

Corporate Presence in the Health care Sector in India

Indira Chakravarthi

Abstract

Various forms of privatization have been the preferred policy option for the health sector reform which was initiated in the 1990s in India under the neo-liberal regime. Rigorous study of privatization processes and of the private sector in general remains inadequate. This research attempts to fill this gap by examining the extent and nature of corporate presence in India in the delivery of health care services. It poses some concerns in light of experiences of other countries. The first section of the paper covers the private hospitals sector. The second part looks at the diagnostics sector. The concluding section discusses the implications of such developments for health care services in the country.

Introduction

As is well-known, India has historically had both public and private medical care providers. This latter group included a large number of individual practitioners (qualified and unqualified), nursing homes, both small and large hospitals, as well as diagnostic and pathology laboratories. While over 70% of the health services in India are provided by the private entities, information on this sector continues to remain far from satisfactory. Most health care attention, research, and analysis focuses on the under-resourced government health services and programs, detailing their “poor performance” and “faults and shortcomings.” It is remarkable (and worrisome) that despite the inadequacy of information on the nature, size, spread, efficiency, and effectiveness of the private sector, it is being promoted by the government and international agencies

as the panacea for all problems relating to the provision of medical care services.

The idea that the private sector in India is made up primarily of small hospitals and nursing homes with only a small corporate presence has become a truism not subjected to critical examination. While no exact figures are mentioned, government documents nonetheless admit that recent decades have seen “tremendous growth in private sector investment in health care” (Government of India 2008 p 98).

This paper examines developments in the private medical care sector over the past two decades specifically in relation to the activities of the corporate sector. It needs to be pointed, however, that even now there is no consolidated source of information on the private sector in India. To be specific, information about the numbers of such providers, ownership patterns, the nature and quality of services, employment conditions and qualifications of personnel is sketchy, and—if available—is in the form of case-studies. The only data collected by the government (Ministry of Health) and published in the Health Information of India (HII) is the total number of private hospitals and beds; this was acknowledged to be an underestimate. With the shift to publication of the HII as National Health Profile in 2005 even this information is no longer available.

In order to arrive at a picture of corporate presence in the health care sector this paper uses information collected by the Center for Monitoring Indian Economy (CMIE), a private research organization, and qualitative information from business publications and websites of companies.

I. Growth of for-profit tertiary level and specialty hospitals

Since the early 1990s, when health care was seen as a “sunrise industry,” several big corporate houses, Fortis Healthcare (promoted by Ranbaxy Labs), Wockhardt Hospitals (promoted by the

Corresponding Author: Indira Chakravarthi
Address: 40 Dakshinapuram, Jawaharlal Nehru University, New Delhi-110 067, India
Email: indira.jnu@gmail.com
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Number and value of projects in health services in 2008-2009

Projects	March 2008		June 2008		Sep 2008		Dec 2008		Mar 2009	
	No.	Rs cr	No.	Rs cr.						
At the beginning of the quarter	222	22,186	240	22,933	239	23,120	241	23,613	245	22,273
New	20	454	5	100	3	500	7	3610	23	13,778
Total live	243	22,740	245	23,033	243	23,700	249	27,223	268	41,052
Total deletion*	3	115	6	256	2	87	4	53	6	1506
At the end of the quarter	240	22,933	239	23,120	241	23,613	245	27,273	262	39,659
Announcements	157	12,918	160	13,201	162	13,501	166	17,162	179	28,383
Under implementation	80	9,963	78	9,912	79	10,112	79	10,112	82	11,275
No info	3	51	1	7	--	-----	--	-----	1	-----

Source: CMIE 2009; Rs cr: One crore or ten million Indian rupees (about \$US 220,000)

* - due to either completed or abandoned/shelved, or no information.

pharma company Wockhardt) and Max Healthcare announced plans to set up hospital chains across the country. In addition to these big hospital chains, including the oldest one Apollo, other private hospitals and specialized health care facilities have been created for specialized services such as cardiac care, renal care, eye care, orthodontics, and laparoscopic surgery.

The International Finance Corporation (IFC), a member of the World Bank Group, is also providing loans to these private parties for their expansion plans and to set up hospitals in smaller cities and towns in the country. IFC promotes such projects as part of its strategy to invest in health care and promote private sector involvement in health care in India.

The table above gives an idea of the very large number of projects in health services in mid 2009 – 262 projects, announced and under implementation. These figures also indicate that on an average at least 2 new projects were announced every month in the reference year, a rather high number. In fact in the December 2008-March 2009 quarter 8 new projects had been announced. Further, it is amply clear that several thousands of crores of rupees are being invested in the health sector.

Listed below is an indicative set of activities by the three highly visible 'health care' groups: Apollo, Max, and Fortis. The Apollo group is re-

ported to be the largest health care group in Asia followed by the Fortis group (CRISIL Research 2009). Since 2003 Apollo Hospital Enterprises Ltd (AHEL) has consistently held 30% of the market share, while other health care companies were way behind, each holding less than 10 %. However, the market share of Wockhardt climbed from 5% to 9.37%, while that of Max went up from 1.5% to 4.6%. Fortis went from 2.98% to 4.3% in 2006-07 and then fell to 3.59 in 2008-09 (CMIE 2010).

AHEL brought the concept of corporate¹ medical care delivery to India in early 1980s. It was incorporated as a public limited company in 1979 and is listed on the Bombay Stock Exchange. The Reddy family owns 34% of the shares. Institutional investors each own less than 5% and the Singapore government owns some shares through its invest-

¹“Corporatization” of health care has been used to describe the penetration of large for-profit companies into an area previously dominated by non-profit institutions and individual practitioners. It also refers to certain organizational-managerial reforms of public services adopted under the aegis of the World Bank, such as application of management practices of the corporate sector to public hospitals with the understanding that this will improve their efficiency and hence the effectiveness of public expenditures. As corporate practices are designed to maximize profit, their adoption by non-profit organizations could influence decisions towards financial efficiencies and affect social goals (see White 1990).

ment arm. AHEL is also into a range of other medical care related services: nursing and hospital management colleges, pharmacies, diagnostic clinics, medical transcription services, telemedicine, clinical trials, and consulting. The Group comprises:

(i) Apollo Hospitals, reported to have over 8500 beds across 50 hospitals in India, many neighbouring countries, and Africa (2654 owned, 1890 through subsidiaries (joint ventures-associates), and 3100 managed).

