CARING FOR MILLIONS

Lessons from India’s Healthcare Challenges and Solutions
INTRODUCTION:

How India Will Solve Its Healthcare Dilemma

Ask any business person: What a company needs, beyond a good product, is an eager marketplace. And, for healthcare, India is about to become that marketplace.

As the economy gains momentum, the country’s growing middle class is outwardly striving for a better life, which of course includes access to quality healthcare. Meanwhile, medicine itself is changing rapidly, with clinical science and technologies poised to make treatments faster, more effective, less expensive, and available across greater distances.

With that propulsive force in mind, the India Business Initiative at Columbia Business School’s Chazen Institute of International Business brought together medical providers, academics, entrepreneurs, and executives in November 2015. The day-long conference, “Caring for Millions,” which we co-chaired, was subtitled “Lessons from India’s Healthcare Challenges and Solutions.”

IT WON’T BE EASY...

No one is downplaying India’s imposing hurdles. Speaker after speaker spouted statistics that acknowledged the still-rampant poverty, the lack of essential nutrition, water, and sanitation, the shortage of trained personnel, and lack of affordable treatments.

But conference attendees also brimmed with good news: In the past 10 years, India has made remarkable progress in eradicating horrible diseases from polio and measles to HIV. Infant and maternal mortality rates have dropped and life expectancy has lengthened.

Some of the progress India has made toward improved healthcare comes from advances in global medicine. But the country is pursuing its own solutions in what speakers called “frugal innovation.” This approach recognizes that money, always in short supply, will not materialize out of thin air. Instead, the answers lie in “faster, cheaper, better, scalable solutions,” that provide “societal
benefits as well as benefits for the inventor,” in the words of the director of a new school whose sole mission is to spur India-style biodesigns. In just a few years, the school has already mentored the creation of 45 healthcare patents.

Frugal innovation has provided delivery solutions as well as products. Aided by telemedicine and facilities set in nontraditional locations, patients in remote villages can increasingly access diagnosis and treatment for the first time. Conference participants also suggested nontraditional methods for attacking the shortage of physicians, including providing holders of bachelor’s degrees with additional training in narrow subspecialties, providing education at regional hospitals, and adopting a model that seems to be working in another poor country, Ethiopia, where a handful of pulmonary MDs receive intensive, free training on the condition that they pass on their expertise to new doctors.

...BUT IT’S DOABLE

Now that India is starting to come together as a marketplace, conference participants foretold an optimistic healthcare future. Although far from adequate, the government has started to respond. For example, new hospitalization insurance covers nearly 200 million citizens. The National Rural Health Mission has helped dramatically cut infant and maternal mortality rates. As tax money shifts from the national to the state level, the speakers predicted, some individual regions will redirect funds toward healthcare.

What’s more, India has a decisive launching pad that no other developing market enjoys: It already has healthcare resources in place. For those who can afford it, quality care is readily available — enough so, in fact, that medical tourism has become an important industry as foreign patients flock to India to seek care. Its pharmaceutical and technology industries are robust, both on the manufacturing and development sides. The country’s medical schools graduate hundreds of thousands of physicians who choose to leave India to practice in developed countries.

The problem, according to conference speakers, is not that India lacks healthcare tools. It’s that it exports them.

The subtext of the conference was hardly subtle: India needs to step up with uniquely Indian solutions. Now that a marketplace is gaining momentum, now that India’s populace is starting to demand higher health standards, now is the time to begin caring for India’s millions.

We’ve excerpted a number of solutions from the conference. We hope you find them as thought provoking as we did and continue to participate in the healthcare evolution in India and around the world.

Co-Chairs of the Caring for Millions Conference

Suresh Sundaresan  Chase Manhattan Bank Foundation
Professor of Financial Institutions, Columbia Business School
Director, India Business Initiative, Columbia Business School

Surya Mohapatra  Executive in Residence, Columbia Business School and former CEO, Quest Diagnostics Inc.
India’s Frugal Soul

Innovation in India follows the principles of jugaad, or quick fixes, and Gandhian approaches that serve the unserved.

