

# [Apollo hospitals – first-world health care at emerging-market prices assignment](https://assignbuster.com/apollo-hospitals-first-world-health-care-at-emerging-market-prices-assignment/)

Felix Oberholzer-Gee Tarun KhanNa Carin-Isabel Knoop Apollo Hospitals – First-World Health Care at Emerging-Market Prices If we do this right, we can heal the world. — Dr. Prathap C. Reddy, founder and Executive Chairman of Apollo Hospitals Group “ I am happy,” declared Dr. Prathap C. Reddy, broadly smiling behind his desk in a modest office that had served Apollo’s Executive Chairman since the early days of the hospital group. “ The first part of the game is over. I have shown the world that we can provide first-class health care in India. ” Apollo’s record was impressive, indeed.

Relying on more than a thousand doctors and a staff of 10, 000, Apollo hospitals had come to rival the best health care institutions on the globe. Apollo surgeons had performed over 50, 000 heart operations, with a success rate of 98. 5%. Of 138 bone marrow transplants, 87% had been successful. And 95% of the 6, 000 kidney transplants performed by Apollo physicians had positive outcomes. [i] Only Cleveland Hospital and the famous Mayo Clinic surpassed Apollo’s performance. Was Dr. Reddy, 72, now prepared to lean back and enjoy his success? Not a chance. I want to bring Apollo health care to a large cross-section of the Indian population – and to the world,” explained Dr. Reddy. “ My vision is to develop the large pool of talent in India. Health care could be the single biggest employer in the country and a resource to the world. Patients will come from everywhere to India for advanced health care. We enjoy a huge cost advantage. But more importantly, our culture is very compassionate. India is now in a position to give patients the best of the East and the West – compassion and advanced medical technology. ” To put his vision into practice, Dr.

Reddy had summoned his three daughters who served with him on Apollo’s board. “ I challenged them,” he explained, “ I asked them to rethink the strategy of the group. What do you want Apollo to be five years from now? Develop a strategy for our future. ” Dr. Reddy gave his daughters Preetha, Suneeta and Sangita a month for the task. Health Care in India In the past two decades, India had made substantial progress in improving public health. Small pox and the guinea worm were completely eradicated, and health care specialists expected polio and leprosy, afflictions of millions as recently as 1980, to be eliminated in the near future.

Yet, the challenges for public health remained enormous. Both infant mortality and morbidity were substantially higher in India than in other developing countries. [ii] Indians spent 5. 2% of GDP on health care – less than South Koreans (6. 7%) and Brazilians (6. 5%) but more than the Chinese (2. 7%). However, most of this spending (64%) came directly out of people’s pockets. Only about 15% of the Indian population was covered by some type of insurance. [iii] As a result, access to health care remained out of reach for many. Moreover, the quality of government-provided care, while more affordable than private services, was often wanting.

Dr. Atul Gawande, a surgeon at Boston’s Brigham and Women’s Hospital, described a visit to a public hospital in Nanded, 400 miles from Mumbai: The examining rooms at Nanded are much like those I found elsewhere in India. They are ovens in the heat of the summer. The paint flakes off the walls in jagged strips. The sinks are stained brown and the faucets don’t work… Each room has a crowd of four, six, sometimes eight patients jockeying for attention… I asked people everywhere what they did when they had a serious health problem.

All of them from villagers to the government doctors themselves told me that, if there was any way they could, they went to a private hospital, though the government does not pay for it… Patients borrow from the family, sell their possessions, do whatever they can to pay for care in private hospitals, which have no waiting lists and are usually clean and well supplied… Even the prime minister does not go to his government’s hospitals. [iv] Spending patterns reflected these concerns with the quality of publicly provided care.

For example, private, for-profit hospitals captured more than 30% of total health care expenditure. The importance of for-profit players in India stood in marked contrast to many other countries, where health care was dominated either by nonprofit or by governmental institutions. Exhibit 1 compares the value chain of the health care industry in India and in the United States. While Health Maintenance Organizations (HMOs) played a major role in granting access to health care in the United States, India lacked organizations of this type.

For the minority of Indians who were covered by insurance, Third Party Administrators (TPAs) negotiated prices for access to network clinics with the large corporations who offered health benefits to their employees. TPAs also processed medical bills on behalf of their network clinics, but they did not offer insurance. The financial risk of providing health care remained with the corporations. Of course, the industry organization shown in Exhibit 1 was not set in stone. Given rapid technological progress and rising cost pressures, the roles of players in the value chain and the boundaries of companies were in constant flux in all countries.

For instance, in the 1990s, hospitals in the United States integrated horizontally in a wave of hospital mergers and strategic alliances with other hospitals. In an attempt to create Integrated Delivery Networks (IDNs), U. S. hospitals also integrated toward the patient. They acquired the practices of primary care physicians, entered into alliances with physicians in physician-hospital organizations (PHOs) and developed HMOs. Horizontal and vertical integration, however, proved financially disastrous for the U. S. industry. In fact, the more a hospital invested in integration, the sharper was the financial decline that it suffered. v] As a result of these negative experiences, U. S. hospitals started dissolving their PHOs and abandoning their HMO products in the late 1990s. The Apollo Group Prathap C. Reddy was born and raised in Chennai in India’s southernmost state of Tamil Nadu. He practiced and taught medicine for nearly 15 years in the United States at various hospitals, including the Massachusetts General Hospital in Boston. An accomplished cardiologist, Dr. Reddy returned to India in 1970 where he opened a booming primary care practice that eventually allowed him to invest in a cardiology lab and clinic.

