

# The **smart** manager

India's first world-class management magazine



**DR SUNITA MAHESHWARI,**  
CHIEF DREAMER,  
TELERADIOLOGY SOLUTIONS  
Health check of the Indian  
healthcare industry.  
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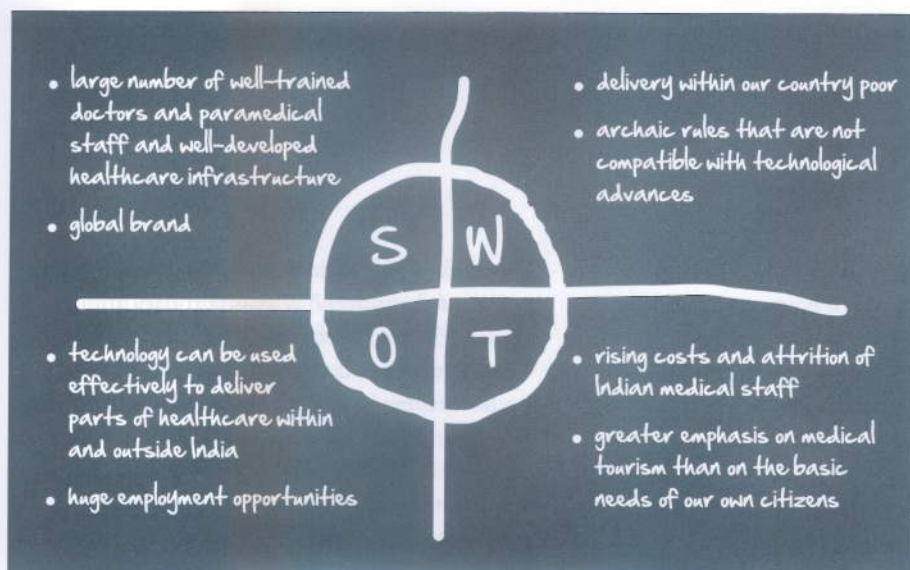


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**DR SUNITA MAHESHWARI**

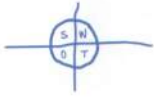
IS A YALE-EDUCATED PEDIATRIC CARDIOLOGIST. SHE CALLS HERSELF THE 'CHIEF DREAMER' OF TELERADIOLOGY SOLUTIONS, A COMPANY SHE COFOUNDED WITH THE AIM OF PROVIDING TELERADIOLOGY SERVICES TO HOSPITALS AROUND THE GLOBE, INCLUDING IN REMOTE AREAS IN INDIA.

# healthcare

As our regular reader would know, this section was started with a view to taking a close, entrepreneurial look at the most 'critical' sectors of the Indian economy. Our parameters for choosing these sectors were simple: the scale at which they impact national life, the opportunity that they hold for growth, and the urgency with which they need attention. We have so far covered infrastructure and agriculture, and this third installment is on healthcare.

Now let's take a moment and absorb that word again: healthcare. Healthcare is not the same as pharma, or simply medical care. Healthcare embodies the overall ecosystem within which public health is protected and care delivered. That includes fundamental yet notoriously difficult targets such as ensuring high standards of sanitation and incentivizing careers in the field. Yet, somehow in the corridors of government, some allege, debates have concentrated too much on medical care, which is only a small part of the puzzle, without first firming up the foundations<sup>1</sup>. That is both the reason for the creakiness that characterizes the Indian healthcare sector today, and the sense of opportunity that entrepreneurs in the field are increasingly sensing.





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**H**ealthcare in India needs to be a strength of our people and our country—a healthy workforce spending money and energy on building the country rather than on getting operated on and recuperating from avoidable diseases. The advantages we have as a country in the healthcare arena are several. For starters, India has 345 medical colleges producing over 40,000 qualified medical doctors per year. The 5 ½ year MBBS course is well structured, comprehensive and, if well implemented, designed to produce good doctors. Since it is highly competitive to enter medical school, Indian doctors tend to be bright and hardworking, with tremendous ability to treat well, innovate and undertake high-quality research under the right circumstances. Second, nursing schools are aplenty in India, and we are one of the larger ‘exporters’ of nurses to the world. Every hospital, clinic and diagnostic center needs technicians, and here again India’s young workforce has enough people to train to be paramedics, technicians, nurse aides and so on. Third, in terms of technology adoption and internet connectivity, India has proven to be up there at the front of the pack. And fourth, infrastructure in the shape of well-designed hospitals now exists in the private sector, attracting patients from all over the world. The government sector too has over 23,000 primary health centers, a large network spread across the length and breadth of the country.

Additionally, we have a large number of patients, helping develop deep expertise in various treatment areas, as well as a global brand—Indian doctors comprise 30% of the medical fraternity in the west and are well respected internationally.

#### through a scanner darkly

So why is it then that infant mortality in India, although arguably dropping, at 46 deaths per 1,000 live births, still remains among the worst 50 in the world?<sup>2</sup> Why is it that we have the world’s largest

concentration of malnourished, low-birth-weight and stunted children? Why is coronary artery disease affecting young adults in their twenties? Why are travelers quarantined if they don’t have a yellow fever vaccine when they enter India, yet dengue and malaria occur rampantly?