Innovation is different in India. Just ask Balram Bhargava, professor of cardiology and executive director of the School of International Biodesign. At the recent Caring for Millions conference, he ticked off example after example of India-specific frugal innovation, including the green revolution that tackled India’s food grain crisis, the Mangalyan Mars mission, and even Bollywood.

In each instance, innovation began with the pervasive Indian culture of jugaad, a Hindi word that describes an inspired, improvised fix, especially in adverse circumstances. Bhargava posited that the essence of jugaad is frugality — or extreme economy of resources — which creates “faster, cheaper, better, scalable solutions.” He described India’s struggle for independence in this context: “Bloodless — and no money spent. It was absolutely frugal.”

Beyond Jugaad

So-called frugal innovation goes a step further, though. “Whereas jugaad is a quick fix, temporary solution, frugal innovation is low-cost but high quality. It is robust and scalable to large populations,” Frugal innovation, he said, provides “societal benefits as well as benefits for the inventor.”

Bhargava also contrasted Western “Edisonian” innovation that requires markets wealthy enough to satisfy robust return-on-investment with what he called Gandhian innovation that displays a deep commitment to serving the unserved. “Gandhian innovation focuses on people, not just shareholder wealth and profits,” he said.

Frugal, Gandhian innovation is now set to upend medicine. Indeed, the unique school Bhargava founded seven years ago was based on the concept of Indian-specific innovation. According to its website: “The goal of [the] School of International Biodesign (SIB) is to train the next generation of medical technology innovators and create an ecosystem of frugal medical innovations.”

View the video Balram Bhargava on “Why Frugal Innovation Isn’t Cheap”: bit.ly/1n3fL9s
Funded by the government of India, the New Delhi-based SIB program is a collaboration between several India organizations, Stanford University, and Queensland University of Technology. “We are adapting the biodesign process: Giving it a frugal soul!” said Bhargava.

He counted 30 medical devices that the program has developed since 2008, resulting in 45 provisional patents. They range from a chest compression device that can revive victims of sudden cardiac arrest to a screen for hearing loss in newborns. “It could be a simple idea,” said Bhargava, who described a cardboard splint coated with a special plastic that can be applied at the site of an accident and removed after the patient is transported to a medical center and x-rayed. The splint, now manufactured by a Delhi box factory, costs $2 to $2.50.

Of course, medical innovation is hardly restricted to the SIB incubation center. Bhargava noted other highly successful entrepreneurial gambits, such as Aravand eye clinics, which have treated millions of cataract patients, a fetal heart monitor co-developed with Siemens, a portable CPR device, and an ‘intraosseous device’ that can access veins within bones.

A Light Government Touch

Beyond their immediate utility, these devices may be important harbingers of what can happen as more money is committed to healthcare. With the right mindset, the $200 billion Bhargava expects to be spent on India healthcare by 2025 can help pull off an innovation revolution.

“The government is facilitating many programs for innovation,” he observed. “With a light, effective regulatory touch, public health officials can facilitate success of healthcare stakeholders, but with the national interest in mind.”

Bhargava warned against the temptation to treat illness with a barrage of tests and procedures, which not only drive up costs, but are often unnecessary. “We’re aiming for physicians to be self-regulating,” he said.

The delicate balance between self-regulation and entrepreneurial freedom may well present a challenge if India’s healthcare success continues. As one India-born and trained attendee of the conference noted, jugaad has another connotation. It also can refer to fixing a situation through backdoor political influence, or for private enrichment. In a nation infamous for entrenched corruption, it remains to be seen if India’s healthcare fixes will retain the Gandhian ideals of benefitting many.

“With a light, effective regulatory touch, public health officials can facilitate success of healthcare stakeholders, but with the national interest in mind.”

— BALRAM BHARGAVA

The Neobreathe is designed to enable birth attendants to perform neonatal resuscitation with little training.

