya, doctors are also offered higher designations and positions of responsibility than what they would have had in urban hospitals. For example, while a doctor might become a consultant after about ten years of service in a private urban hospital, some of Vaatsalya doctors become consultants after five years of professional experience. At Vaatsalya hospitals, doctors also share greater managerial responsibilities and have significant autonomy in decision making. Vaatsalya makes conscious effort to maintain a flat hierarchy in the organization and retain the entrepreneurial spirit in each of their hospitals by keeping formalization to a minimum and allowing the doctors to be in charge of all operational matters. Strategic decisions, especially those that are going to impact the individual hospitals are taken consensually and senior management makes conscious effort to be in constant touch with every doctor to understand the challenges that they face and to have a firsthand feel of their aspirations.

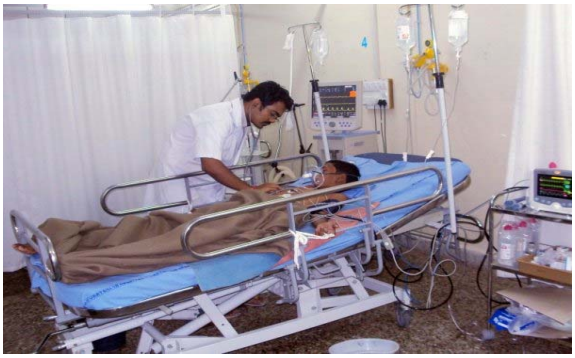
Vaatsalya hospitals are located in areas where there is a significant unmet demand for healthcare. Prior to setting up any hospital, a dedicated project team makes thorough analysis of potential locations to understand the quantity and quality of demand that exists in that region. While their understanding and analysis has evolved and has been refined over the years, today a new Vaatsalya hospital breaks even within a period of 12-18 months and has more than 80% capacity utilization in its steady state of operations. Such high demand implies that the average doctor at Vaatsalya hospitals get to treat a lot more patients and conduct many more procedures than what they would have done in an urban private hospital. This not only helps the doctors to develop their expertise rapidly but also gives them the satisfaction of being able to heal more number of patients, thereby creating greater impact through their profession. Thus, Vaatsalya is able to provide careers to its doctors that are financially rewarding, intellectually stimulating and professionally attractive because of the organization

[11] At Vaatsalya hospitals, the starting salary for doctors who have recently graduated with specializations is approximately INR 40,000 per month which in large cities is typically in the range of INR 25000-40000

culture and the impact that they can create. This is a significant factor that has led to the success and sustainability of their business model so far.

Every Vaatsalya hospital has specialist doctors who are full-time employees and are paid a fixed salary and incentive. They also have Resident Medical Officers, who are the duty doctors, in charge of running hospital operations. They are usually fresh graduates who gain experience at the hospitals before they go for specialization. Their third category of doctors are full time consultants whose primary place of practice is Vaatsalya and who work on a revenue share basis with Vaatsalya hospitals. Finally, Vaatsalya has visiting doctors, such as an ophthalmologist, whose specialist services are usually not needed by Vaatsalya on a full-time basis. Such a variety of relationship with local doctors not only gives Vaatsalya hospitals flexibility in adjusting to local demand and supply conditions, but also enables Vaatsalya to maintain a collaborative relationship with other healthcare service providers of the local community.

Vaatsalya realizes that it might be a challenge to retain some of their doctors within the fold of Vaatsalya hospitals in the long run. Once the doctors make a name for themselves there might be the temptation of establishing their independent practice. Ashwin reasons that one way of reducing this problem is by making their hospitals so good that it will create a barrier for any individual doctor to enter into the market. If their hospital is good in terms of its infrastructure and is able to attract a good team of medical practitioners and nursing and support staff, all their doctors will see greater value in being part of Vaatsalya hospital, rather than venturing out on their own. They are also thinking of offering doctors some stake in the organization by means of stock options.



