

Short Communication**HEALTH CARE IN INDIAN PERSPECTIVE*****Dr. Shankar Prasad Bhattacharya**

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Abstract

AA system perspective To western readers, analyzing a new healthcare system in the East might seem daunting. Indeed, it takes some of us decades to master an understanding of the healthcare system of our country of origin. Nevertheless, there are several methods for approaching an analysis of another country's healthcare system. These include exposition of some (hopefully) invariant principles regarding healthcare that apply across contexts, analysis of what a system of health might look like, comparison with the US system (with which many are already familiar), comparison with other emerging systems such as that of China, application of existing frameworks for healthcare system analysis, appraisal of the major transitions underway in the country's demographic, socioeconomic, political, and epidemiologic profile, and an analysis of the country's public health issues. The chapter analyzes India's healthcare system using each of these methods.

Keywords; Health care, Indian perspective

INTRODUCTION

A system perspective To western readers, analyzing a new healthcare system in the East might seem daunting. Indeed, it takes some of us decades to master an understanding of the healthcare system of our country of origin. Nevertheless, there are several methods for approaching an analysis of another country's healthcare system. These include exposition of some (hopefully) invariant principles regarding healthcare that apply across contexts, analysis of what a system of health might look like, comparison with the US system (with which many are already familiar), comparison with other emerging systems such as that of China, application of existing frameworks for healthcare system analysis, appraisal of the major transitions underway in the country's demographic, socioeconomic, political, and epidemiologic profile, and an analysis of the country's public health issues. The chapter analyzes India's healthcare system using each of these methods. The iron triangle One way to analyze a healthcare system is in terms of a set of principles that are (or at least seem to be) invariant across cultural contexts. One such principle is the "iron triangle" depicted in the logic of this triangle is that there are inevitable societal trade-offs in pursuing any of the goals (vertices) in the triangle. If the triangle is an equilateral triangle, and thus each angle is 60°, policy initiatives that expand one angle beyond 60° force one or both of the other two angles to contract below 60°. Thus, efforts to promote access to care (e.g., via insurance coverage) will lead to higher demand for care, rising utilization, and higher costs. Similarly, efforts to promote quality by virtue of enabling access to modern technologies (drugs, medical devices and equipment) will also likely raise costs. Determining the right thrust and mix among the three angles constitutes the balancing act in resource allocation faced by most countries. The Iron Triangle of Health Care: Balancing Act among Intermediate Outcomes Efficiency/Cost Containment High Quality Care Source: Author. Patient Access Perhaps no country allocates equal attention to all three goals in the manner of an equilateral triangle.

Indeed, healthcare policy in the US has alternated its focus and attention across these three angles since the late 1920s. In the 1960s, policy-makers focused on expanding access to healthcare services via broader insurance coverage by enacting the Medicare and Medicaid programs (to cover the elderly and poor, respectively). In subsequent decades, the policy focus shifted to cost containment to deal with the rising utilization and cost of services that naturally followed from expanding access to insurance for population segments with greater need for healthcare services. During the past decade, policy-makers have devoted more attention to quality via such initiatives as pay for performance (P4P), value-based purchasing (VBP), accountable care organizations (ACOs), and "never events" (reimbursement withheld for controllable adverse events in hospital episodes). India faces challenges in pursuing each of these three goals. With regard to cost, nearly 70 percent or more of all healthcare is financed out of pocket by the population. There is little health insurance or other forms of risk pooling, little regulation and accountability of providers, and a predominance of fee-for-service payment, all of which are associated with high cost Healthcare system defined A second way to study another country's healthcare system is through formal definitions. The phrase "health system" is widely used in the discourse on global health (e.g., health systems strengthening) but enjoys no agreed-upon definition. "Health system" actually combines two nebulous terms. The first is "health." According to the World Health Organization (WHO), health is "a State of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity." Health has also been defined as an important capability "that enables individuals to pursue things they might value." There are as many indicators of health as there are definitions. These include life expectancy at birth, infant mortality rates (IMRs), the percentage of children underweight, the percentage of women with body mass index (BMI) below 18.5, quality-adjusted life years (QALYs), and disability-adjusted life years (DALYs). Comparative, historical data suggest that India has lagged behind other developing countries (e.g., China, Brazil) on many of these indicators. Getting a comprehensive picture of a country across lots of indicators is impossible and probably futile. The US, for

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example, is commonly lambasted for ranking relatively poorly among developed countries on infant mortality; on other indicators, however, such as cancer survival, the US ranks quite highly. The concept of a “system” is also rather elusive. Piecing together definitions from several dictionaries, we might define a system as a whole comprised of several interdependent parts that have differentiated roles, are interconnected by three processes (input, throughput, output), and are thus integrated in a holistic fashion. Such a comprehensive definition begs the question: does any country have a “system” of healthcare? The payer, provider, and producer components found in any country’s healthcare industry are surely interdependent and interconnected (in the sense of serving one another as buyers and suppliers).