One of the weaknesses of our public healthcare system is something that is not unique to healthcare—it is the problem of governance. We have primary health centers and district hospitals spread across the country, but they are ill-equipped and poorly staffed. As the overwhelming share of trained medical personnel is clustered in urban India, rural areas deal with a critical, perpetual shortage of healthcare personnel.

While the yearly average of healthcare spend as a percentage of GDP for BRICS nations was 2.4% between 2004 and 2009, India managed only 1.3%.<sup>3</sup> This difference in spending appears even more daunting when viewed against the background of population growth rate during the period: 1.36% for India, but only 0.7% for the BRICS group as a whole. Although the government allocation to health has increased by 14% to ₹30,702cr for 2012, we still have one of the lowest public per capita spends on health among large developing countries, which results in the highest percentage of healthcare expenditure being financed from private sources. In 2011, it was estimated that 60 million people were forced into poverty by their inability to finance healthcare costs.<sup>4</sup> Such costs are already one of the more common causes of rural indebtedness.

The government healthcare system has deteriorated over the years and is not fully trusted by citizens. The net result is that those who can pay make their way to the private hospitals (less than 25% of all care occurs in public facilities). One of the solutions the government has adopted is to reimburse poor patients for

surgeries at private hospitals or to demand that private hospitals reserve a percentage of their beds for poor patients. Several such schemes such as the Yashashwini scheme, the Arogya Raksha scheme, etc, have benefited some poor patients requiring major surgical intervention. However, they have not addressed the issues at the root of the healthcare problems—how do we provide adequate primary care for the urban poor and the remote rural patient, how do we improve patient education and early detection so that the need for major surgical and medical interventions decreases. Rather than reimbursing private hospitals for treating poor patients, the government would do greater good by strengthening the infrastructure and staffing of the public health system. The National Rural Health Mission (NRHM) is a step in the right direction in this regard.

The private sector in India has put India on the global map in terms of high-quality delivery at Indian prices. It has managed to attract well-trained doctors who can perform spectacular surgeries and non-surgical interventions. However, the private sector has its own challenges. Since there is a shortage of skilled doctors as so many have migrated abroad over the years, the salaries and reimbursement of the existing doctors in India has increased 5-10 fold in the past decade. In addition, a lot of the private hospitals feel the need for hospital administrators—their salaries have similarly increased dramatically in the past five years, with packages of ₹25-48 lakh per annum à la in the corporate world. Naturally, to make 'profits', private hospitals need to pass on some costs to the patients. So slowly but surely, costs of interventions, ICU stays, etc, have been rising.

In complete contrast, the payout to nurses and technicians has remained abysmally low. The gap in pay between a senior doctor and a nurse has widened disproportionately. There was always

an outflow of Indian nurses to the rest of the world. Earlier, this was justified because there were no job opportunities in India. Today, though opportunities abound, nurses are treated poorly and remain relatively underpaid, resulting in astoundingly high attrition rates. The HR policies of corporates now need to be applied to corporate hospitals in India, so that attrition is lowered and patient care optimized.

Also, hospitals tend to be clustering in the cities, leading to competition for the same segment of patient. A move to tier 2 and 3 cities adopted by many of the hospital chains is the way of the future.

Finally, private medical care is structured such that most doctors work on a 'piece rate' basis, their compensation being directly tied to the number of patients seen, procedures performed, commissions from diagnostic referrals made and expensive medicines prescribed. This results in unnecessarily expensive and, at times, unneeded treatment being delivered to the patient. In an environment where effective regulation of such practices does not always exist, quality of care (and therefore of patients) can and often does suffer.

#### all's not lost

The largest opportunity in this context is for public action. Government action must create the conditions for well-being within which preventive and curative services (both public and private) can play a constructive role in protecting health. For instance, there is a need to attack malnutrition through a public distribution system for affordable foodgrains, fight open defecation through a truly effective national sanitation mission promoting used and useable household/community toilets, and enhance access to safe drinking water for all. These are big opportunities.

From a business perspective, the lack of a 'recession' in healthcare makes it an attractive opportunity for any sector. Healthcare in India has



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the chance to grow into a major industry. It can directly employ millions and indirectly employ millions more (those involved in infrastructure development/pharmaceuticals/technology development and deployment such as medical devices, machines, etc).

Further, a robust healthcare system and a drop in infant mortality will lead to a drop in overall population growth: once citizens have confidence that their children will surely survive, the need for multiple children reduces dramatically.

On a different note, a high-tech, reasonably low-cost healthcare industry with high service levels will certainly attract more patients from around the world. In terms of medical tourists, the number is predicted to touch 1.3 million by 2013 at a CAGR of 19%. Higher revenue inflow from 'medical tourists' can potentially offset costs for the poorer Indian patient.

Finally, thanks to technology, Indian doctors can provide diagnostic expertise, clinical input and training to patients and doctors around the world. Teleradiology, telemedicine, telepathology...the opportunities are huge, the potential immense.