The intraosseous device infuses liquids directly into bone marrow, especially useful for cardiac arrest patients.

The USFDA-approved Fecal Incontinence device was designed for 16 million Indian patients, but is a value proposition for 100 million worldwide.
REVVING UP INDIA’S MEDICAL MACHINE

Columbia’s physician-in-chief prescribes radical intervention to cure India’s healthcare crisis.

Acknowledging the scope and depth of India’s healthcare problems, and rising to the organizers’ challenge to be provocative, the Chair of Columbia’s Department of Medicine kicked off the recent Caring for Millions conference by calling for “an industrial revolution” for healthcare in India.

At the symposium, which was sponsored by the Chazen Institute and The India Business Initiative, Donald W. Landry allowed that such a major overhaul of the country’s healthcare system would require the national and state governments to spearhead a major initiative. The industrialization of healthcare, as Landry described it, would combine universal healthcare, telemedicine, and healthcare literacy, as well as sweeping reforms in the medical culture and education, to create more doctors to treat many more patients. The model would cut costs and drive improvements, extending healthcare to literally hundreds of millions.

Healthcare disparities, historically driven by the underserved population, are about to worsen as upper reaches of medical practice become even more rarefied. In India and elsewhere, new capabilities in genetics, biochemistry, and cell biology are leading to a revolutionary approach, so-called “precision medicine.” Rather than a scattershot defense that ravages healthy tissue or triggers unexpected side effects, precision medicine targets specific molecular causes of disease arising from defects or predispositions encoded in the genes.

“Diagnostics and therapeutics tailored to the molecular mechanism of disease means we are no longer tracking symptoms or surrogate markers, but the disease itself,” Landry explained.

Also called “personalized medicine,” since each patient receives customized treatment, the approach has implications not only for patient outcomes but also the efficiency and cost of medical practice. Especially in India and other countries still contending with widespread poverty, “disparities will in the short term grow through loss of economies of scale, as only the wealthy will have access to the diagnostics and treatments that involve subpopulations beset by a given illness,” Landry predicted.

Nations Within the Nation

Landry constructed a pyramid to illustrate India’s current demographic disparity. At the top are 60 million people who receive high-quality healthcare, largely because they are wealthy enough to command it and to travel outside the country if need be. India’s burgeoning middle class of 350 million people has access to fee-for-service healthcare in principle, but their treatment is in constant jeopardy because India’s medical infrastructure remains inadequate and expensive. Twice that many people — 700 million — remain in abject poverty with little access to healthcare.

Chief among India’s healthcare woes is a lack of physicians and other trained medical personnel. Compared to the World Health Organization (WHO)–recommended minimum ratio of 10 doctors per 10,000 population, India counts only 6.5 (the United States manages 24.2), a statistic that plays into India’s “developing nation” rank of 135th out of 187 countries rated in the organization’s Human Development Index.

It’s not as if India’s government is unaware of the problems, said Landry, who cited the spectacular progress made since India signed on to meet the WHO Millennium Development Goals in 2000. Not all goals were met but data show 58 percent reduction in infant mortality rates, 66 percent reduction...
in maternal mortality (since 1990), 74 percent measles immunization coverage, and 57 percent reduction in HIV incidence.

Landry also applauded Prime Minister Narendra Modi’s efforts at modernization of the country’s infrastructure as healthcare in disguise. He cited the Swachh Bharat campaign, which among other goals, targets 100 percent rural sanitation for India by 2019. The new Sustainable Development Goals to eliminate starvation and extreme poverty are essential to India’s aspirations in healthcare, he noted.

India is looking for solutions for its middle class, but the answers do not lie in the American healthcare system, Landry warned. “The US system is defective. India should harness the urgency of its healthcare crisis to leapfrog to where the United States wants to be in terms of pay-for-performance and accountable care organizations.”