(*Photo credit: Vaatsalya)*

Vaatsalya recruits nursing and other support staff locally. Even after paying them market rates[12], Vaatsalya saves considerably in the wage bill, compared to an average hospital in urban India. Since there are several nursing colleges in the state of Karnataka, there is usually no dearth of supply. However, retaining support staff sometimes becomes a challenge because some of them get attracted to corporate hospitals in urban areas. Moreover, since most of the fresh nursing recruits are young unmarried women, they sometimes move on to different towns and cities after marriage. However, even among the support staff, there is a tendency to settle down in towns and communities where they belong and given that Vaatsalya is the biggest name in such towns, it has not been too much of a problem to attract and retain them.

LONG TERM RELATIONSHIPS WITH PATIENTS AND LOCAL COMMUNITY

One of the important dimensions of Vaatsalya's operations is the long-term relationships that its doctors develop with the patients. Vaatsalya focuses on chronic diseases and chronic care patients prefer to stay with one doctor. In its initial days of operation, Vaatsalya found that patients were hesitant to visit its hospitals. This was partly because of their perception that a private hospital like Vaatsalya will be expensive. However, patients were also concerned that if they started getting treated at Vaatsalya, their relationship with local doctors, very often an unqualified practitioner, will be adversely impacted. They might not have the option of going back to them in case Vaatsalya closed down after some time. Therefore, it was important for Vaatsalya to get the confidence of the local community and they achieved this by creating an environment of trust and care in its hospitals.

Closely associated with an environment of trust and care is the transparency that Vaatsalya ensures in every aspect of its operations. Anecdotal evidence suggests that patients in private corporate hospitals sometimes have the feeling that they have been unduly charged for certain procedures or medicines, which they are unable to verify because of lack of transparency in billing. Ninety nine percent of Vaatsalya's customers are non-insured and therefore need to pay for their treatment in cash. Vaatsalya makes every element of the bill transparent such that there is no misapprehension on this count. Results of customer surveys[13] that all Vaatsalya hospitals routinely conduct indicate that patients appreciate the care that doctors and nurses take of them at Vaatsalya. The caring nature of doctors and nurses, as identified by the patients, is particularly a matter of joy for Vaatsalya, since that is a differentiator that they

[12] An entry level support or nursing staff is paid INR 3,400 per month and provided additional benefit such as insurance and education for children.

[13] Vaatsalya hospitals conduct telephonic surveys with all patients who were admitted and 10% of patients who were treated at its hospitals. Patients are asked questions on various dimensions such as efficiency, competence, care and price as well as their propensity to visit Vaatsalya hospitals again or refer Vaatsalya to their friends and relatives.

intend to develop vis-à-vis their competitors, especially other private corporate hospitals, which, despite their impressive infrastructure and richness of resources appear to be impersonal, often lacking the human touch.

Healthcare in rural and semi-urban India is often characterized by unholy nexus that exist between local practitioners, diagnostic laboratories, and pharmacists. Local doctors have a stranglehold over the patients because of the relationships that they develop over long periods. Many of them receive commissions for referrals to city hospitals and diagnostic laboratories, which can range between 20% and 25% of the bill value. The patients have little idea of such payback arrangements and often end up spending a lot of money in the process. However, because of the trust they have developed with the local doctor, it is difficult for them to realize how they are being exploited. Vaatsalya as a policy does not pay any referral fees and ensures that none of its doctors have any such arrangement with urban hospitals or diagnostic laboratories where they sometimes refer their patients. Close to 70% of local doctors refuse to get associated with Vaatsalya, once such zero tolerance policy is articulated. Local administrators at Vaatsalya hospitals closely monitor hospital operations to ensure that all their practices are above board. Apart from meeting its objective of being ethical in all practices, this policy has the benefit of significantly reducing overall price of the healthcare services that Vaatsalya provides.

