

Growth of Formal and Informal Private Healthcare Providers in India: Structural Changes and Implications

Dr Shailender Kumar Hooda, (Ph.D)
Assistant Professor,
Institute for Studies in Industrial Development
New Delhi, India.

Abstract

This study analyses the changing nature of the growth of private healthcare providers and highlights whether they are cost-effective and fill health service deficiency gaps. Evidences show around 10.4 lakhs private health enterprises are providing a wide range of services consisting of hospitals, medical, clinics, dental, diagnostics, homoeopathic, unani, ayurvedic, nursing and social services. Its growth can be experienced since independence, while it has grown faster after 2000s - the liberalised phase of Indian healthcare sector. Growth phenomena has largely been urban centric, economical prosperous and/or areas/districts where public facilities already exist. Private sector has failed in mending the deficiency gaps in healthcare provision across districts, rural-urban regions and states. Over the period, small informal practitioners are disappearing while large-size formal providers are increasing. Indian private hospital sector is taking a corporatisation shape which is highly concentrated in only few districts of some states. Allopathic providers are on the high rise as compared to the AYUSH. A large number of practitioners are unregistered and unskilled (without formal degree). Over the period, private sector has overtaken healthcare provision and delivery market but services has not been cost-effective. This has resulted in high healthcare cost and out-of-pocket burden in the country.

Introduction

The growing size of private providers in health service delivery has attracted considerable debate amongst scholars, civil society organisation and policy makers in both developed and developing countries. Growth phenomena of private sector in countries, particularly the developed, that have followed pro-market approach is different from the others. The financing in these economies is largely been managed through insurance companies, service provisioning by large hospital corporations and research by pharmaceutical and medical equipment companies. The government's role has been minimal which includes giving subsidies for private medical care, providing public insurance to the elderly and poor, but drawing up strong regulatory guidelines for the private sector (Baru, 2006). The experiences from these developed nations reveal that the market model have several shortcoming, despite that the phenomena of pro-market model is spreading even to Socialist countries like Russia, China and emerging economies like South Africa, Latin America and Asia including India (Lefebvre B, 2010). The extent and nature of privatisation of healthcare delivery market however vary widely across the globe.

India has been experiencing with private sector in healthcare delivery market since independence. But, little evidences have been put in place about how it has grown and diversified (in size, ownership pattern and structure) during pre and post liberalised period, how their composition and distribution have changed across rural-urban regions, across districts and states, and their role to meet the requirement of deficient areas, whether these entities/practitioners provide cost-effective services, etc. Against this backdrop, the present study makes an attempt to provide evidences on the structure, trends and diversified growth of private sector in health care delivery market in the pre and post liberalisation phases in India. The growth of private sector is analysed across the service providers like the allopathic (e.g., hospitals, medical, diagnostic labs/centres, etc), Indian System of Medicine (ayurveda, unani, sidha, homeopathy named as AYUSH) and other nursing and social welfare services. The results are presented across states, districts and rural-urban regions of India. The study also draw up evidences on how the hospital sector has been reshaping from informal to formal and then to corporatisation of health care and list out the reasons of its growth and how they have overtaken the healthcare delivery market. Based on the findings, some emerging challenges and implications for health sector are reported.

Methods and Materials

The study largely explores data from 57th (Unorganized Services excluding Trade & Finance), 63rd (Service Sector Enterprises excluding Trade) and 67th (Unincorporated Non-Agricultural Enterprises excluding Constructions) rounds of National Sample Survey Organization (NSSO) survey provided by Ministry of Statistics and Programme Implementation, Government of India. These are most recent rounds of NSSO which were conducted during 2001-02, 2006-07 and 2010-11 respectively. These include the Unorganised Service Sector Enterprises of India. These rounds are used to analyse growth and structure of unorganised health service enterprises of India. These rounds include information on all health practitioners ranging from individual practitioners to the large allopathic hospitals, medical and nursing home, dental care practice, physiotherapists, para-medical practitioners, diagnostic and