When he found himself having to refer more complex cases abroad for treatment, a solution that was prohibitively expensive for his less affluent clientele, he considered opening a private, state of the art, multiple-specialties facility. Overcoming myriad regulatory and financial challenges, Dr. Reddy opened India’s first for-profit hospital in 1983. Twenty years later, the Apollo Hospitals Group emerged as the single largest private health care group in Asia, managing 33 hospitals with 6, 400 beds and treating patients from more than 50 countries.

In India, Apollo’s share in the tertiary care market stood at 14%. [1] This corresponded to a 35% share in the market for private tertiary care. The Apollo Group was active in many parts of the health care value chain. Apollo Hospitals Enterprise Limited (AHEL), the publicly listed holding company, owned and operated hospitals in India and abroad. The hospitals specialized in providing upmarket tertiary care. AHEL also ran India’s largest network of pharmacies and offered international consulting services.

AHEL had five subsidiaries which provided a wide array of health care services ranging from technology solutions and medical billing (Apollo Health Street Ltd. ) to in-home care that allowed patients with medical needs to continue living at home (Unique Home Health Care Ltd). Of special strategic importance was Apollo Health and Lifestyle Ltd. (AHLL), a wholly owned subsidiary, which had started franchising primary care clinics. Apollo also operated several nursing schools and the Global Nursing Program (GNP) which trained and placed nurses in the United States, Great Britain and in countries throughout the Middle East and Asia.

In the GNP, nurses received clinical training in most therapeutic areas. Apollo also offered non-medical training ranging from computer skills to grooming as well as cultural and language classes. In part, the GNP was a response to the high turnover in Apollo’s nursing staff (over 25%). Apollo nurses were actively wooed for their skill level and reputation and many left Apollo hospitals for jobs abroad. With attrition seeming inevitable, Apollo’s management decided to capitalize on the large shortage of nurses in the developed world by creating the GNP.

In the United States alone, 110, 000 nurse positions were vacant at the end of 2004. As a result of the shortage, wages rose fairly quickly in the industry, from $49, 634 in 2003 to $54, 574 in 2004 (see Exhibit 2). More than 25% of the nurses working in the United States reported earning at least $65, 000. [vi] Higher wages lured many retired nurses back to work (The number of licensed nurses not employed in health care is shown in Exhibit 3). Nurses over age 50 accounted for 63% of employment growth (see Exhibit 4 for the age distribution in the profession. All in all, U. S. hospitals hired more than 200, 000 nurses since 2001, the largest increase in nurse employment since the government launched the Medicare program in 1965. The federal Bureau of Health Professions projected that the demand for registered nurses will grow to 2. 8 million by 2020, up from two million in 2000. [vii] Apollo Hospitals Enterprise Ltd. (AHEL) While the quality of care at Apollo’s hospitals was high, the group specialized in offering advanced procedures at prices that were surprisingly low by global standards.

A liver transplant that cost $300, 000 in the United States was $45, 000 at an Apollo hospital. Similar price differences existed for cardiac surgery ($30, 000 vs. $6, 000), orthopedic surgery ($20, 000 vs. $4, 500) and bone marrow transplants ($250, 000 vs. $30, 000. )[viii] There were several reasons for these remarkable price differences, including personnel cost, the high equipment utilization rates in Apollo’s hospitals and differences in margins (see Exhibit 5). Apollo’s cost advantage was less significant compared to other developing countries (see Exhibit 6).

Surgeons and other physicians at Apollo were employed on a fee-for-service basis. A cardiac surgeon typically earned about $300, 000 a year, compared to a median wage of $417, 000 in the United States. [ix] In a fee-for-service model, the corporate entity with which the doctor was affiliated took responsibility for the patient. When complications arose, Apollo seemed to worry more about reputational damage than legal liabilities. “ Most other hospitals have localized problems,” an Apollo manager explained. “ But if something happens to an Apollo patient in Chennai, it affects Apollo everywhere.

If something happens in India, it will affect Apollo in Sri Lanka. ” About two thirds of the Apollo physicians were Indians who had returned home from careers in the United States and Great Britain. (In the United States alone, there were almost 40, 000 physicians of Indian origin, about 5% of all physicians. Indians made up roughly 20 percent of the foreign-trained doctors in the United States. ) “ We have a database with 2, 000 Indian doctors who practice abroad, and we advertise job openings in international medical journals. At this point in time, Apollo is quite competitive.

Our technology is similar to the technology at other leading institutions, and we have the advantage that people like to live in their own culture,” explained Dr. B. Premkumar, Senior Vice President Medical, who oversaw Apollo’s worldwide recruiting efforts. The Colombo Hospital Apollo’s leadership encouraged managers to seek out regional and global business opportunities. Among the international successes was the establishment of a hospital in Colombo, Sri Lanka, a 350-bed super specialty hospital. “ The venture in Colombo is an amazing startup that reached a dominant position right away,” said K.

Padmanabhan, the Apollo Group President, who was responsible for strategic planning. Sri Lanka was our first big investment outside of India. We looked there since we had a large number of patients from Sri Lanka. Six or seven years ago, we would not have thought that we’d invest. We thought we’d facilitate investment and manage operations. We tried to do that for two or three years, but we failed because no one else was willing to invest given the conflicts between the various factions in the country. [2] So we decided to serve as the primary investor.