(ii) Apollo Health and Lifestyle Ltd, which has established over 100 Apollo Clinics across the country for consultations, diagnostics, preventive health check-ups, and 24-hour pharmacy.

(iii) Apollo Pharmacy, was reported as of June 2009 to be the largest branded pharmacy network in the country with over 900 retail outlets all over India.

(iv) Apollo Reach Hospitals, comprising 100-150 bed hospitals presently being set up in semi-urban and rural areas “to capture the underserved market” in the small towns in the name of “taking world-class health care to rural India.” In mid-June 2008 Apollo announced plans to move into Tier II cities in India and was setting hospitals jointly with financial companies such as JP Morgan and Birla.²

(v) Apollo Hospitals Education and Research Foundation, set up in 2002 to establish and support education in medical, paramedical and hospital management courses; it claims to offer over 18 post-graduate programs.

(vi) Apollo Telemedicine Networking Foundation.

(vii) Apollo Insurance Company Ltd, Apollo DKV a joint venture of Apollo with two of Europe’s big insurance groups – DKV AG and a Munich Re Group Company.

(viii) Apollo Global Projects Consultancy offers project and operations management consultancy services. These include feasibility studies, strategic planning, infrastructure consultation, human re-

²The Apollo Hospitals Group was planning to set up a chain of 250 “Apollo Reach” hospitals across semi-urban and rural India, with an investment of Rs 12,500 crore, as part of their concept of “health care superhighway” in the country (Business Line March 22 2009). In the first phase such centers were to be set up at 25 places, including five in Gujarat, with the first three Reach hospitals in Karimnagar and Kakinada in Andhra Pradesh and Karur in Tamil Nadu.

source recruitment, training and medical equipment consultancy, management contracts, establishment of medical and administrative protocols etc. The Apollo Health care Consulting Services manages more than 30 hospitals in India, Dhaka, Colombo, Kuwait, Nigeria, and Yemen. All such managed hospitals become part of the network for central marketing and purchasing programs. In addition, Apollo also has an Online Hospital Equipment Services Private Ltd (Equipment World), an electronic equipment exchange for medical equipment and high-end medical technology. Apollo-Gleneagles is a joint venture between Apollo and Parkway Group of Singapore to cater to eastern and north-eastern India, Bangladesh, Bhutan, Myanmar and Nepal (<http://www.apollohospitals.com>). AHEL has a 45.5% stake in Apollo Health Street, an associated company that provides IT services to US health care companies. AHEL through Stem Cell Therapeutics India, in association with Cadila Pharma and Stem Cyte, USA, has set up an umbilical cord blood stem cell banking facility at Ahmedabad, at a total investment of Rs 60 crore (Business Line March 22 2009, Economic Times February 25 2010). Cadila Pharmaceuticals Ltd also holds 26 per cent stake in a joint venture of Apollo Hospital at Gandhinagar. Apollo planned to invest Rs 1,400 crore in the next few years, including Rs 50 crore in Gujarat. In 2009-10, it would invest Rs 24 crore in the State, mainly on setting up a nursing college and the stem cell center. In February 2009 Apollo Hospitals set up its first robotic radio surgery system (costing about Rs 35 crore) in Chennai at an investment of Rs 75 crore, including infrastructure (Business Line February 7 2009). It expected to invest about Rs 80 crore in acquiring two additional systems to be placed in two other locations.

At the end of March 2008 Apollo reported an income of Rs 1,150 crore, a 28% increase, and a net profit of Rs 101.8 crore, a 51% increase over the previous year (The Hindu June 25 2008). While hospitals, pharmacies, and consulting are the three main lines of business for AHEL, it is the hospitals that are reported to bring in the maximum revenues (CRISIL Research 2009). AHEL has received assistance from IFC on two occasions—in 2005 it invested up to \$ 20 million in equity for expansion purposes to strengthen Apollo’s position in the region as “market leader in health care.” In May 2009 the International Finance Corporation extended

credit to Apollo Hospitals (Business Line May 15 2009) which included up to \$35 million (Rs 175 crore) as a “senior loan” and a convertible loan of up to \$15 million (Rs 75 crore).³

The Fortis Group, incorporated in 1996, is the health care division of Religare Technova, a holding company for the IT business of the diversified transnational Indian business group Ranbaxy. The other divisions include diagnostics (Super Religare Laboratories SRL, formerly SRL Ranbaxy), financial services (Religare Enterprises), wellness, and aviation and travel. In early 2008 Fortis had a network of 13 hospitals primarily in north Indian cities and 16 satellite and heart centers, including one in Afghanistan. By late 2008 it was reported to own 22 hospitals and 2,500 beds of which 1,600 beds were operational. Fortis Healthcare care planned to set up ten “medicities” and was engaged in talks with the Gujarat government on establishing one such project in that state (The Economic Times August 31 2007). It was also planning a Rs 500 crore health city in Gurgaon in the National Capital Region of Delhi (Chronicle PharmaBiz August 30 2007).