SCALING UP

Vaatsalya has setup nine hospitals so far with seven of them in the past 15 months. Like every aspect of their operations, Vaatsalya has arrived at a nearly standardized model of setting up a new hospital. Based on their experience so far, Vaatsalya has learnt that for financial viability, it needs to open hospitals in cities that have at least a population of 200,000 to 300,000 and an additional catchment population of 150,000 from nearby villages and towns. While there is an expectation of rapid scaling from most of Vaatsalya's investors, Vaatsalya prefers to be conservative in their approach. Vaatsalya' s New Projects division that reports directly to Ashwin is in charge of setting up hospitals in new locations. This division is internally specialized in business development, infrastructure management and project management. Usually the business development team searches for and locates suitable doctors and sign agreements with them while the infrastructure team identifies suitable facilities and equipment. Once the physical and human resources have been identified, the task of project planning and execution is passed on to the project management team. Vaatsalya has put in place a launch plan for all its hospitals whereby several stakeholders are engaged with Vaatsalya from a month before the launch. Thus, the business development team invites every doctor from the local community for a dinner where they are taken on a tour of the facility, explained the various services that the new hospital is planning to offer, and how the local medical practitioners can work collaboratively with Vaatsalya. During the same period, Vaatsalya organizes a screening camp for the local population with the purpose of introducing Vaatsalya doctors and facilities to the local community. All these events are given due publicity through local press and radio shows.

Vaatsalya hospitals are either built from scratch (Greenfield) or acquired. Acquired hospitals take about 45 days to start operations and about eight months to break even, since customers

and doctors are already available. Most of the employees in acquired hospitals are retained and trained and Vaatsalya ensures that the price of treatment for the patient does not increase post acquisition, which is often an apprehension among their patients. Typically hospitals that have space and opportunity to grow are suitable for acquisitions. This enables Vaatsalya to introduce more specialties that can give it a competitive edge. Greenfield hospitals take 90 days to get commissioned and subsequently 12-15 months to break even, the larger time accounting for identifying and recruiting doctors, support staff as well as earning the confidence of local communities. Greenfield hospitals offer at least one exclusive service in order to differentiate themselves from the rest of the hospitals in the area. Choice of location is determined by willingness of doctors to relocate to such places and its connectivity to surrounding areas. Proximity to medical colleges that can offer complementary services such as availability of a blood bank is also an important determinant. While relocating, doctors consider the possibilities of putting their children in good schools as well as whether their spouses can be employed. Therefore, small towns that have high growth potential, such as Gadag, are best suited for locating Greenfield hospitals. Vaatsalya is considering the possibility of partnering with some government hospitals, which usually are situated in prime locations, even though other resources in government hospitals will need to be improved significantly to be at par with Vaatsalya quality standards.

Doctors at Vaatsalya are recruited through different methods that include advertisements, referrals, and employment databases. The business development team also evaluates local practitioners to understand their suitability. While referrals have so far been the most effective method, of late there has been an increase in direct applications from doctors seeking opportunities in Vaatsalya. In the past few months, Vaatsalya has recruited three such doctors who had directly applied with the intension of getting associated with Vaatsalya.

While Vaatsalya seems to have mastered the physical aspects of growth well, the sociological dimension of growth remains a critical challenge. Good quality doctors need to be recruited and acculturated with the values of Vaatsalya, which is difficult when scaling happens fast and in a decentralized manner. Today, acculturation is achieved by ensuring that the new recruits spend enough time with the core team members to understand, appreciate and imbibe their philosophy. *"Our hospital network is proud to have attracted highly inspired doctors from across India, who have shown a keen desire and passion to work in our hospitals, particularly doctors who were born and grew up in semi-urban India. Our strategy is to tap into the entrepreneurial spirit of such doctors and work with them on expanding our network,"* says Veerendra. One of the challenges of building and running an organization with a young set of doctors is a relatively lower level of professional maturity. To compensate for that, Veerendra, who is in charge of overall operations, keeps in touch with the new recruits personally and ensures that there is enough handholding happening with the newcomers at the individual locations. New recruits are sent for conferences and to attend training programmes such that they get adequate exposure to professional events that help them to build confidence. Vaatsalya is also planning to have once-a-month meetings between all their doctors for exchange of ideas and best practices that also serve as an orientation platform for the newly recruited doctors.