Along with Apollo, which held a 47% share in the project, the International Finance Corporation (IFC) took a small equity stake. Local investors held 35%. Padmanabhan felt that few health care companies would have been able to surmount the issues that plagued the project after its opening. He explained: When we started, we found that Sri Lankan patients were unwilling to accept Sri Lankan doctors. Since this was Apollo from India, why were there doctors from Sri Lanka? So we had to send a large number of doctors. We could not get qualified nurses either. Six were from Sri Lanka, 250 from India.

Then came the interpretation services for Sinhalese patients. Initially, we found much more acceptance with Muslims who were relatively well off and were used to coming to India for treatment. The Tamils were comfortable. But after five to six months we got a good share of Sinhalese patients. They might have been frightened that the hospital was too expensive, with its granite floors, the large driveway and the helipad on the roof. Now we’re seen more or less as a local hospital and a premium health care provider. The Colombo facility allowed patients who had historically gone to Thailand or Australia for treatment to remain in Sri Lanka.

The project also led to new business opportunities. “ Sri Lanka gave us confidence,” Padmanabhan explained. For instance, Apollo took an equity stake in a major project in Bangladesh. Apollo’s managers had also started studying a project in Bucharest, Romania. Pharmacy Network The Hospital Division was responsible for 55% of AHEL’s revenue and 50% of its profits. 43% of revenue (40% of profits) came from the Pharmacy Division. Initially, Apollo had added pharmacies to its own hospitals to benefit Apollo patients. By 2005, however, the group operated the largest pharmacy network in India with 189 outlets. 0% of these were standalone pharmacies that were not connected to an Apollo hospital. Management expected much of the future growth to be in standalone outlets, which currently contributed about 30% of total pharmacy revenue. In a market where the quality of medication varied substantially, consumers valued Apollo’s reputation for quality. Suneeta Reddy, Director of Finance, explained: “ Why is the Apollo pharmacy better than any other? Because we have a regulated formulary, and there are no spurious drugs. Apollo is a brand name that consumers can trust. “

International Consulting & Projects The Apollo consultancy arm took on two types of projects. The first, “ transition management,” helped clients design and build facilities. With the second, “ operations management,” Apollo actually ran facilities, often staffing the senior management team and, if required, the head of nursing. The team typically recruited and trained the majority of the hospital staff. In 2004, international assignments accounted for 33% of consulting revenues, a figure that was expected to rise to 50% in the next few years. International projects were varied.

They included a feasibility study for a 100 bed multi-specialty hospital in Accra (Ghana), the recruitment and training of nurses for a private hospital group in London, a build-operate-transfer (BOT) agreement for a hospital in Dubai, and the operation management for a 330 bed tertiary care hospital in Dhaka (Bangladesh). The consulting team was planning several major projects including an operations review of a large West African health care group and the equipment and management of the radiology services in a 600-bed ministry of Health Hospital in the Middle East.

Apollo won many of its international contracts through competitive bids. “ We bid for the super specialty hospital commissioned by Petronas, Malaysia’s oil and gas giant, in competition with a who’s who of health care and we won it,” Dr. Reddy noted. “ One of our advantages is that we build hospitals at much lower cost then our competitors. We build a 300, 000 square foot facility with 350 beds at a cost of $30 million, perhaps $35 million. The design of an Australian company would probably cost twice as much,” explained John Punnoose, head of Apollo’s consulting division. One eason for the cost differences were the more limited space requirements. “ Our designs require 800 to 1000 square feet per bed without compromising on the services and the delivery of care. In a typical Western design, 1500 to 2000 square feet are used,” said John Punnoose. Another reason for the cost differential were the more modest consulting fees that Apollo charged. Lower fees, however, still implied handsome profits. Although the Consulting Division contributed only 2% to AHEL’s revenue, it was responsible for 10% of profits. “ Overseas projects just pay much more than domestic investments.

There is a market for our intellectual property, and it is highly valued by overseas clients,” said Suneeta Reddy. Apollo Health and Lifestyle Ltd. (AHLL) Building on the success of its hospitals, the Apollo group decided to enter the primary care market. Ratan Jalan, CEO of AHHL, the subsidiary responsible for Apollo’s primary care clinics explained: Two thirds of health care expenditures occur outside hospitals, that is a very large share of the cake. And this market is very fragmented; there are millions of physicians who provide primary care services. No one knows who the quality providers are.

There is slight regulation, much of it is not enforced, and the customer is left with little information. Given that scenario, Apollo seemed well positioned to exploit its brand equity. In an unusual step for the health care industry, Apollo chose a franchising concept to roll out its clinics. Franchisees were expected to lease premises of about 3, 200 square feet. The total expected investment per clinic was on the order of Rs. 17 million ($400, 000), all of which had to be financed by the franchisee. Apollo insisted on a debt-equity ratio of no higher than unity.

The investment cost included a one-time franchise fee of Rs. 2. 2 million ($50, 000) for the seven-year agreement. In exchange for this fee and a 5% royalty on sales, Apollo offered comprehensive support services. It provided the design for the clinic, selected and trained all medical and support staff including the physicians, and procured the necessary medical equipment and IT systems. Apollo was also intimately involved in all business decisions. It set prices for the medical services offered in the clinics and helped develop their marketing strategy.

Apollo did not require franchisees to be physicians themselves. In fact, of the 30 clinics that were operational by early 2005, physicians ran very few. “ People with a background in health care often have a limited view of health care. Today, if you are talking to a person in the industry about spending money on interior design or signage, he would think it is a waste of money. The health care community does not value the things that are critical to Apollo. But that is exactly what we are trying to change,” noted Ratan Jalan.