But what of the 700 million people at the bottom of the pyramid? For a solution, Landry turned to the industrial model that Henry Ford introduced in the first decades of the 20th century. “In 1900, cars were individually handmade by skilled craftsmen, costing perhaps $5,000 each,” he said, noting that fewer than 1,000 cars were sold that year. As the Ford assembly lines harnessed mass production through narrow specialization, though, “the price of a car dropped to $280 and a million cars were sold in 1920.”

Landry’s industrial revolution for Indian healthcare aims to reorganize general education and medical training to produce a larger number of physicians, but each would operate within a narrow scope of practice. Healthcare literacy and a public health revolution would provide the foundation for progress, and telemedicine, paid for via universal healthcare coverage, would bind the new practitioners into an integrated network. Perhaps the most provocative aspect of Landry’s prescription is a reform of the physician culture and practice, which would produce many more doctors to treat far more patients.

**Subspecialization within Primary Care**

Just as automakers moved from a car built by individual craftsmen to one assembled by a team of specialists, Landry suggests that India implement a novel training program based on subspecialization within primary care. “Historically, medical knowledge within a discipline would grow to become too much for one person to master despite 7 to 10 years of training — and then new specialties would arise,” he said. He proposed a new paradigm: take primary care as it is now and subdivide it. Instead of many years of training, a much more focused education on the outpatient management of a slice of primary care would rapidly yield a cadre of experts fully capable of diagnosing and treating but who, by virtue of India’s vast needs and enormous population, would be able to focus just on their narrow slice of the primary care population. Telemedicine would integrate these caregivers and connect them to broadly trained primary care physicians and to the usual array of specialists and subspecialists.

Landry realizes that such structural reform “is much easier said than done,” but he also indicated that the state and national governments have the will to move forward.

Concluded Landry: “India is gradually addressing its healthcare problems, but great disparities and ongoing suffering call for major structural change.”

### India Healthcare Disparities

A very small elite receives high-quality healthcare in today’s India. Even the middle class, which has access to hospitals, can afford little ongoing care.

<table>
<thead>
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<th>Total Population (in millions)</th>
<th>Healthcare Quality</th>
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<td>60</td>
<td>High quality care</td>
</tr>
<tr>
<td>350</td>
<td>Mediocre access to care</td>
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<tr>
<td>700</td>
<td>Little access to care</td>
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Healthcare in India: On the Brink

Two speakers at the recent India Business Initiative conference on healthcare outline radical suggestions for solving the country’s physician shortage.

It may not be as hopeless as it seems. That’s the message delivered by Nachiket Mor, board chair of CARE India, and Srinath Reddy, president of the Public Health Foundation of India, at the recent Caring for Millions conference.

In fact, all the participants at the conference underscored the progress that India has made to attack deadly diseases, improve infant and maternal care, and improve sanitation, even as they acknowledged much has to be done. Mor and Reddy pointed out that India has a remarkable launching pad that no other developing country has. The advantages lie in the country’s edge in developing pharmaceuticals, technology, and in physician education. The problem, said the speakers, is not that India lacks the tools to provide healthcare. It’s that it exports them.

“We Have the Knowledge”

“Our industry already produces low-cost drugs and vaccines,” pointed out Reddy. (Companies include makers of pharma formulations and ingredients such as Sun Pharmaceutical Industries, branded and generic drug suppliers such as Lupin Ltd., and biotech companies such as Cipla Ltd.) “India is a host not merely to medical tourism but to pharmaceutical tourism. People come from Australia and pack suitcases with drugs that are made here. India is the pharmacy of the world.”

“Similarly, India is known for IT. For example, the Swasthya Slate, or “Health Tablet” in English, uses an Android tablet to conduct 33 diagnostic tests, including EKGs and measuring blood pressure, blood sugar, and urine protein. The handheld device costs less than $1,000. Such technology has cut the turnaround time for maternal healthcare tests, for example, from 14 days to 40 minutes in Jammu and Kashmir, where it is being piloted as part of the National Health Mission.