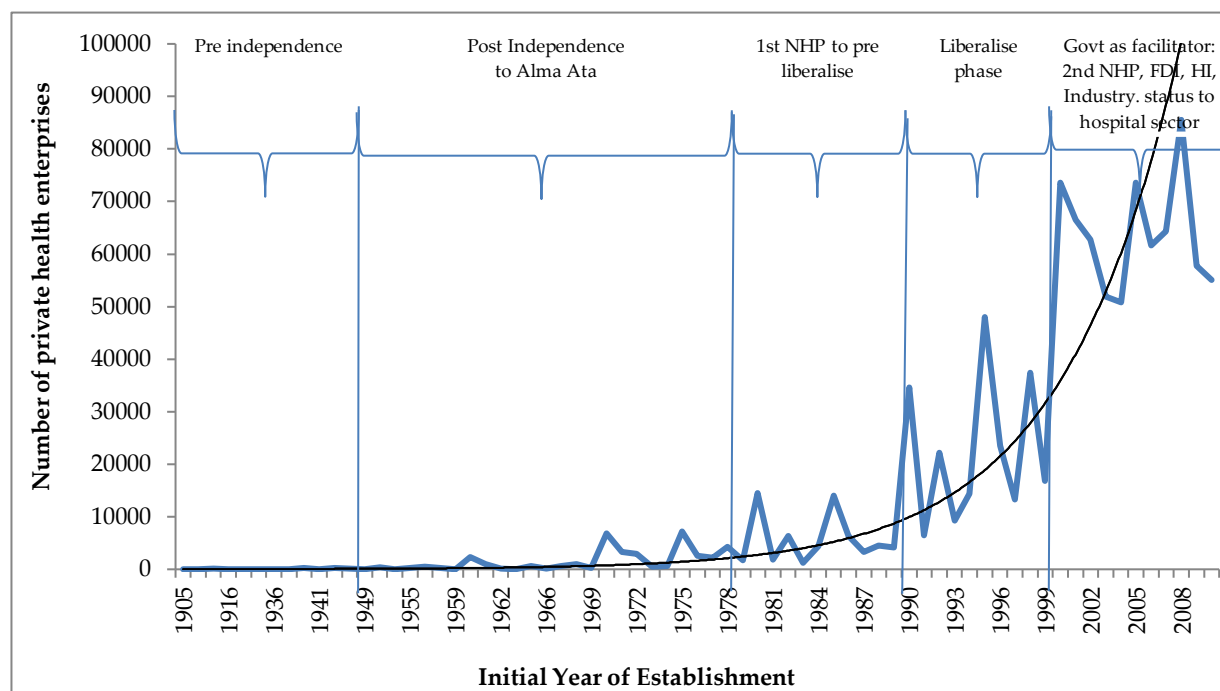
pathological laboratories, blood banks and others which include independent ambulatory care; Indian Systems of Medicine including Ayurveda, Unani and Homeopaths; formal and informal practitioners; qualified and unqualified practitioners; In addition, health service are also classified as residential and non-residential cares. The residential care includes nursing care facilities for elderly, rest homes, for mental retardation, mental health and substance abuse. The social work activities with and without accommodation for the elderly/disabled are also the part of healthcare activities which are included in these rounds.

The health service sector enterprises in these rounds are referred as Own-Account Enterprises (OAEs) and Establishment and define the ownership pattern as for-profit and not-for-profit enterprises. The OAEs are nothing but typically run by an individual health practitioner or a household providing health services without hiring a worker on a fairly regular basis. Thus, OAEs can be classified as an enterprise which employ temporary workers not on a regular basis. In most cases, OAEs are run by an individual health practitioner and therefore referred as small health enterprises. The establishments on the other side hire at least one worker (along with the temporary if any) on regular basis. Thus, establishments are generally referred as large size enterprises. However, considering the fact that these enterprises can hire contractual/temporary workers and can be of small, medium or large size. The results therefore are presented by classifying enterprises on the basis of number of workers including the working owners of the enterprises.

Note that NSS service sector enterprises data capture the health enterprises of informal or unorganised health service sector. In addition, the study also explores information on organised health enterprises especially on hospital sector from Prowess data base of Centre for Monitoring in Indian Economy; Hospital and Dispensary Directory prepared Ministry of Health and Family Welfare and through field survey investigations. The information are also collected from some relevant published materials including policy documents/reports.