Each clinic included a 24-hour pharmacy, which Apollo expected to generate about a third of the clinics’ revenues. Company projections indicated franchisees would earn an IRR of more than 25% on their investment, but Jalan conceded financial outcomes were more varied: “ Quite a few clinics are doing really well, a large number are doing ok, but a few are not running as expected. ” In coming up with its financial projections, Apollo emphasized that the clinics were stand-alone businesses that did not depend on the proximity of an Apollo hospital for their success.

In fact, more than one half of the planned clinics were located in cities without an Apollo hospital. Ratan Jalan nevertheless expected positive spillovers for the group: “ I have often given the IBM example. They were in the mainframe business and then they discovered the PC which everybody uses today. The clinics will give consumers an idea of what Apollo is really all about. Today’s perception is about high-end operations. But with the clinics, Apollo will become much more accessible, develop a much warmer image than we have today. ” Competitors

Apollo had a number of competitors in the market for privately-provided tertiary care. For instance, the health care division of the Manipal Group, one of Asia’s largest hospital management groups, ran 11 private and 7 government-affiliated hospitals with more than 6, 000 beds. [x] Fortis Healthcare Ltd. managed super and multi-specialty hospitals in three locations in India and planned to grow from 600 beds in 4 hospitals to 4, 000 beds in 10 hospitals over the next few years. [xi] Ranbaxy Labs, India’s largest pharmaceutical company, was a strategic investor in Fortis, holding a 17% stake in the company.

Wockhardt Hospitals Ltd. , the hospitals division of the eponymous pharmaceutical company, operated specialty hospitals in Mumbai, Bangalore and Kolkata. Wockhardt had formed an alliance with Harvard Medical International to gain access to Harvard’s expertise in the field of surgical services. Wockhardt planned to set up at least five new super-speciality hospitals in the next three years. [xii] Many of Apollo’s competitors including Delhi-based Max Healthcare and Fortis worked on building integrated delivery networks ranging from primary to tertiary care services.

Analysts expected India’s private tertiary care sector to grow at 15% CAGR in the next few years. [xiii] The Infrastructure Development Finance Company (IDFC), a private-public venture set up by the government of India, saw three main drivers of future growth:[xiv] The present shortage of premium medical facilities, the growing incidence of lifestyle diseases, and growing income levels, have all led to a large unfulfilled demand for high quality healthcare services, translating into a large potential opportunity.

Today, healthcare is being touted as the next big boom, and the sector is expected to grow rapidly over the next decade, to reach a level of Rs. 200, 000 to 300, 000 crore by 2012, largely spurred by an increased corporate presence in the sector. Although demand for tertiary care services was poised to grow, keeping hospitals profitable was not easy, mainly because in-patient care required considerable up-front investments. In the 1990s, many highly-leveraged hospitals found themselves unable to service their debt. As a result, hospital financing had all but dried up by 2002.

The key to successful hospital management, analysts believed, was to keep up-front investments and operating costs in check. Apollo’s sound financial performance, these observers noted, was in good part due to the group’s ability to tightly control operating costs. [xv] Financial Performance From 2000 to 2004 Apollo Hospitals Enterprises Limited’s (AHEL) income grew at nearly 16% CAGR, from Rs. 2. 7 billion to Rs. 4. 9 billion ($64 million to $115 million), while maintaining above average industry operating and net profit margins. For the year 2000-2004, mean operating and net profit margins worked out to 22. 0% and 7. 92% as against industry averages of 20% and 4% respectively (Exhibits 7 and 8 provide more financial data for AHEL and AHLL. ) In the past five years, Apollo’s shares had tracked the Bombay Stock Exchange 30 index quite closely (Exhibit 9). Using a sum-of-parts methodology, analysts at ICICI[3], an Indian financial services company, estimated the group’s value to be Rs. 13. 6 billion ($311 million) (for details, see Exhibit 10). Some investors had expressed concerns when Apollo invested heavily to add an additional 850 beds in the 2000 to 2003 period.

As a result of these investments, Apollo’s debt-equity ratio had reached 1. 4 on a consolidated basis in 2003. But the group returned cash flow positive in 2004, and analysts expected the debt-equity ratio to fall below unity in 2006. At the time of the case, Apollo’s management did not feel capital constraints limited their strategic choices. “ In the 1970s, the lack of capital was the key problem. Today, the key question is how we can successfully deploy our intellectual property,” said Suneeta Reddy. In any case, Apollo intended to pursue an asset-light strategy.

K. Padmanabhan noted: “ Given the current asset turnover ratio of almost 1 to 1, we need to lower investment. I want us to pursue an asset-light strategy. We should manage hospitals, we should not own them. ” By 2005, the Apollo Group had won the confidence of major foreign investors who owned about 41% of AHEL. Schroder Capital Partners, a venture capital firm, and Temasek Holdings, which owned and managed the investments of the government in Singapore, held major stakes in AHEL with 16% and 8%, respectively. The Reddy family’s share now stood at 32%.

Strategic Opportunities In thinking about Dr. Reddy’s challenge to come up with a new strategic vision for the Apollo group, three major decisions were likely to be on the family’s mind: opportunities arising from deeper vertical integration in the domestic market, the prospects of international hospital management, and the possibilities related to global medical tourism. Integrated Health Care Delivery Networks (IDN) A first strategic possibility was to focus Apollo on the development of the domestic market and build up a vertically integrated health care delivery network.