#### obstacle course

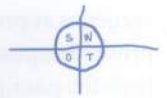
However there are threats. We are not training enough. We are not training fast enough. In my own entrepreneurial story (I cofounded India's first and largest teleradiology company), we are flooded with requests for radiology reads. However, there is now a shortage of trained radiologists in the country. Why? The government says you can only train if you have a 100-bed hospital. What does that have to do with teleradiology where patients are 10,000 miles away?! Technology and not a hospital bed connects the patient to the doctor. This is the basic disconnect: the rules are archaic and old, while the healthcare opportunities are revolutionary and new. The National Board of Examinations passes only 10%-20% of candidates

per year leading to an artificial shortage, and students end up spending years clearing these exams instead of being productive doctors in the workforce. Why does the Board pass only 10% of candidates unlike the US where 99% of candidates are passed each year? If the training is so poor, it needs to be improved rapidly. If the system is 'like that only,' it needs to be changed. Else, opportunities are flying by us.

There are no easy answers. But it is obvious that the healthcare system in India is creaking and needs urgent fixing. Improving the infrastructure and staffing at government hospitals is a priority. One of the challenges in recruitment is that the private sector pays its doctors much more than the government system does. Rather than paying the private hospitals to treat poor patients, it would be better to invest this money in the government doctors—give them incentives, send them for continuing medical education, bring in well-trained doctors who are energized and want to improve the system. One example of this is the Jayadeva Institute of Cardiology, which, under a dynamic head and autonomous status, has become one of the busiest public hospitals in the country.

Secondly, free healthcare has just not worked—corruption ensures it is not really 'free,' although the 'free' tag removes the ability of the patient to demand quality! One option is to charge patients a nominal amount that is transparent and can be used to improve the system, use this to increase salaries of government staff and make corruption a strict no-no.

Rather than making rural postings compulsory, make it so attractive that young doctors see it as a good career option. This has been done successfully in the West, where rural postings actually pay more than city ones. If the government is still not able to attract enough doctors to rural health centers, rather than forcing it, it is better to look for alternatives. The shorter 3-year Bachelor of Medicine program



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under consideration to train rural doctors is one option. Training locals, as is being envisaged in the NRHM, for basic healthcare delivery supplemented by telemedicine consultations with specialists or internists, could be another way of ensuring primary healthcare delivery, education and early detection in remote parts of India.

And finally, telemedicine has the potential to truly revolutionize healthcare delivery and take doctors to areas where there are patients but no doctors. Telemedicine technology has evolved to high-quality video conferencing with digital tools, such as a digital stethoscope and teleradiology being integrated into the system. One such example is Cisco's health presence integrated with our teleradiology software RadSpa, which is much more than just Skype or video conferencing. It allows the doctor to not just 'see and hear' the patient but also listen to their heart sounds, look into their ear or eye, check their blood pressure and review their CT scan. In our own study of telemedicine's impact on primary healthcare (we cover 22 health centers in India via telemedicine), we found that 70% of the issues could be addressed via telemedicine. Not 100%, but certainly better than zero!

Today, we stand at a golden crossroads—a large number of needy patients both within and abroad, a global brand of high-quality healthcare, understanding of the use of technology in healthcare and an ability to train and create a dynamic healthcare work force. Will we use all these opportunities and create a world-class primary and tertiary care network, or will

we trudge along a disease-ridden road of lost opportunities? The choice is ours. ■

#### exhibit01: accidental entrepreneurs

*"The first two years were the toughest. Transition was painful but we persevered, and at the end of those two years we threw a 'two-years-up-in-India-and-still-here' party! Workwise, however, I faced an uncomfortable situation where a highly qualified woman pediatric cardiologist was not fully welcome. However, I was luckier than my husband. I got a job at a local heart hospital, despite the hostile environment, for an over-trained Yale/Cornell radiologist. As a result, he took up Yale University's offer to be on their parttime staff while his "crazy wife changed her mind about being back in India"! He went back and forth between India and the US, working there for a month and coming home to India for two. It was during these trips that the idea of international teleradiology hit us. Instead of shuttling between the two countries, why couldn't the patients' CT scans just fly back and forth over the internet?"*

Excerpted from an article by Dr Sunita Maheshwari in the Mar-Apr 2011 issue of The Smart Manager. To read more, go to <http://thesmartmanager.com/elibcontent.aspx?ContentId=10104>.

01 <http://www.financialexpress.com/news/the-healthcare-debate-in-bharat/485330/0>

02 [http://www.indexmundi.com/india/infant\\_mortality\\_rate.html](http://www.indexmundi.com/india/infant_mortality_rate.html)

03 [http://www.thehindubusinessline.com/industry-and-economy/article3317902.ece?homepage=true&ref=wl\\_home](http://www.thehindubusinessline.com/industry-and-economy/article3317902.ece?homepage=true&ref=wl_home)

04 Free drugs for India's poor; Amelia Shepherd-Smith; The Lancet; Volume 380, Issue 9845, Page 874; 8 September 2012



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