Growth of Private Sector

Since independence, India has undergone through various policy changes at macroeconomic front as well as within the health sector which has impacted the growth of private healthcare sector significantly. The phase-wise detail breakups of the growth (measured through year of establishment) of private health enterprises reveals the existence of private healthcare sector can be traced since the time of independence. The growth of private healthcare providers is started picking up during 1980s-1990s, the pre-liberalise phase of Indian economy and it grow at faster rate after 1990-91 - the liberalisation phase of the Indian economy (Figure 1). The growth of private healthcare sector turned much faster after 2000 when considerable amount of liberalisation policies were rolled out in the Indian healthcare sector like the 100% FDI in hospital, promotion of health insurance financing mechanism, public private partnership, industry status to hospital sector, reduction in custom duty on medical equipments, subsidise land and tax exemption to hospitals for opening up branch in rural or semi-urban areas with a condition to serve economically weaker sector of society, etc. The detail discussion on the responsible factors for the growth of health enterprises is presented in one of the subsequent section.

Figure 1: Growth of Private Health Enterprises (in No.)

Source: Unit level records of 67th round of NSS

Table 1: Changing Nature of the Growth of Private Health Enterprises, Since 1950

	Type of Enterprises established		Nature of Enterprises established		Establishment of Enterprises by Size (by no. of workers)				Total
	OAE	Est.	NPE	FPE	Single (1)	Small (2-5)	Medium (6-10)	Large (>10)	
1905-1950	46.3	53.7	21.4	78.6	13.2	55.3	16.9	14.6	1353
1951-1960	76.5	23.5	2.9	97.1	75.2	21.8	0.0	2.9	3428
1961-1970	65.4	34.6	3.8	96.2	35.4	55.6	4.5	4.6	10741
1971-1980	70.2	29.8	2.5	97.5	56.3	31.4	6.8	5.5	39749
1981-1990	71.3	28.7	2.1	97.9	62.5	32.8	2.6	2.1	80730
1991-2000	71.2	28.8	1.6	98.4	64.8	30.3	2.8	2.1	264925
2001-2010	71.6	28.4	1.5	98.5	64.3	31.7	2.3	1.7	630088
Up to 2010-11	738647	296850	16982	1018515	659475	327344	30246	18432	1035497

Source: Unit level records of 67th round of NSS.

As per the initial year of establishment of private health enterprises, around 1353 private enterprises were establishment up to 1950. In the subsequent decade 1951-1960 around 3428 private health care enterprises were come into existence. Around 10741, 39749, 80730, 264925 and 630088 private health enterprise were established during 1961-1970, 1971-1980, 1981-1990, 1991-2000 and 2001-2010 decades. The establishment of private health enterprises in most of the decades remained around 2-3 times higher than the previous decade (Table 1). As per NSS 2010-11 data, putting all practitioners

and facilities together, cumulatively around 10.4 lakhs private health enterprises are providing health services in the country.

The growth of private sector has been highly heterogeneous in India. Various range of providers viz., formal and informal, for-profit and not-for-profit, national and multinational for-profit corporation, small, medium and large corporate entities has been opened up. Of the total 10.4 lakhs health enterprises, the share of Own Account Enterprises (OAE) which function without hiring workers on regular basis, is recorded around 71.3 per cent in 2010-11 which amounted to 7.38 lakhs in number. The number of establishment recorded around 2.97 lakhs which accounted around 28.7 per cent. The higher number and share of OAE reflect that small enterprises especially run by an individual practitioner predominate the healthcare delivery market. These practitioners are referred as traditional hailer or barefoot doctor or *ghola chhap* doctor which generally provide outpatient care services.

The composition of private provides is changing over the period. At the time of independence, around 21.4% of private health enterprises registered themselves as not-for-profit entities (NPE). The NPE share however recorded very low around 1.6 per cent in 2010-11. Now most of the enterprises (about 98.4%) are of for-profit (FPE) in nature (Table 1), though the number of NPE has increased substantially. The share of establishment in 1950 was 53.7% which declined to 28.7% in 2010-11. The number/share of OAEs were growing at much faster than the establishment up to 2000s. The trend however reversed thereafter.