First steps in this direction – the pharmacies and the primary care clinics – had already been taken. In reviewing these ventures, Apollo’s managers needed to decide if they fit well with Apollo’s core business. Were there significant strategic risks in developing an IDN? Should the group add additional services? For instance, some managers were excited about the prospects of developing insurance products to further stimulate the demand for health care services. International Hospital Management

A second possibility was to aggressively acquire international hospital management contracts. An interesting question was if Apollo should consider foreign direct investments – a strategy the group had successfully pursued in Sri Lanka – or if it should concentrate on managing hospital assets without owning them. The geographic focus of Apollo’s activities was another strategic variable under consideration. Traditionally, Apollo had managed hospitals in South Asia and the Middle East. More recently, it had developed some business in Africa.

At the time of the case, however, the Consulting Division studied a hospital project in Romania, which had the potential to open up the Eastern European markets. Romania had 400 public hospitals with 160, 000 beds, but not a single private facility. Most health care services were covered by the National Health Insurance Fund (CNAS), which was financed by contributions from companies and employees. The CNAS reimbursed hospitals based on the average diagnostic related group (DRG) of their patients. The DRG was a clinical classification system used in most of Europe and in the United States.

Assisted by the IFC, the Romanian government sought to develop a public-private partnership (PPP) for the Fundeni hospital in Bucharest. Fundeni was a major tertiary care hospital with 1, 118 beds and a staff of 1, 500, including 289 doctors. The government offered a long-term concession to run Fundeni. While Romania would retain ownership of all assets, the private operator was responsible for operations and capital expenditures. The concession contract required the operator to take on all staff currently on Fundeni payroll. In the first year, no significant layoffs would be possible.

The IFC advertised the Fundeni concession as “ an excellent investment opportunity” because the hospital had a “ top reputation as the premier tertiary hospital in Romania,” was “ well-funded by CNAS” and “ well positioned to serve the untapped private health market” in Romania. Dr. Reddy was optimistic about Fundeni: “ I am now managing hospitals in Colombo, but I feel I should also be prepared to go to Central Europe and possibly the UK. Romania is not so far; going from India to America, it is about half distance. ” Sangita Reddy, Director of Operations, felt similarly:

I am very positive about this opportunity, we need to go there with a positive spirit. When we started the hospital in Hyderabad, everybody told us that it would be difficult because Hyderabad is very different. They said the same thing about the hospital in Delhi and the hospital in Sri Lanka. It is interesting that there is no global health care player. Every other business is more global, but health care is very localized. There is room for more globalization in health care. Medical Tourism A third strategic opportunity open to Apollo was to help develop India as a destination for international medical tourism. Traditionally restricted to he elites of poor countries, global medical tourism was a relatively recent phenomenon. Significant quality and cost differences in hospital care, however, made international patient mobility ever more attractive. With more than one million medical patients per year, many of them undergoing plastic surgery, Thailand was the most successful destination. India, in contrast, was not yet on the map for medical tourists. In fact, even India’s general tourism numbers were abysmal. Despite its rich cultural heritage and the many interesting destinations it offered, India attracted less than 3 million foreign visitors a year.

To compare, more than 90 million tourists visited China each year. Despite its weak competitive position today, many analysts seemed to be optimistic about the prospects of medical tourism in India. For instance, a study by the Confederation of Indian Industry (CII) and McKinsey estimated that medical tourism might bring India annual revenues of $1. 1 to $2. 2 billion by 2012. [xvi] Apollo’s President, K. Padmanabhan, expected the group to capture up to 60% of this market. Apollo’s managers identified four international customer segments likely to come to India for medical treatment.

First, they hoped that members of the 20-million strong Indian diaspora might combine a home visit with medical treatment. A second target were countries with rationed health care. To patients in the United Kingdom and Canada, Apollo hoped to provide relief from the famously long National Health Service (NHS) waiting times (see Exhibit 11). The legions of uninsured in the United States were a third target segment. At any one time, about 43 million Americans under the age of 65 had no health insurance (see Exhibits 12 and 13). Some of these uninsured had turned to Indian hospitals in the past.

For instance, a North Carolina carpenter replaced his heart valve at India’s Escorts Heart Institute & Research Centre for a total expense of $10, 000, including round-trip airfare and a side trip to the Taj Mahal. [xvii] In the United States, the surgery would have cost $200, 000, with a required initial deposit of $50, 000. The fourth segment were patients from regional markets in which top-quality hospitals and health professionals were hard to find. For residents of neighboring Pakistan, Nepal, Bangladesh, Mauritius and the Maldives, or citizens of African and Middle Eastern countries India was a quality health care location. xviii] Although the target population for medical tourism was large, for the time being at least, Apollo’s patients were mostly domestic. Out of the 5, 200 hospital beds run by Apollo in India, foreign patients usually occupied about 100 beds. Most of them came from the Middle East, Africa and countries of South Asia. Consumer attitudes did not appear to be the problem. In a recent survey in Europe, two thirds of respondents indicated they would be interested in going abroad for treatment if it was possible to use their national funding. xix] And at least in the European Union, it appeared to get easier to travel abroad for treatment. In a landmark decision, the European Court of Justice forced the German Labor Office to pay for the spa treatment of one of its civil servants. The employee had decided to take his healing soak in a spa in Italy. Some private insurers had also started steering clients to countries with cheaper care. Dutch insurance giant OHRA BV, for example, sent many of its patients with knee problems to a center in Alicante, Spain. “ We pay for airfare and all travel expenses.