Over the past few years Fortis has been acquiring hospitals across the country. In 2005 Fortis acquired majority control in Escorts Hospitals, Delhi at Rs 585 crore. In the same period International Hospital Ltd, a wholly owned subsidiary of Fortis Healthcare Care Ltd, along with Oscar Investments Ltd (OIL) acquired 62.17 per cent equity in the Chennai-based Malar Hospitals Ltd (MHL) for Rs 34.68 crore (Business Line February 20 2008). According to MD Fortis, the acquisition was an important milestone in their “national roll out plans.” Malar Hospitals was well established in Chennai and enjoyed strong brand equity in South India, which was an advantage. Fortis expected to invest Rs 20 crore to upgrade Malar Hospital. According to Fortis, “My major concern is revenue generation, (which means) better utilisation of beds” (Business Line October 2 2008). To improve revenue generation, the hospital not only needed to upgrade the basic infrastructure but also its medical equipment, he said. The major thrust areas identified were cardiac, orthopedics, neurosciences, and women’s health. In January 2009 Fortis acquired Apollo’s stake in the 75-bed renal care center, Apollo RM

Hospital for an undisclosed sum and now holds 66 per cent in it (Business Line April 8 2009). Fortis also acquired the 152-bed Hiranandani Hospital at Vashi (Mumbai) for Rs 25 crore. According to a Fortis spokesperson, the hospital was a public-private partnership with the Navi Mumbai Municipal Corporation (Business Line April 2009). In late 2009 Fortis Healthcare care Ltd acquired 10 hospitals from the Wockhardt Hospitals chain for Rs 909 crore. This was considered to be the largest deal in the health care industry. The deal, covering Wockhardt’s hospitals in Mumbai, Bangalore, and Kolkata, added 1,902 beds to Fortis’ existing capacity (Business Line August 25 2009) and was to be funded through a mix of debt and equity. Following the deal several senior management staff from Wockhardt Hospitals, about 650 doctors and 1,300 medical staff also entered the Fortis fold. With this acquisition, Fortis would have 9,250 personnel, including 1,575 doctors and 5,000 nurses and paramedics, according to company officials. In January 2009 Fortis, through its wholly owned subsidiary Novelife Limited, along with a Mauritian Industrial Group CIEL, jointly acquired a controlling stake in Mauritius’s largest private hospital. Fortis took over the operations and management of the hospital. As of March 2010 Fortis Healthcare Network comprised 46 hospitals (including 13 satellite/heart centers) (www.fortishealthcare.com accessed March 17 2010). In March 2010 Fortis was reported to be acquiring (for about Rs 3100 crore) a 23.9% stake in the Singapore-based firm Parkway Holdings (The Hindu March 12 2010), an Asian health care company spread over six countries, including India. Fortis was also reported to have a joint venture with DLF, a Delhi-based real estate company, to set up hospitals across India at an investment of Rs 6200 crore (\$ 1.5 billion).⁴

Max India Limited is a multi-business corporate company (part of the Mohan Singh Group). Prior to 2000 Max was in the telecommunications and the traditional manufacturing sector. Seeing an opportunity it shifted to health care services. Max Healthcare is owned by its founders and other promoters, Warburg Pincus (reportedly the largest international private equity investor in India), and other foreign institutional investors and individuals. It claims to “protect life” through its life insurance

³ www.ifc.org/ifcext/southasia.nsf/Content/India_overview. Accessed in April 2010.

⁴ www.asianhbm.com/knowledge_bank/projects/ Accessed June 18 2010

subsidiary Max New York Life, a joint venture between Max India and New York Life, a Fortune 100 company. It promotes “care for life” through its healthcare company, Max Healthcare, a subsidiary of Max India Limited. Max Healthcare has a technical collaboration with Partners Harvard Medical International⁵; Max claims to “enhance life” through its health insurance company, Max Bupa Health Insurance, a joint venture between Max India and Bupa Finance Plc., UK; and finally it will “improve life” through its clinical research business, Max Neeman, a fully owned subsidiary of Max India. Max India continues the manufacture of speciality products for the packaging industry.

Max Healthcare claims to have over 800 Beds and 8 hospitals in Delhi with over 1500 physicians and 3000 support staff. Max has received IFC assistance in three phases – in 2003, 2007 and in 2009. In 2007 it received a loan to expand by 2010 its network of secondary and tertiary facilities, as well construct new hospitals in the National Capital Region (comprising Delhi and neighboring townships) and Dehradun. Max planned to set up sixteen primary care centers, five nursing homes (each with 30-40 beds), and two tertiary level hospitals, at a total budget of around Rs 3 billion (<http://www.ifc.org>). The expansion project was expected to create about 4500 jobs during the construction phase. In 2009 the IFC extended a loan of Rs 150 crore (\$30 million) as an equity investment through Max Healthcare Institute Ltd, in which it already holds a 70 per cent stake. Max India planned to expand its network of hospitals at an investment of Rs 472 crore (\$93 million) (Business Line May 15 2009). Max Healthcare also received a loan of US \$ 20mn from the Asian Development Bank (ADB) in 2002 (www.maxindia.com, www.maxhealthcare.in).

The Wockhardt Hospitals, promoted by the pharma company Wockhardt, had established a chain of so-called ‘state-of-the-art super specialty’

⁵ Partners Harvard Medical International (PHMI) is an association of Harvard Medical International, a subsidiary of Harvard Medical School, with Partners Health care USA. PHMI works primarily with medical colleges and hospitals outside USA to develop educational and health care programs. Apart from Max Healthcare, Wockhardt also has been associated with PHMI since 2001. In April 2010 a team of doctors from Wockhardt was sent to Boston for a leadership program organized by PHMI (www.phmi.partners.org).

hospitals located at Nagpur, Nashik, Surat, Rajkot, Bhavnagar, Vashi (Mumbai), Bangalore, Hyderabad, and Kolkata; Wockhardt had committed several hundred crore rupees for this purpose (Economic Times 14 December 2004). The group planned to double its chain of hospitals by 2012 and opened its second 400-bed hospital in Bangalore (Business Standard July 13 2007). Wockhardt Hospitals, Hyderabad, signed a Memorandum of Understanding with the Andhra Pradesh State Road Transport Corporation to provide cardiac care services to its employees (Business Line March 2 2009). Wockhardt planned a new hospital in Goa by 2011, and four new hospitals in South Mumbai, Bhopal, Patna, and Jabalpur.