The most recent three rounds data of NSSO on Service Sector Enterprises provides an interesting oversight on the type, nature, size and growth of private health enterprises. The total number of enterprises decreased from 13.2 lakhs in 2001-02 to 10.4 lakhs in 2010-11. The share of NPE in the total number of health enterprises is significantly lower than the FPE across these rounds data. The share of NPE between the first two rounds data is showing increasing trends. A closer examination of these data reveals that most of the NPE are registered under co-operative society, charitable or trust Act. Most of the NPE are of establishment in nature and have large size and employ large number of workers for their proper functioning. As far as the type of enterprises i.e., OAE or establishment is concerned, number of establishment has increased from 2,41,106 enterprises in 2001-02 to 2,96,850 enterprises in 2010-11. The share of establishment also increased from 18.2 percent enterprises in 2001-02 to 28.7 percent in 2010-11, indicating a rising share of establishment during different rounds data of NSS. The classification of all these enterprises taken together by size of workers reflects a true picture of the size (small or large) of the enterprises. The classification of enterprises by number of workers like the individual/single worker/owner, small (2-5 workers), medium (5-10 workers) and large (greater than 10 workers) show that small, middle and large size enterprises are increasing whereas single/individual run enterprises are declining. The growth rate estimates show that the large size enterprises are growing at much faster rate even as compared to the medium and small size health enterprises. The individual run enterprises however are declining over the period from 2001-02 to 2010-11. About 89 per cent of OAEs are run by an individual/single practitioner. Though they dominate the healthcare market, but their share has been declining over the period from 2001-02 to 2010-11 (Table 2). This reflects that large size enterprises are mushrooming at faster rate in the country.

Table 2: Ownership Pattern and Changing Nature of Private Providers- NSS Periods

	<i>Type of Enterprises</i>		<i>Nature of Enterprises</i>		<i>Size of Enterprises (by no. of workers)</i>			<i>Total</i>	
	<i>OAE</i>	<i>Est.</i>	<i>NPE</i>	<i>FPE</i>	<i>Single (1)</i>	<i>Small (2-5)</i>	<i>Medium (6-10)</i>		<i>Large (>10)</i>
2001-02 (57th)	1081325 (81.8)	241106 (18.2)	25422 (1.9)	1297009 (98.1)	1009064 (76.3)	276690 (20.9)	25777 (1.9)	10900 (0.8)	1322431 (100)
2005-06 (63rd)	793032 (72.7)	280469 (25.7)	31408 (2.9)	1042093 (95.6)	757227 (69.5)	287611 (26.4)	28629 (2.6)	16819 (1.5)	1090286 (100)
2010-11 (67th)	738647 (71.3)	296850 (28.7)	16982 (1.6)	1018515 (98.4)	659475 (63.7)	327344 (31.6)	30246 (2.9)	18432 (1.8)	1035497 (100)
CAGR (2001-11)	-0.041	0.023	-0.044	-0.026	-0.046	0.019	0.018	0.060	-0.027

Source: Unit level records of 57th, 63rd and 67th rounds of NSS.

The change in the nature of growth of private providers from small to large size enterprises may be because, the centre and some states governments introduced health insurance schemes in the most recent past decade. The health insurance generally provides reimbursement for medical expenses for hospitalisation. The hospitalisation services are provided by the large/formal/establishment hospitals/enterprises. Therefore, establishment and large size enterprises show an increasing trends as compared to the OAE/small practitioners. The share of OAE/informal practitioners however is still very high. One notion that emerges from the declining number of small providers and increase in number of large and middle providers is that India healthcare sector is shifting from informal/unorganised to the formal organised providers. In this process big fish (large enterprises) eating the small fish (small clinic/individual providers). How this changing trend will help in providing the health care services to poor and general population needs a separate evaluation.

Diversity in Growth of Private Sector

Health enterprises in India have grown and diversified over a period of time. Its diversity can be reflected from the providers list. Presently, a wide range of providers are providing healthcare services in the country. These services can be classified viz., hospitals, medical and nursing home, dental care practice, nurses masseurs, physiotherapists, para-medical practitioners, diagnostic and pathological laboratories, blood banks and others which include independent ambulatory care, Ayurveda, Unani and Homeopaths. In addition, service are also classified as residential and non-residential cares. The residential care includes nursing care facilities for elderly, rest homes, for mental retardation, mental health and substance abuse. The social work activities with and without accommodation for the elderly/disabled are also part of healthcare activities in the country.