In spite of that; it’s still cheaper than caring for them here,” an OHRA spokesman said. [xx] US health insurer Blue Cross Blue Shield insured patients for treatment at the Wockhardt Hospital & Heart Institute in Bangalore, as did the British health insurer Bupa. [xxi] In general, however, it was not easy to get coverage for treatment abroad. The NHS, for instance, reimbursed patients only if they received care at a facility that was within three hours of flight from Britain. To market its services to international patients, Apollo partnered with SITA Incoming, a division of Kuoni Travel (India).

SITACARE, the SITA division dedicated to medical tourism, operated more than 200 offices in India and seven offices in the European Union. On its website (http://www. sitacare. com), patients were able to choose medical treatments and select hospitals with a few clicks of the mouse. For example, Coronary Artery By-pass Grafts (CABG), offered at $6, 940, were available at seven different Apollo hospitals, including the facility in Colombo. The website also offered basic medical information and performance data for the Apollo hospitals. Prospective patients learned that the group had performed 49, 000 heart surgeries with a 98. % success rate. 80% of the bypass operations were done using the beating heart technique. Apollo and SITACARE co-financed marketing campaigns directed at medical tourists. “ They have a strong handle on the tourism market. We participate in marketing blitzes with them. We also develop joint brochures and contact health care brokers,” explained Ashok Anathram, President of Business Development. In the United Kingdom, health care brokers assisted patients, typically referred by their general practitioner, with packages that included treatment, hotel and travel arrangements, functioning as de facto one-stop shops for medical tourism.

SITACARE received a commission of about 10% to 15% for each patient, about 2% to 5% of which it paid out to referring doctors. Preetha Reddy, Apollo’s Managing Director, was optimistic about the prospects of developing medical tourism: “ Our chairman kept saying that India could be a major health care destination but no one believed him. Now people have woken up. India has the potential to be a significant player. Our practices are on par with the best international hospitals and the general infrastructure is slowly getting better. ” Seizing this opportunity, the family agreed, was not going to be easy.

Suneeta Reddy noted: “ Different pieces of the puzzle need to be in place to make medical tourism attractive. Right now, the broader infrastructure environment is lacking, and Thailand is ahead of the game. Another important issue is after-care. A part of our strategy could be to build a clinic in the UK. This clinic could provide the postoperative care that patients need. ” A critical question for the Apollo managers was how competitive the market for medical tourism would be in the future. K. Padmanabhan was concerned about China: One of the big questions is how much medical tourism will go to India and how much will go to China.

At this point, India has a much better private health care system than China. But the Chinese will spend as much on health care as Indians, and this will act as a catalyst for the development of private health care services. In terms of skills, we are way ahead of China, but ultimately, the competitive advantage comes from the number of patients doctors are seeing and from their skill sets. International competition was not the only concern related to a strategy that emphasized international patients. In an editorial on medical tourism, the Times of India remarked critically:

While aspiring to become a world-class supplier of health care services, India cannot wish away its ailing masses who lie unattended for want of decent health care. The current health care situation in India is dismal. The number of hospital beds per 1, 000 population, for example, is around one, which is well below the WHO prescribed norms, or even the low-income countries’ average of 1. 5. The same shortage extends to the availability of medical and paramedical staff… Given all this, does it make sense to promote medical tourism? To be sure, the development of medical tourism will alter India’s health care landscape.

While it will give a boost to the private health care industry by catering to wealthy foreign and domestic consumers, it could adversely hit the low-income population. Medical personnel and infrastructure would be geared to serve the elite. Moreover, medical tourists will end up driving up health care costs. A New Vision for Apollo Dr. Reddy had given his daughters Preetha, Suneeta and Sangita a month to come up with a new vision for Apollo. The group faced ample opportunities. But which strategies were most promising? Much seemed to depend on the future development of the health care market.

Was health care fundamentally a local business? If there were global opportunities, why did the very best hospitals in the world – institutions like the Mayo Clinic, for example – operate as single institutions in only a few locations? Moreover, the Reddy family was acutely aware that medical services were unlike other commercial services. Caring for patients brought great responsibility, and all members of the family deeply cared about public health in India. Given the enormous challenges at the domestic front, was it perhaps best to focus on developing the market in India?

Exhibit 1Health Care Value Chain in the United States and in India Source: Adapted from Lawton R. Burns et al. “ The Health Care Value Chain: Producers, Purchasers, and Providers. ” Wiley, 2002. Exhibit 2Annual Earnings for RNs and Elementary School Teachers and “ Real” Earnings for RNs: 1983-2000 [pic] Source: Bureau of Labor Statistics, Current Population Survey Exhibit 3Licensed Registered Nurses Not Employed in Nursing [pic] Source: Bureau of Health Professions, RN Sample Surveys, various years. Exhibit 4Age Distribution of RNs: 1980, 2000 and 2020 Projected [pic]