The Business and its Relationships

Vaatsalya hospitals are setup to be run as operationally and financially independent entities. Because of large unmet demand for healthcare services in rural and semi-urban India, Vaatsalya has been able create a viable business model without much support or interdependencies with other organizations or institutions. Till date, their biggest challenge has been getting adequate supply of medical practitioners – doctors, technicians, nurses and other medical support staff in the relatively remote locations where these hospitals have been setup. While they have been able to attract and retain the practitioners through a mix of attractive compensation and career growth opportunities, Vaatsalya needed to inculcate friendly relationships with the local community of medical practitioners primarily because of two reasons. First, the local population had faith and long-term relationships with the local medical practitioners. Therefore, if Vaatsalya antagonized the local practitioners, it would have been difficult for them to attract patients to their hospitals because of apprehensions that patients from semi-urban and rural areas typically have about private hospitals. Second, since the operating model of Vaatsalya cannot support a large number of full-time resident doctors, Vaatsalya gets into a variety of partnerships with local medical practitioners. Some of them act as part-time consultants for specializations not available with Vaatsalya such as dentistry while others provide the first level of contact for the patients in remote locations and after assessment, refer the patients to the nearest Vaatsalya hospitals for further treatment, if needed.

Vaatsalya hospitals also depend on other institutions and hospitals for complementary services such as blood bank and diagnostic laboratories. Thus, most of the Vaatsalya hospitals are located close to medical colleges, which are equipped with blood banks and diagnostic laboratories. They are also getting into revenue sharing arrangements with local entrepreneurs who are willing to make capital investments in setting up diagnostic facilities on premises of Vaatsalya hospitals.

As the subsequent section on growth strategy and future outlook would indicate, Vaatsalya is exploring a variety of relationships with various organizations and institutions to extend the reach of their services. This includes the government, micro-health insurance agencies, as well as foundations and charitable trusts, all of who can provide financial assistance to Vaatsalya's poor patients who cannot pay for its services. Vaatsalya is also dependent on medical technology companies to innovate and provide medical equipment at lower prices that would enable Vaatsalya to bring down costs of procedures such as dialysis, which are still out of reach for most of its poor patients.

Results Created by the Business

Being a healthcare service provider, the best indicator of Vaatsalya's results is the number of patients that it has treated. Apart from curing patients and delivering them higher quality of life, Vaatsalya's model ensures that the total expenditure of its patients is minimized substantially since they do not have to travel to far-off urban locations for their treatment.

Timely interventions at primary and secondary levels avoid complications and very often obviate the need for tertiary care – this not only reduces the expenses for the patient but also brings down the cost of healthcare services at a macro-economic level. Vaatsalya's investments in preventive healthcare services also have similar effects of reducing the total cost of healthcare.

In its past four and a half years of operation, Vaatsalya has setup nine hospitals across nine districts in the state of Karnataka[14] , managed 450+ beds and has and treated close to 175,000 patients, making it the largest chain of its kind in semi-urban India. In the next few years, they intend to setup 50 more hospitals spanning across several Indian states, reach out to more than a million patients a year, which would in turn indirectly benefit 4-5 million of the Indian population living in semi-urban and rural areas. The positive impact of Vaatsalya's inclusive healthcare business has been well recognized at national and international levels resulting in Vaatsalya receiving the Sankalp Award 2009, winning the BiD challenge India in 2007 and the LRAMP award 2008 in the enterprise category.[15]

Growth Strategy and Future Outlook

Vaatsalya's growth challenges are along three dimensions – that of extending its their portfolio of services, of going deeper into the hinterland and of providing services to the bottom 30% of the economic strata.