Concern with Iron Triangle • Affordability of health care • Concern with high hospital costs as cause of impoverishment/bankruptcy • Concern with geographic variations in spending • Concern with geographic disparities in health status • Concern with conflicts of interest and supplier-induced demand • Concern with lifestyle issues and behaviors • Preference for private sector provision of health care • Need for investment in primary care system • Fee-for-service payment system • Mixture of financing mechanism: government, employer, individual • Fragmentation between federal and state government similar to Medicaid • Low consumer literacy and information • Local governments have competing priorities: education, social services, health care.

Low vs. High spend per capita on healthcare • Falling vs. Rising government spend as percent of NHE • Rising vs. Falling out-of-pocket spend as percent of NHE • Absence vs. Presence of private health insurance • Low vs. High depth and breadth of insurance coverage • Absence vs. Presence of centralized purchasers • Weakly vs. Strongly developed role of central government in healthcare • Weakly vs. Strongly developed governance mechanisms to monitor providers • Weakly vs. Strongly developed measures of utilization, appropriateness of care • Weakly vs. Strongly developed system of outpatient care Major transitions underway in India In addition to studying India’s healthcare system from the vantage point of the frameworks above, we can also highlight the dynamic changes underway – in the country’s demographic, socioeconomic, political, and epidemiologic characteristics – that present opportunities and pose challenges for the country. These are outlined below. We begin first with a description of the country’s political divisions and religious composition. Political and religious diversity India is a large country, comprising more than 17 percent of the world’s population (as of 2011) and 42 percent of the landmass of the US. It is also a very diverse country, with 28 States and 7 union territories, at least 6 major religions (81 percent Hindu, 13 percent Muslim, 2 percent Christian, 2 percent Sikh, 1 percent Buddhist, and 0.5 percent Jain; 2001 data), and 22 percent officially recognized languages and 1,700 dialects. There are enormous variations across Indian states in their healthcare financing and expenditures, healthcare infrastructure, and healthcare outcomes. Some of these variations reflect differences in state incomes, which, in turn, reflect differences in commercial activity and private-sector development and the presence of capitalists investing in healthcare. Some of these variations reflect differences among states in their willingness to invest in sectors that complement healthcare such as water, sanitation, nutrition, education, and basic infrastructure. Demographic transitions India is the

world’s second most populous nation (1.21 billion people in 2011) and is expected to reach 1.35 billion by 2022 and 1.6 billion by 2050, thereby becoming number one. There is growing urbanization and concentration of the Indian population; whereas only 25 percent of the population of 850 million resided in cities at the end of the 1980s, that percentage increased to 28 percent (2001) and 31 percent (2011) and is expected to exceed 55 percent by 2050.⁴⁴ This agglomeration is occurring in massive urban areas of more than 10 million population (Delhi, Mumbai, Kolkata), massive metropolises of 5–10 million (Hyderabad, Bangalore, Chennai, Ahmedabad), and a host of large cities with 3–5 million inhabitants (Pune, Surat, Jaipur, Kanpur, Nagpur, Lucknow, etc.). In addition to the 53 “million-plus” urban centers throughout the country, 415 urban towns with over 100,000 population have seen considerable growth over the past decade. The 2011 census confirmed that while urbanization rates are skyrocketing in cities and towns with 100,000+ population, they have finally begun to slow down in the three megacities: Delhi, Mumbai and Kolkata. Together with these major urban areas that represent 70 percent of the urban frame, the 7,467 urban towns with 5,000–100,000 population accounting for the remaining 30 percent have remained largely steady population-wise. Roughly one quarter of the overall urban population lived in slum areas in 2001 with a similar provisional estimate for 2011, and in the megacity of Mumbai slum-dwellers account for half of the urban population.