Apart from these major companies, a range of smaller, local companies are also entering the hospital sector. A representative list is presented below:

i. *Narayana Hrudayalaya*, the Bengaluru-based hospital group, was founded by the Shankara Narayana Construction Company. The group, which has a “health-city” in Bengaluru and a center in Kolkata, planned to open a 600-bed facility in Hyderabad and a center in Visakhapatnam (Business Line July 11 2009). In January 2009 Narayana Hrudayalaya signed an MoU with the Gujarat Government to set up a 5,000-bed Health City in Ahmedabad (Business Line January 17 2009). It planned to initially invest Rs 480 crore in a 1,000-bed heart hospital, which was to be operational by June 2010. This was to be followed by other specialty hospitals, apart from a nursing college and paramedical training centers. According to the Chairperson, the Ahmedabad project was meant “to make medical services and technologies affordable to the masses,” and was expected to generate direct employment for 2,000 people and indirect employment for 5,000 people. Apart from Bangalore and Kolkata, the group had hospitals in seven other cities. In July 2009 it opened the 1,400-bed Mazumdar-Shaw Cancer Centre in its health city at Bangalore (Business Line July 18 2009). The Chairman of Biocon Ltd, in her individual capacity, was reported to have invested around Rs 40 crore in the project.

In total the Narayana Group had 28 units across the country (www.narayanahospitals.com). It also conducted several training programs and was partner with the Karnataka state government in the Yeshaswini health insurance program. It planned to

start 100 multi-specialty diagnostic centers *cum-clinics* across the country at a total investment of around Rs 100 crore (estimated at Rs 1 crore for each clinic) to be funded through the family-owned Narayana Hrudayalaya Private Ltd (Business Line June 11 2009).

ii. *CARE Hospitals Hyderabad* is a similar group which has several facilities across AP and in the eastern cities of Raipur and Bhubhaneshwar.

iii. *Rockland Hospital, Delhi* is owned by a group with interests in the hotel, media, retail, and real estate sectors. In 2008 Rockland Hospital received a \$22 million loan from the International Finance Corporation in equity to fund expansion of its current facilities, construction of a new 250-bed hospital at Manesar on the outskirts of Delhi (The Hindu August 5 2008), and a television channel focusing on health related services (www.ifc.org).

iv. *Bengal Faith Healthcare Pvt Ltd* in 2006 announced setting up of Bardhaman Health City Project at Bardhaman, West Bengal, at a capital outlay of Rs 1000 crores. It is being implemented by Bengal CES Infratech India Ltd and is expected to be completed by 2014.

v. *Adarsh Divya Vikas Hospital & Research Centre* announced in 2003 the 900-bed Belkunda Hospital Project at Vaishali, Bihar, at an outlay of Rs 375 crores of which Rs 275 crores was foreign loans. This was expected to be completed by 2011.

vi. *Global Sunrise MediServices Pvt Ltd* announced a Multi Organ Transplant Hospital Project Phase I in October 2004 at Rajarhat North 24 Parganas, Bengal at a capital outlay of Rs 150 crores.

vii. *Kohinoor Planet Constructions Pvt Ltd* was to set up a new unit at its hospital in Mumbai.

viii. *B.P.Poddar Hospital & Medical Research Pvt* announced in 2007 an extension of its Kolkata Hospital in Kolkata from 123 to 260 beds.

ix. *Goa Infrastructural Development Co. Pvt Ltd* was to have set up a 250 bed hospital at Phonda, North Goa, at a cost of Rs 35 crores.

x. *Himadri Memorial Cancer Welfare Trust* was setting up a 150 bed cancer hospital in Kolkata at a cost of Rs 25 crores.

xi. *Sterling Hospitals Ltd* was to set up a 50 bedded hospital in Kachh, Gujarat at Rs 18 crores; it has also announced the creation of a cardiology facility at Vadodara.

xii. *Ruby General Hospital Ltd*, set up by an NRI doctor, (www.rubyhospitals.com) announced

expansion of its Kolkata Hospital to 300 beds at a cost of Rs 10 crores. This hospital was also reported to be working on a private-public partnership (PPp) with the Kolkata Municipal Corporation to revamp the latter's hospitals.

xiii. *Medica Synergie Pvt Ltd Kolkata*, which was setting up a network of hospitals in eastern India, announced in 2008 the establishment of Kolkata Eye Hospital Project. ICICI Ventures, though Iven Medicare India Pvt Ltd, was providing venture capital to Medica Synergie. It was reported to have invested Rs 250 million so far (www.medicasynergie.in).

xiv. *B.M.Birla Heart Research Centre* announced in 2008 the setting up of 3 hospitals in Rajarhat, 24 Parganas; Siliguri, Darjeeling; and Haldia; these are all in West Bengal. However, the construction of all three was stalled. (Information on iv.to xiv also from CMIE 2009).

xv. In the National Capital Region of Gurgaon, Medanta, a "Medicity" has been set up by *Global Health Pvt Ltd.*, with an investment of \$ 250 million. GE Health care was to provide the technologies for this project and was also a partner in the clinical research and education programs. (Chronicle Pharmabiz June 2 2005). GE, as part of its plans to increase its presence in India, was investing \$ 250 million in infrastructure and health care projects in the country (Business Standard May 26 2005). Similarly, the Chennai-based Frontier Lifeline Pvt Ltd had also invested in a "Mediville" near Chennai (Business Line March 14 2009) and was running health care facilities in an industrial township in the neighbouring state of Andhra Pradesh (Business Line September 2 2009). Both Medanta and Frontier were promoted by cardiac surgeons, who are their CEOs.

xvi. *Artemis Hospitals*, promoted by Apollo Tyres, was setting up a Rs 500 crore medical education "hub" on the Baroda-Ahmedabad highway in Gujarat (The Economic Times August 31 2007). This hub was to have a 500-bed hospital, a medical college, nursing college, pharmacology school, and a college of medical administration.

xvii. Several new and existing corporate hospitals were planning to set up large hospitals in Gujarat; it has been estimated that total investment in the health sector in Gujarat was more than Rs 7000 crore as of August 2007 (The Economic Times August 4 2007). This groups included Bombay Hospi-

tal Trust, Clinical Islet Transplant Group, Apollo, and Sterling; this is in addition to the investments by Artemis and Fortis mentioned earlier.