Still, for the most part, India has not turned its digital expertise toward medicine. “The only systems in hospitals are billing systems,” said Mor, who complained that the fee-for-service approach means that the medical profession spends more energy tracking down payments than it does treating patients. “We need to be able to harness innovation, to put together the concepts of technology and healthcare.”

Then there’s the shortage of medical personnel trained formally in allopathy, defined as the use of medical and surgical interventions to combat and cure disease (as opposed to homeopathy, which works to stimulate the body’s own healing systems). Mor estimated that India requires about 1.2 million physicians to serve its population, “and we have something like 300,000 allopathic physicians.” Despite nearly 400 accredited medical schools throughout the country, he said, “the numbers being produced are not nearly enough to meet the requirements, and the situation is not helped by the fact that many migrate outside India.” Reuters called India “the world’s largest exporter of doctors,” with about 47,000 graduates currently practicing in the United States and about 25,000 in the United Kingdom.

The lack of doctors is particularly acute in rural areas. Since “urban colleges don’t graduate rural doctors,” Reddy said, one solution may involve conversion of district hospitals into teaching centers. His proposal calls for local recruitment and full scholarships in exchange for five years of mandatory local service. Mor, on the other hand, felt that if physicians with at least a bachelor’s degree in ayurveda (which is focused on promoting good health rather than fighting disease) are retrained as primary care physicians, similar to the training of nurse practitioners in the United States, then India can fill the gaps at the primary care level even in the poorest parts of the country. District hospitals could then focus on
taking physicians who already have a bachelor’s-level qualification in allopathic medicine and offer them a two-year diploma in fields such as obstetrics, orthopedics, and anesthesia. This combined approach, in Mor’s view, would completely meet the requirements of trained personnel for both primary and higher levels of care.

“<insert_text>harness innovation, to put together the concepts of technology and healthcare.”</insert_text> — NACHIKET MOR

But Is It Doable?

Both Mor and Reddy acknowledged that India has lost some momentum when it comes to healthcare. Nothing much has come from the 2010 High Level Expert Group on Universal Health Coverage that recommended upping public financing for healthcare from 1 percent to 2.5 percent of GDP (The World Health Organization urges countries to spend at least 6 percent of GDP on healthcare.) “The economy slowed down, and the politicians argued that investment had to go to other priorities,” noted Reddy.

And even as progress continues on infectious diseases such as malaria and typhoid, noncommunicable diseases such as suicide, cervical cancer, and hypertension have reached epidemic proportions. Noting that Indians get heart attacks 10 to 15 years earlier than patients in the United States, Reddy pointed out that cardiovascular diseases are removing individuals from the workforce in their most productive years. “No country that positions itself as a growth area can afford to lose so many people in the productive prime of life,” he said.

Even if tax hikes are unlikely, though, the speakers saw reasons for hope. The country has been experimenting with innovative models such as the National Rural Health Mission. Launched in 2005, it has especially aimed to train health personnel in basic newborn care, resulting in a 1 million woman army of rural health activists who mobilize pregnant women to deliver at local health centers. The National Health Insurance Program for the Indian poor has enrolled nearly 185 million individuals, covering hospital care worth almost $500 per family.

What’s more, as India channels a higher share of tax revenues from the national level to the states, some localities are stepping up to make sure their citizens have healthcare and insurance. “The hope is that India can pursue changes at the state level. Then, over the next five years, other states and the national government will be able to implement lessons learned,” said Mor.

An important part of the state-level healthcare could come through public-private partnerships (PPP), the speakers predicted. Noting that the states don’t have to provide the actual healthcare as long as they can assure someone does, Reddy added, “Past PPP schemes have been described as ‘Partnerships for Private Profit.’ Politicians need to redefine them as vehicles for the general good, as Partnerships for a Public Purpose.” Beyond health benefits, such partnerships should offer opportunities to create jobs, especially for women.

Many pessimists refer to the crippling cost of healthcare for a country starting at such a low level. Without minimizing the enormity of India’s challenges, Mor called the comparisons with what developed economies spend on healthcare “a bit misleading.” He noted, for example, that Indian heart surgery that costs $100,000 in the United States can be done for Rs100,000 (about $1,500), thanks largely to lower personnel costs.

