



A foundation for **public health** in India

Rajat K. Gupta, Gautam Kumra, and Barnik C. Maitra

A renewed effort to train and attract public-health professionals will ease a chronic shortage and improve health care.

India's citizens have become much healthier since the country's independence, almost 60 years ago, thanks largely to public-health efforts that have nearly doubled life expectancy while halving infant mortality rates. The public-health system has eradicated smallpox and guinea worm and drastically reduced cases of leprosy, malaria, and polio (Exhibit 1).

But India still trails its Asian neighbors on key measures such as life expectancy, and its public-health challenges are growing. India has 5.1 million HIV/AIDS cases—the second highest of any nation in the world. Diseases such as diabetes

and cancer are on the rise as people live longer and more affluent lives. Some communicable diseases (such as dengue fever) once thought to be under control have resurfaced.

If India is to continue improving the health of its citizens in the face of ongoing and new challenges, its government must address the fundamental deficiencies of the public-health system rather than merely create more infrastructure to treat sick people. The country already has a strong public-health infrastructure, but public hospitals and clinics are understaffed by 15 to 20 percent, on average (Exhibit 2)—

EXHIBIT 1

Diseases in India

	1951	1981	2000	2003
Leprosy , cases per ten thousand people	38.1	57.3	3.74	2.79
Malaria , millions of cases	75.0	2.7	2.2	1.78
Polio , number of cases	N/A	29,709	265	53
Smallpox , number of cases	>44,800	Eradicated		
Guinea worm , number of cases	N/A	>39,792	Eradicated	

Source: India's Union Health Ministry, 2004 statistics

and in rural areas by even more. McKinsey research suggests that this shortage stems from supply and demand problems within the public-health infrastructure.

India has 95 public-health institutions, which produce only about 375 professionals a year, or about 4 from each school; even the top schools graduate just 10 to 15 a year. By contrast, both Johns Hopkins and Harvard Medical School produce nearly 200 public-health specialists annually. The typical curriculum at Indian public-health schools is overly theoretical, out-dated, and out of touch with the latest thinking on epidemiology, health economics, and mass communication. Practical internships are limited in number, and a shortage of faculty makes matters worse. Furthermore, some schools suffer from a lack of academic rigor and prestige and

so are often filled by students who have few other career options.

Partnerships with leading UK and US public-health schools have improved the quality of instruction and research at some of India’s top institutions, and extending these programs could raise the sector’s educational standards. But the country should also establish new public-health institutes, with the aim of replicating the achievements of the Indian Institutes of Technology and the Indian Institutes of Management (created to fill the country’s need for engineering and management graduates, respectively).

The public-health sector is unique in that it must take responsibility not only for producing a steady supply of professionals but also for stimulating demand for them.

EXHIBIT 2

Understaffed

India’s public-health system, 2004

Type of facility (focus)	Subcenter (immunizations, referrals)	Required staff, number and type	Infrastructure	Number of facilities in country	Public-health personnel ¹	
					Number on hand	Number required
		1 to 2 health care workers (at most locations) with 10–12 weeks of training	No beds; temporary facilities	142,655	207,413	290,565
	Primary health care center (preventive and curative medicine, family planning)	1 to 2 doctors with public-health qualifications/experience plus 14 administrative/health care workers	4–6 beds	23,109	25,700	30,000
	Community health care center (general medicine, surgery, labor and delivery, tests)	3 to 4 doctors with public-health qualifications/experience (a general practitioner plus mix of gynecologist, pediatrician, and/or surgeon) and 21 administrative/health care workers	30 beds, labor and delivery room, X-ray room	3,222	4,200	6,700–7,000

¹Includes only medical professionals (doctors, nurses, health care workers) with public-health qualifications—eg, master’s degree in public health.

Source: Interviews with public-health personnel; India’s Union Health Ministry, 2004 statistics; India country profile, World Health Organization; McKinsey analysis

Low pay, poor working conditions, and a lack of prestige limit the appeal of this career path for talented professionals. Many public-health doctors devote the bulk of their time to private practice, viewing their public duties as secondary and supplemental. This approach is unsurprising given that a full-time doctor in the public-health sector earns just \$150 to \$500 a month, compared with about \$1,150 for a private practitioner. Many of the sector's doctors emigrate or join international multilateral agencies such as the World Health Organization, the World Bank, and the UK Department for International Development (DFID).

Financial incentives will be the key to attracting and retaining public-health professionals and other staff. In the relatively affluent state of Maharashtra, for example, doctors who focus solely on public health receive a bonus equal to 25 percent of their salary, and the early results on retention are promising. Extending this program to the national level would cost from \$30 million to \$50 million a year—not a prohibitive sum given the government's pledge to spend \$1.5 billion on rural health care over the next five years.

To integrate these and other approaches, India's government is partnering with the private sector to create an autonomous public-health foundation.¹ This organization, much like the National Academy of Sciences and the Institute of Medicine in the United States, will act as an adviser to the Indian government and public-

health schools, set national accreditation standards, design a more rewarding career path for public-health professionals, and seek to improve public-health education by building new schools and upgrading capabilities in existing ones.

The foundation plans to finance and launch two new public-health schools in India during the next two years. At these and other institutions, educators should intensify the focus on academic rigor, real-world experience, and field internships so that professionals are more prepared for India's public-health realities.

The foundation's autonomy will help to promote a system that fosters professionalism and ensures that the selection of public-health personnel is based on merit. Such a system will encourage a virtuous cycle in which an increasingly specialized public-health community improves India's schools and, in turn, makes the field more attractive to practitioners.

Rajat Gupta, senior partner worldwide, is a past managing director of McKinsey; **Gautam Kumra** is a principal and **Barnik Maitra** is a consultant in McKinsey's Delhi office. Copyright ©2005 McKinsey & Company. All rights reserved.

¹ McKinsey has worked with the Indian Prime Minister's Office, the Planning Commission, and the Union Health Minister to develop the foundation.