xviii. The *Asian Institute of Gastroenterology*, a Rs 30-crore, 200 bed Gastroenterology and Liver Diseases Hospital and Research Centre, was started in Hyderabad in 2004 with equity participation from Matrix Laboratories and donations from VisualSoft and Zen Securities. This venture was to have treatment services, research & patenting, training, and drug trials as its focus areas. The Asian Institute was chosen as one of the five centers in the world for a multi-country trial of a new capsule endoscope. The US Federal Drug Authority granted authorization for the Institute to undertake drug trials which the latter planned to capitalize upon (Business Line December 25 2003). Another specialty hospital, the Delhi-based RG Stone Urological Research Institute joined forces with ICICI Venture to establish 10 hospitals at US \$ 10 million.⁶

xvix. *Healthcare Global Enterprises Ltd* (HCG), a chain of cancer hospitals with equity investments by IDFC Private Equity, Evolence India Life Sciences Fund and PremjiInvest, had 17 cancer treatment centers across the country in 2009 and was planning to expand to 40 centers with an investment of Rs 400 crores by 2012 (Business Line August 29 2009).

xx. The M.P. based *Birla Group* ran a 150 bed hospital and a 46 bed ophthalmology hospital in Kolkata. The Group was planning to set up another budget hospital of nearly 200 beds in Kolkata (Business Line June 25 2009). It also planned to set up two hospitals in Rajasthan: one in Jaipur and a second in Chittorgarh. It already has a clinic in Jaipur with a 64-slice CT scanner.

xxi. The Karnataka-based *Manipal Education and Medical Group* was also reported to have set up a chain of health care centers across the country (Manipal Cure & Care) (Business Line March 17 2009).

Although 100% foreign direct investment (FDI) has been permitted in the country since 2000, such investment has been limited. Of the 90 projects approved for FDI during the period 2000-2006, 21 were for hospitals and the rest for diagnostic centers. While FDI is expected to increase very large

corporate hospital chains are not expected to invest here (GoI 2008 p 98). Some foreign companies reported to have plans to enter the Indian market are Pacific Healthcare Holding and Parkway (both from Singapore), Emaar from Dubai, Prexus Health Partners from the US, and Columbia Asia from Malaysia. Prexus was planning three facilities in Delhi and its surrounding towns; Columbia Asia planned three 100 bed hospitals in Mumbai, Delhi and Calcutta (Business Standard July 13 2007). However, we find that there is considerable corporate investment already in hospitals in the country through foreign institutional investors (FIIs). This is expected to continue.

Corporate hospitals are also being invited to manage government hospitals. The Government of Gujarat has a public-private partnership with Wockhardt Hospitals Group (WHG), to manage the 275 bed Palanpur General Hospital in Gujarat (Express Health care July 2007). Under the agreement Wockhardt would “run the hospital efficiently” within the allocated annual budget, as well as provide medical treatment and facilities at rates fixed by the Government of Gujarat. The agreement was initially for a period of 10 years, to be renewed for another 10 years by mutual consent. Apollo too was managing a super specialty hospital at Raichur for Government of Karnataka for 10 years beginning in 2002 (www.apollohospitals.com).

II. Private diagnostic centers

Private laboratories for clinical and pathological tests are not new. It is estimated that there are over 25,000 path labs in the country and that most were either ill-equipped or not professionally staffed (Business Line 29 September 2005). Although it is difficult to estimate their numbers (it is only recently that an Act providing for registration of medical establishments has come into existence) a couple of interesting trends are visible in the diagnostic industry: (i) The growth of independent diagnostic centers and their corporatization (like the hospitals); (ii) The increasing number of independent imaging centers that are being set up in many cities.

Several corporations have drawn up plans to exploit the market potential of pathological laboratories. It is predicted that this fragmented path-lab market would witness some consolidation in a regulated environment within the next five years.

⁶ www.asianhnm.com/knowledge_bank/projects/ Accessed June 18 2010

According to the management of the Metropolis Health Services Private Limited, "..... this was the growth model in the US. Ten years ago, the US market was as fragmented as the one in India today. But over the years, four major chains have emerged to control 90 per cent of the market in the US. The market in India will also evolve in a similar way" (Business Line September 2005).

Several factors can be identified for the increasing number of private diagnostic facilities:

- * The growth of such independent diagnostic facilities is perceived as taking a load off of conventional hospitals.
- * Specialized diagnostic labs are looking at Hospital Lab Management (HLM)—ways by which they could take over the maintenance and operation of lab facilities at big hospitals. This is seen as an avenue for those who do not want to open a new lab or buy one outright (Business Line April 15 2006).
- * Another development is the government's policy of encouraging/promoting public-private partnerships in the health care. In the context of PPP laboratory services are being outsourced by government and other public sector hospitals as well as institutions, such as the Railways, Defense, and Employees' State Insurance Corporation.
- * The outsourcing of laboratory testing and diagnostic services by non-Indian hospitals is expected to become a big business in India. "For hospitals in the UK and the US, it is cheaper to outsource laboratory and diagnostic tests to India. The prevailing rates there are ten times more compared to our charges. The situation is the same in West Asia too," according to the Managing Director of Metropolis Health Services (India) Private Ltd.

Major companies in the diagnostics facility segment

Some of the companies involved in the diagnostics industry are SRL, the Mumbai-based Metropolis, the Delhi-based Dr Lal's Pathlabs and the Agarwal Imaging Centre. Pharma companies, including Dr Reddy's Laboratories (DRL) and Nicholas Piramal, also have a finger in the path-lab pie, supporting such ventures directly or indirectly. According to news reports, organized chains hold 5-10% of the market share and are trying to expand by buying off stand-alone centers (The Economic Times

May 6 2010). Use of state-of-the-art equipment is the major selling point for these facilities, and acquisition of any new gadget/equipment is given wide publicity in the media and highlighted by all laboratories without exception.