When it comes to extending its portfolio, Vaatsalya has to grapple with challenges of making such services affordable for the masses even while maintaining their financial viability. Realizing that many of their patients have to travel hundreds of kilometres twice a month for dialysis, some of Vaatsalya hospitals have now added facilities for dialysis. Dialyses equipments are expensive to setup. A reverse osmosis plant for four dialysis beds costs INR 600,000. Vaatsalya charges INR 900 per dialysis of which INR 450 is spent on reagents and equipment allocation costs, while INR 450 accounts for operational costs. On top of that sometimes Vaatsalya needs to buy water worth INR 5000 per day because they operate in some of the very arid zones of Karnataka where water supply is scarce. Such contingent costs cannot be passed on to its patients, especially given their economic status. However, even at INR 900, its price point is beyond what can be afforded by poor patients. Sooner or later, Vaatsalya expects the costs for dialysis to come down, partly because of technological advancement and partly because of scale economies that they would get from higher volumes. However, price is not the only constraint when it comes to dialysis – there is an acute shortage of nephrologists all over the country. Vaatsalya estimates that the whole of India possibly has about 600 nephrologists and only three of them are available in the cities where Vaatsalya operates, all of who are employed by Vaatsalya. Likewise, there is shortage of dialysis technicians. This puts constraint on the total volume that each hospital can handle.

[14] Bijapur, Gadag, Gulbarga, Hassan, Hubli, Mandya, Raichur, Shimoga, Mysore. The corporate office is in Bangalore.

[15] See: BiD challenge India, 2007, http://www.bidnetwork.org/page/44240/en;

Vaatsalya's second set of challenges lie in extending the reach of the individual hospitals deeper to the hinterland. In Gadag, a small town in North West Karnataka, Vaatsalya established four outreach centres linked to the main hospital. However, the outreach centres could not be sustained because the sole gynaecologist in the main hospital could not handle all the cases that were brought as reference. Moreover, Vaatsalya found it difficult to retain qualified practitioners at the outreach centres because most of them wanted to be part of the main hospital, rather than working at the outreach centre. Therefore, today Vaatsalya is exploring the option of partnering with local practitioners in order to extend the reach of their hospitals. However, finding local partners who are willing to accept Vaatsalya values in terms of transparency and honesty has been difficult.

Vaatsalya's third and possibly the biggest challenge lies in extending healthcare to patients at the lowest economic strata – the bottom 30%. A study by an external agency indicated that Vaatsalya caters typically to a population whose monthly income ranges from INR 5,000 to INR 15,000 (from US$ 100-300. Those that are below this level are unable to afford Vaatsalya's services, even if Vaatsalya operates at cost. Among these patients, there are those that can afford Vaatsalya prices, but have difficulty paying by cash for their treatment, given the incremental nature of their income. Therefore, there is need for a financing model that can effectively bridge the gap between their income-led cash inflows and one-time lumpy cash outflow that is typical in case of healthcare expenses. Microfinance institutions usually provide finance for income generating activities but not for healthcare. Models of micro-health insurance are still evolving and are mostly unavailable in the areas where Vaatsalya operates. As a result, today there are not many options available before Vaatsalya to cater to the healthcare needs of the bottom 30%.

One of the available options is enter into partnership with government hospitals and healthcare programmes. For example, the Indian government has recently introduced Rashtriya Swastha Bima Yojana (RSBY), a national health insurance scheme for below-poverty-line (BPL) citizens where for a small registration fee of less than US$1, families are entitled to INR 30,000 (~about US$600 worth of hospital care per year. The scheme is implemented by leveraging technology, where families will be provided smart cards that can be used to reimburse their expenses at the hospitals. The hospitals will be paid in tranches of INR 300,000 in advance by the government. This scheme is intended to involve private hospitals as well as private insurance companies to deliver healthcare to BPL citizens. The Indian government also spends money in providing subsidized healthcare to the poor through other programmes, such as INR 3,000 given for delivery to pregnant women who are poor. However, these schemes have a high degree of leakage and are largely ineffective because they are delivered through public hospitals. If government provided the same kind of subsidies to hospitals like Vaatsalya, they would be able to implement such government-aided healthcare programmes much more effectively. The Government of India has recently introduced a scheme of providing unique identification numbers to each of its citizens. Lack of identity proof often results in harassment and denial of services to the poor and marginalized. It is envisaged that a unique identity number will improve the delivery mechanism of the government's pro-poor schemes and programmes, by ensuring enhanced access to government services for every intended beneficiary and by preventing leakages. It