“We have the resources,” suggested Mor. Whether India has the political and social will to launch a full-scale healthcare reform should become evident in the next five years.
The Good News of Global Medicine

“This period in healthcare is one of the most dramatic ever witnessed,” observed Linda V. Green, professor of healthcare management at Columbia Business School.

Not the least reason for her optimism is so-called precision or personalized medicine. “New tools in genetics, biochemistry, and cell biology are tailoring diagnostics and treatment to the individual,” explained Donald W. Landry, chair of Columbia’s Department of Medicine. “The possibility of editing the human genome means we will no longer treat symptoms, but the thing itself.”

Landry cautioned that this breakthrough will initially favor the wealthy who can afford such one-on-one medicine. But already new targeted drugs are revolutionizing the way doctors approach certain diseases, such as cystic fibrosis and several forms of cancer.

On a broader scale, Green warned that the system’s motives have to change in order to achieve universal healthcare. A fee-for-service industry, such as practiced in the United States, she said, “is inevitably all about volume: the more doctors do to a patient, the more patients hospitals see, the more money they make.” Still, she added, “one-third of hospitals operate in the red.”

The solution, which is starting to gain traction in some quarters, is to “move from volume to value,” or reward healthcare for successful outcomes. Noting that most systems today focus on billing, Green said doctors and hospitals need to step up the computerization of patient records to support better medicine. She also applauded the leveraging of physician assistants, nutritionists, community coaches, and other nonmedical personnel to reach a wider population. Similarly, the use of e-visits and mobile clinics can take some of the burden off hospitals.

Although many medical trends begin in developed markets, poorer countries can learn by acknowledging mistakes, lessons, and innovations from the rest of the world. “India needs to leapfrog current global norms by building an integrated approach to healthcare,” said Landry.

How to Multiply Doctors

Beyond humanitarian reasons, emerging market governments and businesses have a monetary motive for reining in diseases, especially those, such as tuberculosis, that attack young people. “In the places where TB is common, mostly lower-income countries, the workforce for those businesses is very seriously affected by losing patients with TB,” said Neil W. Schluger, professor of medicine at Columbia University.

Such was the pitch Schluger made when rounding up sponsors for the East Africa Training Initiative. Classes are taught by local, European, and American doctors who rotate into Ethiopia for weeks or months at a time. Beyond learning clinical care and procedural skills, graduates are expected to publish research and play a large teaching role for medical students. “In these ways, we hope the effect of training a relatively small number of subspecialists can add greatly to the knowledge base of physicians and public health officials in the country, and thus multiply the effect of our program,” Schluger wrote.

Such a program, which recently graduated its first two students, could easily be adapted to India, said Schluger: “Using faculty from some of that country’s advanced medical centers and training programs to train physicians in underserved areas, capacity could be built efficiently and with excellent quality.”

Frugal Innovations

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Scaling Up Eye Care

In a nation where fewer than 15 percent of the populace has received any type of eye care and a whopping 80 percent of cases of blindness is deemed avoidable, Aravind Eye Care takes the hub-and-spoke model a step further. Partnering with local organizations such as Lions Clubs, it sets up “eye care camps” in remote locales where villagers can receive a free or low-cost eye exam. Thus far, camps in 47 villages have served more than 22,000 patients. Of those, 749 were diagnosed with an eye problem and were referred for further treatment.

Executive director Thulasiraj Ravilla calls this approach “active case finding,” and said it helps confine care to the primary level before symptoms — and costs — escalate.

For people who are able to travel or live near an urban area, Aravind has installed 54 “vision centers” throughout southern India. In 2014-2015, it provided 3.5 million outpatient exams, 400,000 laser and surgical procedures, and 500,000 eyewear prescriptions. Half of services are free or backed by heavy subsidies. Those who need surgery receive shuttle service to eye care hospitals at a nominal price. Cost-containment tactics such as telemedicine and an emphasis on preventive care have enabled each of the centers to break even after their second year in operation.