Analysis shows that the private healthcare sector is highly dominated by allopathic services providers. In 2010-11, the share of allopathic facilities which consists of hospital, medical, dental, diagnostic labs, blood banks service providers constituted around 76 per cent, whereas homeopathic and ayurvedic share recorded around 11.2 per cent and 7.4 per cent respectively. It is interesting to note that at the time of independence, in 1950, roughly 1352 private health enterprises were recorded which cumulatively increased to 10.4 lakhs in 2010-11 (Table 3). Though in 1950, Ayurveda service providers dominated the health care delivery market as against the allopathic providers. Over a period

of time, allopathic health enterprises grew at much faster rate than ayurvedic and other system of medicine (Table 3).

Table 3: Heterogeneous Growth and Structure of Private Healthcare sector in India

	1905- 1950	1951- 1960	1961- 1970	1971- 1980	1981- 1990	1991-2000	2001-2010	Total	GR
Hospital	187	11	1284	4332	8123	13973	52240	80265	1.13
Medical	331	2342	2539	19630	42847	137144	368517	576027	1.12
Dental	42	0	201	73	1747	7841	31805	42052	1.16
Ayurvedic	504	449	1796	6866	9812	29662	27767	76891	1.08
Unani	0	512	477	202	61	6187	9346	16837	1.06
Homo	0	23	765	4709	11150	34000	64748	115760	1.16
Nursing	0	0	2366	1360	1130	13712	23663	42231	1.07
Diagnostic	0	0	32	707	2342	13215	29056	45805	1.18
Others	0	0	1239	1053	2591	5688	12931	23856	1.07
Residential	289	90	42	429	127	1233	4232	6521	1.05
Social	0	1	0	388	800	2270	5783	9252	1.10
Total	1353	3428	10741	39749	80730	264925	630088	1035497	1.11

Note: Total enterprises are higher than cumulative add up, as it also represents for year 2010-11.

Source: Unit level records of 67th round

As far as the rate of growth of these enterprises, allopathic service providers (hospital, medical and dental) and diagnostic labs/centres grew at faster rate as compared to the Indian System of Medicines (AYUSH) and other providers (Table 3). The Figure-2 presents the exponential growth rate in four category of providers like the allopathic, diagnostics, AYUSH and residential social since 1990s. The growth rate coefficient estimates show that allopathic and diagnostics are growing at much faster rate with coefficient values 0.113 and 0.857 respectively as compared to 0.09 and 0.04 of residential social and AYUSH services providers respectively. This reflects that during the liberalised phase Indian economy as well as of health sector, the allopathic and diagnostic sector grow faster. This may be because of changing nature of life style disease and demand of different kinds of health services, they grew at much faster rate. During the period, there is also a change in industrial structure and innovation in the medical sector especially the medical devices at the global level, this has also attracted more growth in diagnostic and allopathic service sector.

Within the allopathic providers which consists of hospital, medical, dental, diagnostic labs, blood banks service providers, medical service providers constitute a large share around 55.6 per cent and followed by hospitals (7.8%), diagnostics (4.4%), dentals (4.1%), and nursing (4.1%). Under the other system of medicine, homeopathy practitioners constitute a large share (about 11.2%) in the total private health enterprises. About 66.8 per cent, 65.1 per cent and 61.6 per cent of hospital, dental and diagnostic enterprises are of establishment in nature, but their share in total allopathic enterprises is low. Out of total medical practitioners, only 21.7 per cent of the medical care enterprises are

establishment and rest 78.3 per cent are OAEs indicating majority of medical care practitioners are individual/small size in nature (Table 4). This reflects that health care market is highly dominated by small size private enterprises in India.