would also facilitate the implementation of private-public partnership in services such as RSBY by taking away the burden of identity verification from service providers such as Vaatsalya, who can then focus only on their expertise of delivering healthcare.

Another way in which Vaatsalya plans to address the healthcare needs of the economically impoverished, who cannot afford their services, is by means of launching programmes aimed at preventive healthcare. Since such programmes will not be commercially viable, Vaatsalya intends to raise money from charitable trusts or find other means of finance such as renting out spaces for advertisements. Dr. Renganathan, VP of alliances at Vaatsalya, who is looking after these programmes says, *"A significant cause of many ailments among the poor is lack of knowledge. For example, lack of awareness about right nutrition makes them vulnerable to diseases such as diabetes and anaemia. In many villages pregnant women are discouraged from taking multi-vitamin tablets so that their babies do not grow big because they think big babies would make their delivery difficult."* Vaatsalya has planned to create content that would teach people in these towns and villages about preventive healthcare and when to seek help of doctors. They intend to disseminate such information by using mobile vans. The total expense of such operations is expected to be funded by advertisements that can be displayed on the mobile vans.

Says Ashwin, *"Anytime we see a repeated pattern of ailment, we try to ascertain the cause. For example, there is a high incidence of cerebral palsy in Gadag. When we investigated the cause, we found that there is high incidence of anaemia among the population, which leads to difficult childbirth. All of this can be traced to the lack of or poor anti-natal care available in these areas. Therefore Dr. Renganathan wrote a proposal and we got our initiative funded through the Deshpande Foundation."* With the funding, Vaatsalya has launched a pilot programme in four regions where, in collaboration with local general practitioners (GPs), they would setup rural birth centres. These birth centres would screen cases of pregnancy from an early stage and decide on the next course of treatment whenever there is a necessity. The local GPs would provide treatment to cases that are non-complicated but need medical attention while those that are complicated will be referred to Vaatsalya hospitals.

Vaatsalya is planning to setup a testing laboratory for checking the fluoride content in water in areas where there is high incidence of fluorosis, characterized by blackening, cracking and pitting of the teeth of patients. Likewise, they are exploring means of creating a database of blood banks by leveraging technology such as Google maps. By means of such database and toll-free number, blood can be located quickly from the nearest blood bank. This becomes very important in situations of post delivery haemorrhage. *"These activities"*, continues Ashwin, *"are unlikely to generate revenues or be profitable. Therefore we will fund them through our foundation or take grants from other foundations. Since we understand the context, we are in the best position to address these needs. These are our CSR activities, ways of giving back to the society."*

In many ways, Vaatsalya is a pioneer in the Indian healthcare sector. By means of innovations on multiple fronts it has been able to bring good quality affordable healthcare to semi-urban and rural India. Vaatsalya has established a model that is financially viable and scalable. The

founders believe that if they are able to attract a dedicated set of medical practitioners as they have done so far, they will be able to setup 50 more hospitals in the next few years that would span across several Indian states, reach out to more than a million patients a year, which would in turn benefit four to five million of the Indian population living in semi-urban and rural India. However, their services are still outside the reach of the poor (earning less than US$1 per day) and the vulnerable (earning between US$1 and US$2 per day), comprising 300-400 million of the Indian population and from Vaatsalya's experience, there seems to be no way of addressing their healthcare needs through a business model that is financially viable. While Vaatsalya is addressing this segment at present through charitable funds, the founders are hopeful that partnership with the government or with other private institutions providing complementary services will very soon enable Vaatsalya to bridge this gap.

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