The bulk of India’s population, however, remains in rural areas: in 2011, 69 percent of Indians continued to live in 638,588 villages Socio-economic transitions India has been hailed for its rapid economic development between 1990 and 2010 following economic liberalization (see Box 1.2). The country’s rate of growth in GDP averaged 6.6 percent over this time period. The average rate masks the acceleration of growth, however. The rate of growth in GDP increased from 5.7 percent (average rate in the 1980s) to 6.1 percent (average rate in the 1990s) to 8.1 percent (2003–04) and as much as 9–9.5 percent (2005–07), before falling after the financial crisis of 2008. Economic growth has also been abetted by the “green revolution,” based on the introduction of a package of industrial technologies in the 1970s such as chemical fertilizers and hybrid seeds. This revolution fostered growing productivity of India’s agricultural sector (for certain commodities), which raised the standard of living in rural areas. As a result, the incidence of poverty was nearly halved between the late 1970s (51.3 percent) and the late 1990s (28.6 percent). By 2004–05, urban poverty levels had declined to 26 percent, while rural poverty rates dropped to 28 percent. The varying definitions of povertyline status suggest the absolute number of poor ranges from 330 to 480 million people (see Chapter 11). According to census data, literacy rates have also risen from 52.2 percent (1991) to 64.8 percent (2001) and 74.0 percent (2011). However, despite the economic growth and the resultant increase in personal incomes and tax revenues, the country has not increased public spending on healthcare (or on other social sectors) in a commensurate fashion. In fact, liberalization was accompanied by reductions in central government spending on healthcare and other social services in order to shrink public deficits and encourage the development of the private sector. Epidemiologic transitions On the epidemiologic front, there is a growing prominence of chronic illness in the population, which is typical of countries that increase in national wealth. In particular, India has a rising incidence of western-style conditions such as diabetes,

hypertension, and obesity, as well as a growing presence of lifestyle conditions (e.g., heart disease), and cancer-related illnesses. For example, 700,000 new cancer cases are diagnosed in India every year; 800,000 people die of the disease each year.⁵⁵ Chronic diseases accounted for an estimated 50 percent+ of the 10 million deaths occurring in India in 2004, compared to 37 percent of deaths due to communicable diseases, maternal and perinatal disorders, and nutritional deficiencies. Cardiovascular diseases and diabetes are the second leading cause of death in India (behind TB, covered below). Among the population aged 25–69, cardiovascular diseases account for roughly one quarter of all deaths; ischemic heart disease is widespread in the West but not prevalent in other developing and lower-income countries. This reflects a mixture of India's rapid change in lifestyle, changes in diets, increasing levels of stress due to urbanization, decrease in physical activity, and genetic predisposition to heart disease risk factors (obesity, diabetes, hypertension).⁵⁷ In addition to chronic disease, India has witnessed the growth of communicable illnesses such as HIV/AIDS and TB. TB is the number one cause of death in India, which now accounts for over one quarter of all cases worldwide (total of 8.8 million). India's TB rate is double that of China. Barriers to combating the disease include the lack of geographic and financial access to treatment, the need to continue treatment for months, the cost of missing work in order to seek treatment, and the stigma attached with the treatment. As a result of all of these factors, there is a growing problem of drug-resistant TB in India that not only requires a longer and more expensive treatment regimen, but also threatens the entire world.⁵⁸ Communicable diseases afflict primarily the urban poor and rural populations; these segments also increasingly suffer from chronic ailments. As a result, the Indian population suffers from a "dual disease burden." India has made progress in attacking chronic diseases through a series of national policies and programs. However, these programs have focused on specific targets (cancer, vision, mental health, diabetes, TB) with technological responses – eschewing integrative, multicomponent interventions – and have oftentimes been unevenly implemented geographically.

The disparities in treatment for chronic disease are enormous between urban and rural populations and between wealthy and poor populations (2–20 times). Episodes of hospital care for chronic disease are twice those for infectious disease, with higher expenditures overall and higher expenditures on private-sector services. Expenditures on chronic diseases accounted for 45 percent of average monthly income for the highest-income group and 70 percent for people in the low-income groups. The interaction of these two transitions – urbanization and chronic illness – will have enormous effects on India. The rise in lifestyle diseases in urban areas will spur an increase in inpatient hospital admissions and costs, and is projected to account for a \$236 billion in lost productivity between 2005 and 2015. The relative frequency of treatment for lifestyle and chronic illness conditions varies between inpatient and outpatient settings. Compounding both of these trends is longer life expectancy and the growth of the elderly population (described above). Medical tourism Finally, rising medical tourism to India is also swelling demand for healthcare in private facilities. It is estimated that the number of patients visiting India for medical treatment grew from 150,000 in 2002–04 to 600,000 by 2011 (see Chapter 6). The lure of India is the lower cost of procedures, the perceived "cost-effectiveness" of Indian healthcare, the fact that Indian