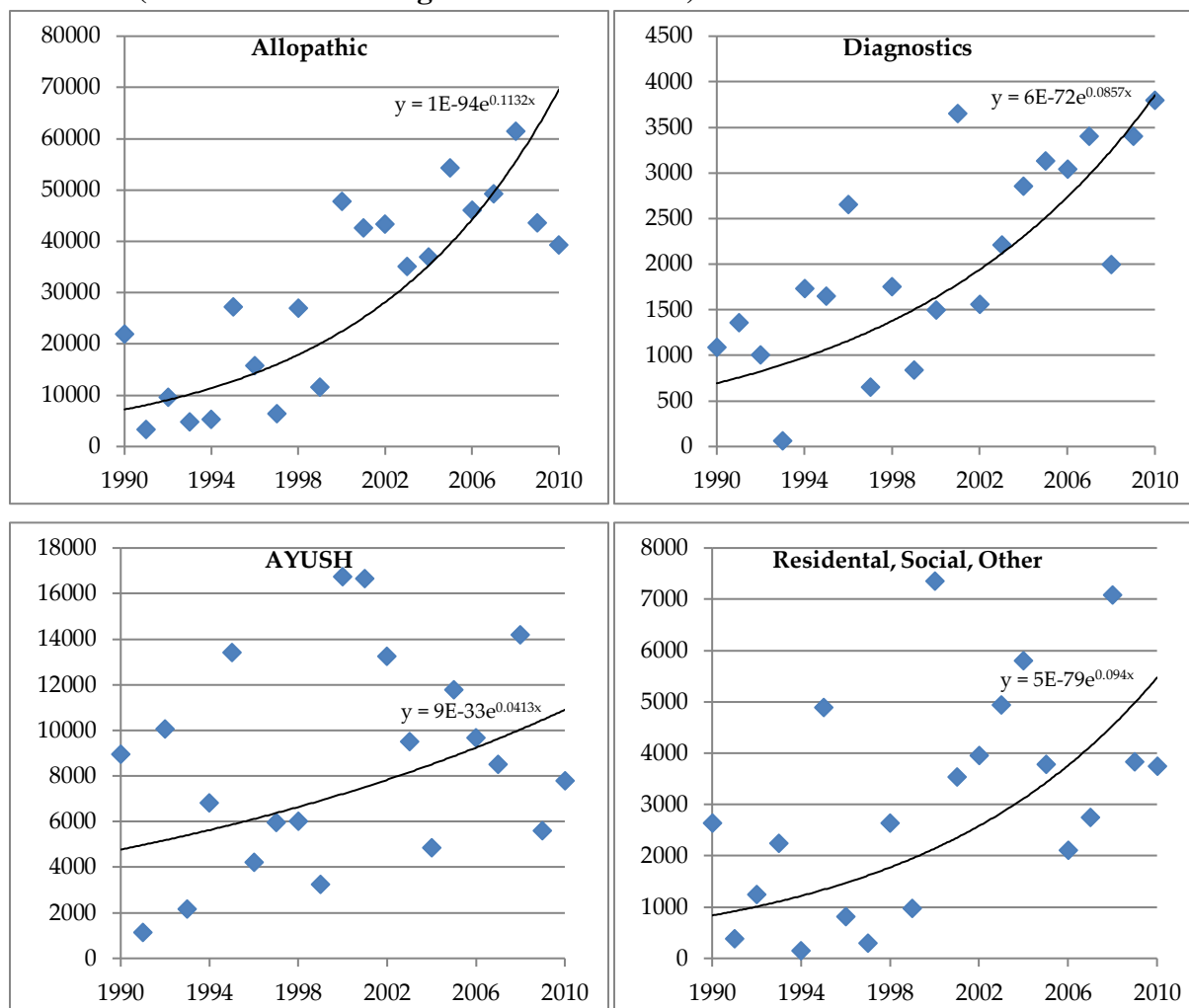
Table 4: Nature and Size of Private Health Enterprises by Size of Workers: 2010-11