Metropolis Health Services (India) Private Limited is a Mumbai-based company which runs a chain of clinical diagnostic centers across the country in Mumbai, Chennai, Bangalore, Jaipur, Thrisur, Kochi, Delhi, Ahmedabad and a contact center at Dubai. According to newspaper reports the revenue of Metropolis increased from Rs 8 crore in 2002 to Rs 70 crore in 2006 (Business Line April 15 2006). It also acquired several existing labs, such as Lister Laboratories of Chennai and was reported to have spent Rs 25 crore on additional acquisitions. ICICI Venture, considered to be India's largest private equity fund, was reported to have invested \$ 8.6 million in a chain of diagnostic facilities along with Metropolis Health Services (PriceWaterhouseCoopers 2007 p 15). Metropolis managed ten of its 17 labs under Hospital Lab Management (HLM), including laboratories in Sri Lanka and Seychelles. (Business Line 29 September 2005). Metropolis also planned to set up a joint company or have a loose alliance to work with contract research organisations to conduct clinical trials and offer patients, lab services, hospital beds, and disease profiles. Lister Metropolis claims to have launched several "novel" services, such as "home service" where X-ray and ECG could be done at homes. Another was on-site medical testing of new employees for various companies; testing is done at its offices. (Business Line 4 March 2005). The third segment that the venture planned to target was the home services segment, namely the provision of services to those who are unable to visit a diagnostic center for pathological testing. Lister Metropolis also had joint ventures with the Delhi-based Agarwal Imaging to provide imaging services.

Piramal Diagnostics is the diagnostics division of Piramal Healthcare, in turn a division of Nicholas Piramal India Limited (NPIL) a pharmaceutical manufacturer. It has over 60 pathology laboratories and imaging centers throughout the country (www.piramalhealthcare.com).

Super Religare Limited (SRL – formerly SRL Ranbaxy) is also in the clinical laboratories business, operates a chain of SRL pathology laborato-

ries, and is promoted by SRL and Fortis, as discussed earlier.

Diwan Chand Satya Pal Aggarwal Imaging Research Centre is a unit of Diwan Chand Integral Health Services Limited. (www.dcaimaging.org). As of 2006 DCIHS, a Diwan Chand Aggarwal (DCA) group company, was set to expand in Delhi and NCR to create an integrated chain of imaging centers. The company had six imaging centers in the NCR region and was looking at options in Kolkata, Mumbai, Jaipur, Chennai, and Bangalore (Express Health care Management November 2006). According to the Director of DCIHS, there was no organised imaging group in the country and DCIHS wanted to fill a niche. An investment of over Rs 150 crore was planned for expansion; funds are to be raised through a mix of private equity and loans. DCA Imaging also sets up and manages hospital based diagnostic imaging centers in Delhi. Since 1990 the center has been a recognized teaching institution for post-graduate training in radio-diagnosis and posts trainee radiologists in corporate hospitals in Delhi during training. Another activity of the center is the conducting of clinical trials. It functions as a referral center for the radiological investigations needed for trials of chemotherapy drugs and has undertaken trials of contrast media for the US companies Bracco and Nycomed.

Dr. Lal Pathlabs Pvt Ltd, Delhi (LPL), like the Agarwal Imaging Centre described earlier, is a large private pathology laboratory with a centralized facility for testing and 200 collection centers spread across Delhi and in several towns in the northern region. (www.lalpathlabs.com). Dr Lal PathLabs, which has 20 pathology labs currently, is planning a network of 50 labs across India to be financed through public offerings and venture funding (Business Line February 22 2007).

Gujarat Imaging Centre (GIC), was set up with an investment of Rs 30 crores, and reported 200 per cent growth in its business. In July 2008 GIC and GE Healthcare announced the creation of the first molecular imaging center for cancer detection and treatment in Gujarat (Business Line July 9 2008).

US based Quest Diagnostics Inc, a global player in diagnostic testing has entered the Asian markets through its subsidiary Quest Diagnostics India, which opened a diagnostic facility in Gurgaon (Business Standard September 26 2007). It had already entered into an agreement with a private life

insurance company to conduct tests on its applicants/customers.

In several states independent diagnostic centers are also emerging from conventional pathological laboratories; examples include Medinova Diagnostics and Elbit Medical Diagnostics Ltd. Started as a 50:50 joint venture with Elbit of Israel a few years ago in Bangalore, the latter had two units, in Bangalore and in Hyderabad. It had also bought out the stake of the Israeli company (Business Line February 6 2004).

Among the emergin private diagnostic institutions, there is a distinct trend of opening independent imaging centers that offer CT and MRI scanning facilities, apart from even more specialized scanning such as CT-PET. According to the Atomic Energy Regulatory Board (AERB), the regulatory authority for X-ray installations in the country, as of 2006 there were around 40,000 diagnostic X-ray facilities in India; by mid-2008 it reported 45,000 X-ray units (Annual Reports Atomic Energy Regulatory Board, downloaded from www.aerb.gov.in). According to a former official of the AERB in 2006 there were over 2200 CT scan units (Parthasarathy 2007), and by mid-2008 the number of CT scanners in the country had increased to over 2500 (Parthasarathy 2008). In the National Capital Region of Delhi, as of 2006, there were at least 50 CT scanning units; 35 were in private hospitals or diagnostic centers and 15 in government hospitals. There were 25 MRI units; 18 were private and 7 in government hospitals.⁷ Clearly, most of these facilities are located in the private sector.

Instances of outsourcing of laboratory and diagnostic services by public hospitals include the following:

- All the 142 hospitals run by the Employees State Insurance Corporation (ESIC) were to open up their facilities for private players to locate research and diagnostic centers (Business Line December 21 2003). Similarly, ESIC in Puducherry had contracted the three big private hospitals in Chennai to provide specialized treatment to its beneficiaries (The Hindu February 17 2009).
- Similarly, under the Central Government Health

⁷These figures were derived from the list of CGHS recognized institutions in Delhi available on www.mohfw.nic.in, and from websites of various hospitals/diagnostic centers in the city where available.

Services Scheme (CGHS) private diagnostic and pathological laboratories have been empanelled in many states to provide these services.