providers speak English, and providers' familiarity with western healthcare (by virtue of having trained abroad). The government has also promoted medical tourism by introducing a new category of "medical visa" to facilitate visits by foreign patients to Indian hospitals. The Government's National Health Policy of 2002 also encouraged the provision of healthcare services to non Indian patients to help the country with foreign exchange. Some medical tourists are not foreigners at all but natives of the Indian states who want to keep in touch with their roots and hold onto their traditions, and thus come home and avail themselves of the facilities serving foreigners.⁶⁶ Private-sector facilities cater to these patients (who may crowd out the indigenous population that seeks care there). A different but important driver of medical tourism is the availability of assisted reproductive technologies (ARTs) to western patients, such as in vitro fertilization and surrogate parenthood. These technologies are not tightly regulated, and regulations vary considerably across Asia, where several countries compete with one another for medical tourism business. Medical tourism has had several unanticipated effects. First, it has reportedly induced many healthcare professionals to move from the public to private sector, exacerbating the shortages of public-sector manpower and perhaps lowering standards as well. Second, it may have increased the concentration of providers not only in the private sector but also in urban areas. Third, the monies raised through medical tourism have not yielded the expected tax revenues for the government.

The hospitals catering to medical tourists – often the larger, for-profit corporate facilities – have received various subsidies and financial benefits, including lower import duties, increased rates of depreciation on medical equipment, and land concessions. However, they have not necessarily reciprocated by setting aside capacity to treat indigent patients. Moreover, they have attracted a number of physicians who were trained in the public sector at government expense.⁶⁸ Public health issues A final method used to analyze a country's healthcare system is to analyze its approach to public health and its health status indicators. India's healthcare system has evolved in an evolutionary and organic fashion since independence. Development during the first phase (1947–83) was guided by the principles that (1) no one should be denied care based on inability to pay and (2) healthcare is the government's responsibility. The government, through the Bhore Committee, sought to plan and deliver services to all through the building of infrastructure (institutions, manpower, research, pharmaceuticals, technology) and a strong primary care system supported by secondary and tertiary systems.⁶⁹ Efforts during this period focused on disease eradication and reductions in infant mortality, as well as the erection of a network of urban and rural healthcare services in the public sector – much of it at the secondary and tertiary level during the 1960s. During the second phase (1983–2000), the country articulated its first National Health Policy, stating the need for private-sector involvement in addition to an expansion of primary care funded by public sources and continued emphasis on disease eradication via targeted, vertical "National Health Programs." There were major cutbacks in public funding due to the country's fiscal crisis of the late 1980s and the economic reforms (liberalization) of the early 1990s, which marked a major shift in the government's policy toward healthcare. The government reduced its share of spending on health, reduced direct taxes, increased administered prices, reduced tariffs on trade, and provided incentives for FDI. These moves conferred

legitimacy on the private sector, perhaps covered for the declining allocations to healthcare in the country's success, and led to its crowding out the public sector. Moreover, lack of funding hurt the public-sector infrastructure, leading many public providers to migrate to the private sector. Most recently, in the third phase (since 2000), the country has facilitated the rise of private-sector health insurance, sought to mobilize private-sector infrastructure to address public healthcare ends, and increased the government's role in financing healthcare.⁷¹ The country has also accessed loans from the IMF and World Bank to refashion delivery in the public sector. Since independence, India has made great strides in public health. IMR – the number of infant (less than 1 year old) deaths per 1,000 live births – was nearly halved from 148.

Summary and overview of the volume This chapter has described a variety of lenses and frameworks through which one can begin to analyze India's developing healthcare system. None are inherently superior or inferior. Instead, they alternatively highlight goals and tensions, structures, functions, corporate and individual actors, flows and exchanges, and dynamic transitions. One might wisely employ multiple approaches to develop a comprehensive understanding of India or any other healthcare system in an emerging economy. In analyses of the US healthcare system, we typically rely on a value chain framework that focuses on the major actors and the economic exchanges (as buyers and sellers) between them. We loosely adopt that framework in this volume to focus on several of the key actors in India's healthcare system: hospitals, physicians, insurers, other payers and financiers (e.g., foundations and private equity), pharmaceutical firms, biotechnology firms, and medical device firms.

Consistent with the Control, we also spend considerable time describing the wider societal context underpinning India's healthcare system, and the policy levers used in the past to achieve its desired intermediate and ultimate ends. There are two additional introductory chapters in this first section of the book. Chapter 2, written by Stephen Sammut, expands upon some of the issues dealt with in this chapter. The chapter discusses the balancing act in India between the iron triangle issues of access and cost, as well as six major public health challenges facing the country. It also addresses the question of whether India's healthcare system can keep pace with the country's economic growth, or will encumber the burgeoning economy. Chapter 3, written by Lawton Robert Burns, provides an in-depth overview of India's value chain and the efforts undertaken since independence to reform it. This chapter serves as an introduction to many of the topics and trends discussed throughout the remainder of the volume. It also discusses some of the key historical events in the evolution of India's healthcare system and the wider Indian economy

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