Source: Bureau of Health Professions, RN Sample Survey and Supply Projections Exhibit 5Cost Differences between the United States and India for Cardiac Surgery (US$) | | US | India | Comment | | | | | | | Price | 30, 000 | 6, 000 | | | Margin | 6, 000 | 600 | | | | | | | Important cost | | | | | blocks | | | | | Physician | 4, 080 | 680 | | | Staff | 7, 920 | 2, 640 | | | Equipment | 2, 400 | 600 | Equipment utilization in India is twice as high as in the United | | | | | States. The expected economic life of the equipment is twice as long. | | Room | 2, 880 | 720 | | Source: Company estimates Exhibit 6Global Cost Differences for Cardiac Surgery (US$) [pic] Source: http://www. sitacare. com/ Exhibit 7AHEL Financial Highlights (Rs. in Millions) | Year Ended | 31. 03. 04 | 31. 03. 03 | 31. 03. 02 | 31. 03. 01 | 31. 03. 0 | | | | | | | | | Balance Sheet Sources | | | | | | | Share Capital | 395. 18 | 395. 18 | 395. 42 | 415. 43 | 435. 43 | | Reserves and Surplus | 2071. 56 | 1864. 56 | 2014. 65 | 2384. 34 | 2233. 07 | | Networth | 2410. 25 | 2181. 81 | 2212. 71 | 2617. 26 | 2546. 5 | | Loans | 1563. 89 | 1709. 85 | 1711. 05 | 1321. 41 | 1156. 17 | | Capital Employed | 3974. 14 | 3891. 67 | 3923. 76 | 3938. 67 | 3702. 62 | | Applications | | | | | | | Gross Block | 3950. 75 | 3668. 24 | 3857. 60 | 3231. 17 | 2728. 92 | | Accumulated Depreciation | 1232. 19 | 1061. 45 | 1043. 95 | 847. 12 | 697. 2 | | Net Block | 2718. 56 | 2592. 65 | 2766. 50 | 2346. 27 | 2000. 92 | | Investments | 909. 7 | 924. 17 | 829. 14 | 969. 11 | 1099. 34 | | Current Assets, Loans & Advances | 2002. 28 | 1782. 61 | 1725. 40 | 1504. 87 | 1496. 47 | | Current Liabilities & Provisions | 1656. 40 | 1407. 77 | 1294. 15 | 778. 45 | 790. 99 | | Net Current Assets | 345. 88 | 374. 84 | 431. 25 | 726. 42 | 705. 8 | | | | | | | | | Profit and Loss Account | | | | | | | Income | 4997. 66 | 4485. 51 | 3767. 88 | 3225. 85 | 2788. 97 | | Operative Expenses | 2641. 85 | 2380. 85 | 1955. 82 | 1639. 20 | 1402. 07 | | Salaries & Wages | 657. 04 | 586. 32 | 470. 38 | 388. 20 | 302. 03 | | Administrative Expenses | 657. 55 | 579. 58 | 518. 21 | 405. 64 | 349. 9 | | Operating Profit | 1011. 37 | 907. 72 | 796. 35 | 771. 96 | 714. 86 | | Financial Expenses | 191. 61 | 242. 61 | 231. 43 | 215. 43 | 210. 90 | | Depreciation | 210. 60 | 230. 05 | 194. 70 | 159. 85 | 133. 85 | | Profit before taxes | 586. 18 | 433. 10 | 358. 36 | 396. 67 | 329. 71 | | Profit after taxes | 371. 48 | 274. 93 | 247. 05 | 306. 83 | 278. 4 | | Dividend | 138. 32 | 118. 56 | 98. 80 | 98. 80 | 91. 80 | | | | | | | | | Key Indicators | | | | | | | Operating profit margin % | 20. 24 | 20. 24 | 21. 44 | 23. 93 | 25. 63 | | Net profit margin % | 7. 43 | 6. 13 | 6. 56 | 9. 51 | 9. 8 | | Return on investment % | 19. 78 | 17. 26 | 15. 00 | 16. 02 | 18. 33 | | Return on net worth % | 16. 18 | 12. 51 | 10. 23 | 11. 88 | 13. 52 | | Debt/Equity Ratio | 0. 65 | 0. 79 | 0. 77 | 0. 50 | 0. 45 | Source: Apollo Annual Report 2003-2004 Exhibit 8Apollo Health and Lifestyle Ltd. (AHLL): Profit & Loss Account (Rs. ) | | 31. 03. 2004 | 31. 03. 003 | | Income | 59, 588, 400 | 54, 626, 233 | | Expenditure | | | | Personnel Expenses | 14, 920, 734 | 11, 528, 433 | | Administrative Expenses | 21, 534, 631 | 19, 579, 580 | | Marketing Expenses | 10, 249, 805 | 14, 067, 017 | | Interest Charges | 4, 193, 478 | 4, 195, 390 | | Depreciation | 940, 515 | 800, 251 | | Amortization of Intangible Asset | 1, 396, 809 | 814, 805 | | Total | 53, 255, 232 | 51, 124, 639 | | Profit before Taxation | 6, 333, 168 | 3, 501, 594 | | Profit after Taxation | 5, 903, 168 | 3, 281, 594 | Source: Apollo Annual Report 2003-2004 Exhibit 9Apollo Hospital Enterprises and Bombay Stock Exchange 30 Index [pic] Exhibit 10Sum-of-parts valuation methodology Business | Value (Rs mn) |% of | Valuation methodology | Remarks | | | | Enterprise Value | | | |  | | | | | | Hospitals | 8, 779 | 64. 4 | EV/EBITDA-FY06E multiple | This is the average one-year forward | | | | | of 9x | EV/EBITDA multiple for the top eight | | | | | | hospitals in the US and Asia. | | | | | | | | Pharmacy | 3, 125 | 22. | EV/EBITDA-FY06E multiple | This is at 20% discount to average | | | | | of 7. 4x | one-year forward EV/EBITDA multiple of | | | | | | 9. 2x for global pharmacy chains like CVS | | | | | | Pharmacy and Duane Reade. | | | | | | | | Hospital Consultancy | 1, 235 | 9. | DCF | | | | | | | | | Others | 493 | 3. 6 | | This is mostly Apollo Health Street | | | | | |(technology solutions) | | | | | | | Source: Adapted from Shilpa Gupta and Rajesh Vora, “ Apollo Hospitals: Scaling New Heights. ” ICICI Securities, 7 May 2004 Exhibit 11British National Health Service Waiting Lists – Number of patients referred to hospitals and waiting for admission Waiting time | 0 to 5 months | 6 to 8 months | 9 to 11 months | More than 1 year | | October 2003 | 793, 200 | 124, 300 | 38, 800 | 109 | | October 2004 | 774, 400 | 69, 600 | 33 | 24 | Source: Government Statistical Service, at http://www. publications. doh. gov. uk/public/work\_health\_care. htm#waitlist , accessed on 10 January 2005. Exhibit 12Population in the United States without Health Insurance (millions) [pic] Exhibit 13Household Income of the Uninsured Population in the United States (%) [pic] Source: U. S. Census Bureau (2000), Economist, “ In sickness and in health. ” 19 December 2002 Endnotes ———————– [1] Tertiary care services are provided by specialized hospitals or departments that are often linked to medical schools or teaching hospitals.