	<i>Compositional Distribution (in %)</i>			<i>Distribution by Service Providers (in %)</i>			<i>Aggregate (% and no.)</i>		<i>Nature and registration status of enterprises</i>		
	<i>Small (1)</i>	<i>Mediu m (2-5)</i>	<i>Large (≥6)</i>	<i>Small (1)</i>	<i>Mediu m (2-5)</i>	<i>Large (≥6)</i>	<i>Total (%)</i>	<i>Total (no.)</i>	<i>% of Est</i>	<i>% of FPE</i>	<i>Not regd. under any act (%)</i>
Hospital	33.5	34.4	32.2	4.1	8.4	53.0	7.8	80265	66.8	97.7	15.4
Medical	69.9	28.5	1.6	61.1	50.2	18.4	55.6	576027	21.7	99.6	35.4
Dental	27.9	71.5	0.6	1.8	9.2	0.5	4.1	42052	65.1	99.9	18.9
Ayurveda	68.7	30.5	0.8	8.0	7.2	1.2	7.4	76891	17.2	99.7	32.9
Unani	63.4	36.6	0.0	1.6	1.9	0.0	1.6	16837	30.3	100.0	37.7
Homeopathic	75.2	24.5	0.3	13.2	8.7	0.7	11.2	115760	18.8	99.2	33.2
Nursing	80.8	19.1	0.0	5.2	2.5	0.0	4.1	42231	12.0	99.8	59.1
Diagnostic	31.0	58.7	10.3	2.2	8.2	9.7	4.4	45805	61.6	99.3	29.2
Blood Bank	69.2	14.8	16.0	0.0	0.0	0.1	0.0	318			
Other	69.8	27.4	2.8	2.5	2.0	1.3	2.3	23538	21.8	97.0	56.7
Residential	22.2	37.1	40.7	0.2	0.7	5.4	0.6	6521	76.9	51.2	33.1
Social	12.8	37.0	50.1	0.2	1.0	9.5	0.9	9252	77.1	19.3	18.7
Total	63.7	31.6	4.7	100.0	100.0	100.0	100.0	1035497	28.7	98.4	33.8

Source: Unit level records of 67th round of NSS.

The distribution of enterprises by number of workers reflects that on an average, 64 per cent of the health enterprises, OAEs and establishment taken together, are run by an individual practitioners. The medical/clinic, ayurvedic, unani, homeopathic and nursing cares in most cases are operated by individual practitioners. The hospital and residential/social care centres absorb more workers per enterprises as compared to the other service providers. Most of the medical care institutions (70%) are run by an individual practitioner (Table 4).

Figure 2: Heterogeneous Growth: High Rise of Allopathic and Diagnostics-Post 1990s
(establishments during 1990 to 2010 in No.)



Source: Unit level records of 67th round of NSS

In 2010-11, around 10.4 lakhs private health enterprises exist which employ roughly 21 lakhs workers in the healthcare sector. This account for 1.9 per cent of total workforce (manufacturing, trade and services excluding agriculture) in India and 5.4 per cent of total workforce engaged in service sector. Out of total 2090522 workers, the engagement of workers in OAEs is recorded to be around 39.8 percent (835375 workers in number) which is slightly higher than the number of enterprises per se (738647 enterprises in number). This reflects that around 89 per cent of the OAEs are run by an individual practitioner and rest 11 per cent OAEs sometimes employ workers on temporary basis. The OAEs engage roughly 40 per cent of the total workforce working in health enterprises and rest 60 per cent are in establishment. Within OAEs, the medical/clinic care enterprises engage highest number

(60.4%) of workers of the total workforce engagement in private health enterprises (Table 5). It is interesting to note that a large proportion of these workers including working owners are without formal degree/education. The private health enterprises therefore consisting of unskilled, semi-skilled and skilled health practitioners.

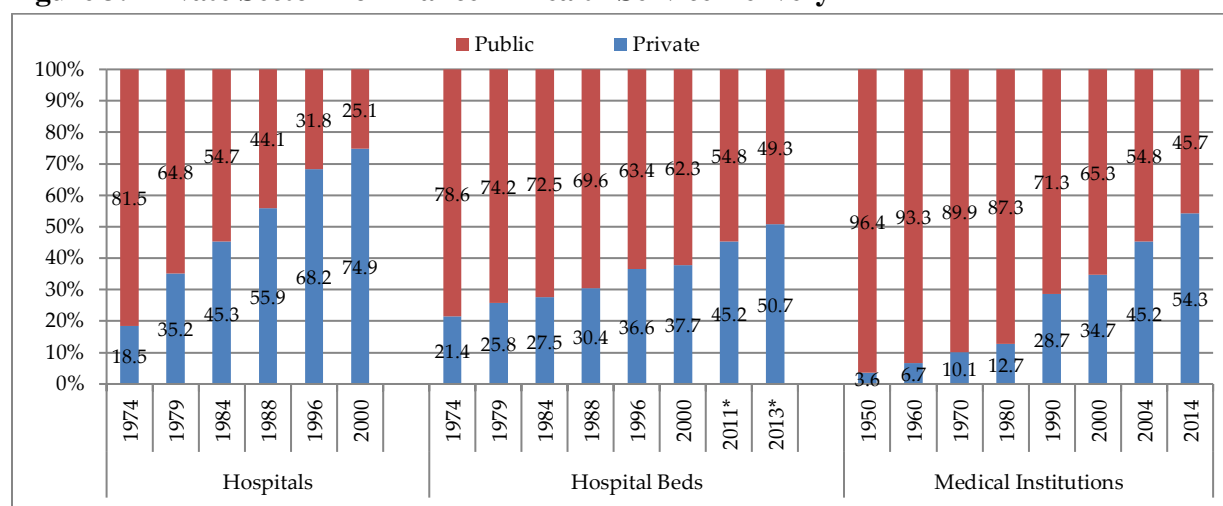
Table 5: Workforce Engagement in Private Health Enterprises: 2010-11