- The West Bengal government had a joint venture with EKO X-ray and Imaging Institute, Kolkata, to provide diagnostic facilities in its hospitals (Business Line 31 January 2005).
- The Government of Madhya Pradesh, in January 2008, entered into an arrangement with GE Healthcare and Sanya Hospitals and Diagnostic Centre, Delhi to establish an advanced, diagnostic imaging facility at its Medical College Hospital in Jabalpur (Express Health care Management January 2008). The Diagnostic Center was to invest Rs 80 million on equipment and employ trained professionals. Patients would be charged at lower than prevailing market rates. The facility would also be available to the students for training and research.
- The Government of Tripura in 2005 had engaged the services of three different private diagnostic laboratories to provide imaging and pathological services at government hospitals: WinMark Diagnostic Services (of the Kanoria Group) and Sethi Diagnostic and Medicare Private Limited, both of Kolkata, and Dr Lal's Pathlabs, Delhi (Government of Tripura 2005 – Bulletin on Functioning of Health and Family Welfare Department).

III. The Indian Healthcare Federation: For an organized private health sector

In the mid-1990s owners of the erstwhile leading corporate hospitals (such as Apollo Hospitals); manufacturers of advanced medical equipment, like Philips Medical Systems—India; and the Confederation of Indian Industry (CII) started collaborating to establish an active industrial association: an “organized private sector” in India for the provision of health care. This which stand in contrast to the prevailing system composed largely of unorganized, fragmented and unregulated small hospitals and nursing homes. These efforts culminated in the formation of the Indian Healthcare Federation, an association of big private hospitals, diagnostic centers, medical equipment manufacturers, and pharmaceutical companies. According to the IHF an active industry association can play an important role in the development of the health care sector. “To boost the overall growth and development of

healthcare in India, the sector needs a vibrant industry association, which will have to present a united front to key stakeholders, such as government insurers, policy institutions and industry players” (www.indianhealthcarefederation.org).

The IHF commissioned a report on the health care market in India, prepared for it by the Confederation of Indian Industry (CII) and McKinsey and Company. The report was released in October 2002. It found that the Indian health care infrastructure was under-developed and particularly weak in terms of tertiary beds and specialist physicians. The report was meant to provide a roadmap for the creation of this infrastructure by the organized private players in a viable and cost-efficient manner. It concluded with clear recommendations for industry and government on how to increase levels of investment in the sector and how to create opportunities for public-private partnerships in health care. If investments were made by organized private providers (corporate and charitable, excluding small hospitals and private nursing homes), then they could significantly increase their share in health care delivery. The report recommended that concessions from government of land and equipment could improve the economics of tertiary care facilities (The CII-IHF McKinsey Health care Study, 2002). At the request of the government, the IHF and the CII National Committee on Health care jointly prepared and handed over a list of 50 hospitals spread across the country to the Indian Government as potential centers for medical tourism. The government was to undertake an international publicity campaign to boost health tourism in the country (Chronicle Pharmabiz November 25 2004). IHF is reported to have around 300 members and works closely with the CII-National Committee on Health care. Together they organize regular India Health Summits, attended by industry and government, to promote and “showcase” the Indian health care industry.

Significant issues relating to corporate involvement in health care

The following issues emerge from the above description of the corporate sector in health in India:

1. The entrenchment of the idea that health care is a “business” and that decision making in this business should conform to market-oriented crite-

ria. We find that hospitals have come to be regarded as businesses that need to turn in profits for their investors and share-holders, and not as providers of medical care services to the sick. Alongside the hospitals, there is corporatization of the diagnostics sector too. Accordingly, the modes of financing have also changed. Companies setting up hospitals and diagnostic companies are raising funds through public offerings, venture capital, loans and equities, etc. from Indian and international financial institutions including World Bank. These funds are not solely for setting up facilities; they are also used for expansion, acquisitions, etc.

2. Curative and diagnostic services in the private sector are looked upon as part of a “growing marketplace in healthcare” and hence “a good investment opportunity.” For instance, a market survey by PriceWaterhouseCoopers of the Indian health care sector concludes thus: ‘The Indian Healthcare sector can be viewed as a glass half empty or a glass half full. The challenges the sector faces are substantial, from the need to improve physical infrastructure to the necessity of providing health insurance and ensuring the availability of trained medical personnel. But the opportunities are equally compelling, from developing new infrastructure and providing medical equipment to delivering telemedicine solutions and conducting cost-effective clinical trials. For companies that view the Indian health care sector as a glass half full, the potential is enormous’ (PriceWater-houseCoopers 2007 p 20).

3. Along with these changes, there is introduction of business and corporate management practices into the hospitals sector as an attempt to increase efficiency.

4. There is considerable corporate investment in these hospitals in the country, through FIIs and foreign equity, and according to government sources this is likely to continue (GoI 2008 p 98).

5. There is a trend towards increasing dominance by the corporate sector within the private sector, and establishment of multiple facilities (chains); Apollo initiated this trend in 1980s. Following the lead of the corporate hospitals—where Apollo Hospitals talked of setting standards through “brands”—in the diagnostics sector companies are planning to create “brand names,” leaders, etc.

6. Companies with diverse interests are entering into the health sector. Examples are Artemis of

Apollo Tyres, pharma companies like Ranbaxy and Wockhardt, and construction and hospitality groups.

7. General Electric, a US multinational company with diverse business interests, is reported to have invested in 2006 \$ 250 million in infrastructure and health care projects in India (PriceWaterhouseCoopers 2007 p 15).

8. We also find that by and large all the investments are for setting up ‘world-class’ allopathic hospitals with the “latest and most advanced” technologies.

9. There is increasing private purchase of medical technologies with a significant increase in private hospitals and facilities offering complex imaging and other diagnostic and curative technologies. Up till the 1970s-1980s, new medical technologies were introduced into the country by government hospitals and teaching hospitals; now private hospitals and stand-alone diagnostic centers widely advertise the acquisition and use of “advanced / latest technology.”

10. Tertiary hospitals of most companies are concentrated in and around the major metropolitan areas: Delhi, Chennai, Mumbai, Kolkata, Bengaluru, Hyderabad, and Jaipur. However, of late there is increasing movement towards setting up smaller hospitals in smaller cities and towns across the country. This follows the government’s announcement in 2008 of a 5-year tax holiday for setting up hospitals in Tier II and Tier III towns.