They treat patients with complex conditions who have been referred by other hospitals or specialist doctors. [2] In 1983, tensions between the Sinhalese majority (mostly Sinhala-speaking Buddhists) and the Tamil minority (mostly Hindu) led to a civil war between Sri Lanka’s government and the Liberation Tigers of Tamil Eelam (LTTE). According to government estimates, the on-and-off war has cost more than 50, 000 lives. [3] For more information on ICICI, see John Pegg, Bharat N. Anand and Nitin Nohria, “ ICIC (A). ” HBS case 9-701-064. ———————– [i] Shailaja Neelakantan, “ India’s Global Ambitions,” Far Eastern Economic Review, 6 November 6, 2003, pp. 2-54. [ii] World Bank, “ Raising the Sights. ” World Bank Report, Washington, D. C. , 2001. [iii] Confederation of Indian Industry and McKinsey & Company, “ Health Care in India: The Road Ahead. ” CII: New Delhi, 2002. [iv] Atul Gawande, “ Dispatch from India,” New England Journal of Medicine, vol. 349: 2383-2386. [v] Lawton R. Burns, Gilbert Gimm and Sean Nicholson, “ The Financial Performance of Integrated Delivery Networks (IDNs). ” Working paper. Wharton School, University of Pennsylvania, December 2004. [vi] Christopher Windham, “ Nursing Shortage Eases With Higher Pay and a Weak Labor Market. ” Wall Street Journal, 17 November 2004 at D5. vii] National Center for Health Workforce Analysis Reports, “ Projected Supply, Demand and Shortages of Registered Nurses, 2000-2020. ” At http://bhpr. hrsa. gov/healthworkforce/reports/rnproject/default. htm , accessed on 10 January 2005. [viii] ICICI Securities, “ Apollo Hospitals: Scaling New Heights. ” 7 May, 2004, p. 6. [ix] Radiological Society of North America, “ Workforce,” RSNA News October 2004, at http://www. rsna. org/publications/rsnanews/oct04/salary-1. html, accessed December 29, 2004. [x] Manipal Hospital, at http://www. manipalhospital. org/Heart-found/aboutus/manipal\_hospital. htm, accessed on 10 January 2005. [xi] “ Fortis to expand hospital network; plans IPO,” Financial Daily, August 6, 2004. [xii] P. T.

Jyothi Datta, “ Wockhardt plans 225-bed hospital in Delhi,” Financial Daily, April 3, 2004. [xiii] Confederation of Indian Industry and McKinsey & Company, “ Health Care in India: The Road Ahead. ” CII: New Delhi, 2002. [xiv] Infrastructure Development Finance Company Ltd. , “ Investing in Private Healthcare in India. ” IDFC, December 2002. At http://www. idfc. com/pages/PolicyAdvisory/papers/health/Investing. pdf, accessed on 10 January 2005. [xv] Infrastructure Development Finance Company Ltd. , “ Investing in Private Healthcare in India. ” IDFC, December 2002. At http://www. idfc. com/pages/PolicyAdvisory/papers/health/Investing. pdf, accessed on 10 January 2005. [xvi] “ Get well away,” The Economist, October 9, 2004, p. 60. xvii] John Lancaster, “ Surgeries, Side Trips for ‘ Medical Tourists’: Affordable Care at India’s Private Hospitals Draws Growing Number of Foreigners,” Washington Post, October 21, 2004. [xviii] Shailaja Neelakantan, “ India’s Global Ambitions,” Far Eastern Economic Review, November 6, 2003, pp. 52-54. [xix] Hannah Karp, “ EU Has Health-Care Headache: Patients Crossing Border for Care Complicate National Systems. ” Wall Street Journal, 12 November 2004 at A10. [xx] Hannah Karp, “ EU Has Health-Care Headache: Patients Crossing Border for Care Complicate National Systems. ” Wall Street Journal, 12 November 2004 at A10. [xxi] Shailaja Neelakantan, “ India’s Global Ambitions,” Far Eastern Economic Review, November 6, 2003, pp. 52-54.