Still, Ravilla is frank about the issues that come with the innovative model. Can such a system be scaled with eye care and extended to other disciplines? Can an integrated primary care model support tertiary care? A strong, seamless distribution system is key, he said, and where all the money will come from remains a question mark.

One possible answer is private investors. In order for innovations such as Aravind’s to be attractive to capital markets, scalability is a must — with a little altruism mixed in. “Truly disruptive innovation has to be driven by purpose and passion,” said Ravilla. “Without it, you’re just achieving incremental improvement.”

HUBS AND SPOKES

Ashok Seth, chairman of Fortis Escorts Heart Institute, is betting heavily on a hub-and-spoke model. Through a new venture dubbed “Critinext,” Fortis has set up remote patient monitoring systems in 10 facilities in Dubai, Bangladesh, and India. Monitors at the patient’s bedside are linked to a central command center through which specialists can consult using two-way audiovisuals and real-time patient data. In a five-month pilot program, Critinext patients performed markedly better on several measures, including incidents of cardiac arrest and mortality.

The model goes to the core of a widely acknowledged problem in India: Too few specialists who are generally clustered in urban areas. The lack of intensive care doctors is particularly acute: “We’re 60,000 ICU doctors short,” said Seth. Of the 5 million patients who need intensive care each year, about 500,000 die, and Seth attributes 10 percent of the deaths to ICU “mistakes.”

Then there is the expense. Two thirds of Indians pay for their own healthcare (for ICU patients the figure is 85 percent), and 40 percent of ICU patients sell assets or borrow money to offset their medical bills. Many simply decline treatment.

Fortis’s hub-and-spoke model is set up for inexpensive replication. Regional facilities can be staffed with less-experienced specialists and less-sophisticated equipment. Telemedicine can bring treatment to the patient’s doorstep and lower regional infrastructure requirements. Management techniques borrowed from retail, such as peak pricing — diagnostic and CT scan centers are open 24 hours but charge less at night when demand is lower — is also helping to make quality care available to more people. Says Seth: “We’re achieving economics of scale.”

80% Fewer than 15 percent of the populace has received any type of eye care and a whopping 80 percent of cases of blindness is deemed avoidable.

HEALTHCARE IN INDIA VS. THE UNITED STATES

<table>
<thead>
<tr>
<th>Doctors (per 1,000 people)</th>
<th>0.5</th>
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<tbody>
<tr>
<td>Beds (per 1,000 people)</td>
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<tr>
<td>Healthcare Spending (GDP)</td>
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</tr>
<tr>
<td>Cardiac Surgeries (per million)</td>
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The India Business Initiative is a platform for Columbia Business School faculty and alumni to connect with each other and with industry leaders and policy makers on all things India-related. Its goals are:

- Facilitating thought leadership and exchanges between faculty, industry leaders, and policy makers, both in India and abroad.
- Learning about the challenges and opportunities for Indian business and working with Indian industry and policy-making bodies to provide research-based solutions and long-term plans to such problems.
- Engaging in India with training programs, student internships, student exchanges, student visits, and faculty research projects with institutions and corporations in India.
- Bringing to the Columbia campus industry leaders and policy makers to share their experience and views about major issues as they impact the Indian economy.
- Bringing the resources of Columbia University to address problems faced by the Indian business community.

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In 1991, our founder, Jerome A. Chazen, MBA ’50, recognized the need for a new kind of leader: one who understands cross-cultural issues and their impact on business. That vision led to the creation of the Jerome A. Chazen Institute of International Business, which serves as the hub of global activity at Columbia Business School. The institute draws on the expertise of world-class faculty members and business leaders to help shape the thinking and discourse on major global business issues. By sharing its thought leadership, training the next generation of global leaders, and supporting major research, the Chazen Institute serves as a gateway to the people and ideas that transform the international marketplace.

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