11. These health care companies are partnering with insurance companies, TPAs, and foreign financial institutions. The corporate sector caters to their own employees and thus have a captive customer base.

12. Movement of these companies from provision of medical service to other activities, such as medical education, consultancy, and clinical research. Many of these hospitals and diagnostic centers are also providing training/education, including teaching the use of specific procedures and technologies. Some have even associated with the medical equipment manufacturers to teach the use of their equipment. Some of these companies are also entering into arrangements to conduct clinical trials for pharmaceutical companies in the name of research.

13. The corporate segment of the private health care sector is well-organized and, in association

with industry organizations, lobbies actively with the government in its interest. This is done in the guise of partnering with the government to serve the health care needs of the nation.

14. There is also explicit encouragement and support from government quarters to this sector in the form of tax holidays, provision of land at concessional rates, duty-free import of equipment, etc. The Planning Commission of India in May 2007 created a High Level Group on Services Sector. The consultants for the health care sector included the Directors /Presidents of Escorts Heart Institute, Delhi, Apollo Hospitals, Fortis Healthcare, and Columbia Asia. Their report clearly states that “with no regulatory impediments on the expansion of healthcare, the expectation is of sizable private investment by private players in the sector in the next few years” (GoI 2008 p 99).

Lessons from other countries

Corporate involvement is in no way unique to the Indian health sector. It is similar to what happened in countries such as the US in the 1970s (White 1990), Australia (White and Collyer 1998), and Malaysia, (Barraclough 1997) in the 1970s-1980s. Hence it would be instructive to look at their experiences.

“In the United States, where privatization and corporate ownership is more widespread than in Australia, powerful lobbying of the government has enabled the large hospital corporations to weaken regulation, determine Medicare and Medicaid reimbursement rates, influence hospital construction approvals, fund research that justifies and favours corporate hospital care, and influence the actions and practices of the hospital sector as a whole.” (Lindorff 1992, cited in White and Collyer 1998). Further, *“evidence from the US demonstrates that the state can lose control over the hospital sector even if corporations do not control a numerical majority of hospitals or services.....”* (op cit).

Evidence of more serious consequences is provided by a large number of studies of the US health care system, a review of which concludes:

The US has four decades of experience with the combination of public funding and private health care management and delivery, closely analogous to reforms recently enacted or pro-

posed in many other nations. Extensive research ... shows that for-profit health institutions provide inferior care at inflated prices. The US experience also demonstrates that market mechanisms nurture unscrupulous medical businesses and undermine medical institutions unable or unwilling to tailor care to profitability. The commercialization of care in the US has driven up costs by diverting money to profits and by fueling a vast increase in management and financial bureaucracy, which now consumes 31 percent of total health spending.... The poor performance of the US health care is directly attributable to reliance on market mechanisms and for-profit firms, and should warn other nations from this path” (Himmelstein and Woolhandler 2008).

Two similar accounts of corporate involvement in the health sector from Australia and in Malaysia examine the implications for the health sector. The Australian paper discusses the political reasons why the state pursues privatization. Both reviews are relevant to the Indian context.

Some issues that have been arisen in Australia include how corporate investment clearly undermined the capacity of the state to intervene in the health care sector and the loss of political and bureaucratic control over the planning of appropriate hospital services. Among the grave problems caused by the introduction of competition in the health sector was the lack of information sharing between hospitals. Information such as infection rates (e.g. staphylococcal infections) and financial performance are withheld on grounds of “commercial sensitivity.” Such inhibition of information sharing decreases the capacity of the state to monitor, regulate and control.

In Malaysia several consumer groups have drawn attention to the high costs of private hospital treatment and urged government to exercise control. Concerns have been raised about the effectiveness of market-oriented hospital care. None other than the Director-General of Health observed that “The profit motive does not appear to have resulted in vigorous competition and improvements in the quality of services. Nor has competitive pricing resulted in lower costs to consumers.” (BarraClough 1997 p 653). Further, many doctors and nursing staff have left the public sector

for the better pay, work conditions, and prospects in the private sector. The Prime Minister himself, a doctor, was forced to admit that loss of specialists to lucrative private practice had aggravated the problems of the public hospitals which had more patients to treat despite shortage of medical staff. Existing charitable hospitals were finding it more difficult to cross-subsidize their poor patients due to the need to be compete with commercial hospitals. Lastly, “the relatively low level of regulatory control of private hospitals contrasts with the government approaches to planning and social engineering in other areas of Malaysian society and economy” (op cit p 656).

These three experiences all point to the serious impacts of corporatization: loss of government control over the health care sector, no marked improvements in quality of care, the high cost of such care, the lack of transparency, and the resistance of the corporate sector to any monitoring, and the undermining of the public sector. To date there has been little attempt in India to look at the vast private sector (especially the corporate sector), the inroads being made by the huge regional and national hospital systems, the growing dominance of for-profit health care arrangements and of finance capital in this sector. Based on vigorous and critical research, we need to understand clearly: What are the implications of these changes: 1) for the wider health system and for planning and co-ordination for health services; 2) for regulation of the private sector; 3) for cost and quality of care; 4) for medical practice, and 5) most importantly, for equity in health services? What is the impact upon the government health services, upon the small private hospital and laboratories sector, with these moves towards franchising, take-over, and setting up of smaller facilities, by the corporate sector in smaller cities and towns? What is the impact upon control over doctors in such corporate settings? Who are they accountable to? To the investors, share-holders and their management, or to the patient and their professional ethics? How, and why, does the state facilitate and support the entry of such forces into the health care sector despite such negative evidence of their effectiveness?

The public health community in India needs to widen the scope of discussion and pay more attention to the corporate private sector, the other privatization processes, and the growing market ideol-

ogy. These are becoming significant and powerful forces within the health system. This is imperative if one is to make any sense of the developments in the health sector and if one is to make meaningful, long-term interventions so that the growing inequalities in health are arrested, the state commitment to provide universal and comprehensive health services is restored and fulfilled, and the poor do not suffer further for lack of effective and rational health services.

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