	<i>Compositional Distribution (%)</i>		<i>Distribution by Services Providers (%)</i>		<i>Aggregate (in % and no.)</i>	
	<i>OAEs</i>	<i>Est.</i>	<i>OAEs</i>	<i>Est.</i>	<i>Total (%)</i>	<i>Total (no.)</i>
Hospital	6.2	93.8	3.6	36.2	23.2	485564
Medical	57.2	42.8	60.4	29.9	42.1	879581
Dental	19.2	80.8	2.1	5.9	4.4	91705
Ayurveda	65.1	34.9	9.0	3.2	5.5	115381
Unani	54.8	45.2	1.5	0.8	1.1	23323
Homo	65.9	34.1	12.1	4.1	7.3	153033
Nurse	74.3	25.7	4.8	1.1	2.6	54121
Diagnostic	17.0	83.0	2.6	8.4	6.1	127839
Blood	37.5	62.5	0.0	0.0	0.0	773
other	48.0	52.0	2.5	1.8	2.1	44046
Residential	6.2	93.8	0.3	2.6	1.7	34741
Social	8.9	91.1	0.9	5.8	3.8	80415
Total	39.8	60.2	100.0	100.0	100.0	2090522

Source: Unit level records of 67th round of NSS.

Outcomes of Growth of Private Sector

The growing size of private health sector over a period of time has resulted in high presence of hospitals and hospital beds in private sector as compared to the public. The share of private hospitals was only 18.5 per cent in 1974 which increased to 74.9 per cent in 2000. Similarly, the share of hospital beds increased to 50.7 per cent in 2013 from its low share of 21.4 per cent in 1974. The medical institutions are very important for human resource development for health. The share of private medical institutions at the time of independence was only 3.6 per cent, whereas it crossed half the mark and reached to 54.3 per cent in 2014 (Figure 3). The share of government hospitals, hospital beds and medical institutions has been declining over the period.

Figure 3: Private Sector Dominance in Health Service Delivery

Note: Data on hospitals and hospital beds are not available after 2000, the information for the years 2011* and 2013* represent hospital beds in medical institutions.

Source: Health Information of India, Rural Health Statistics, Medical Council of India.

The private sector has not only overtaken the service provision market but also became dominate in service delivery. As per 71st round of NSSO, conducted in 2014, private sector roughly provides around 2/3 of inpatient and 3/4 of outpatient care treatments in the country. The outpatient care treatment received from private sector however is almost constant since 1986-87, but its share in inpatient care treatments increased to 68 per cent in urban and 58 per cent in rural in 2014 from a low share of 40 per cent in 1986-87 (Table 6), indicating large and growing presence of private sector in health service delivery in the country.

Table 6: Inpatient and Outpatient Care Treatments by Type of Facilities (in %)

NSS rounds	Description	Inpatient		Outpatient	
		Public	Private	Public	Private
42 nd 1986-87	Total	60.0	40.0	22.5	77.5
52 nd 1995-96	Total	43.5	56.6	19.5	80.5
60 th 2004-05	Total	40.0	60.1	20.5	79.5
71 st 2014	Rural	41.9	58.1	28.9	71.1
	Urban	32.0	68.0	21.2	78.8

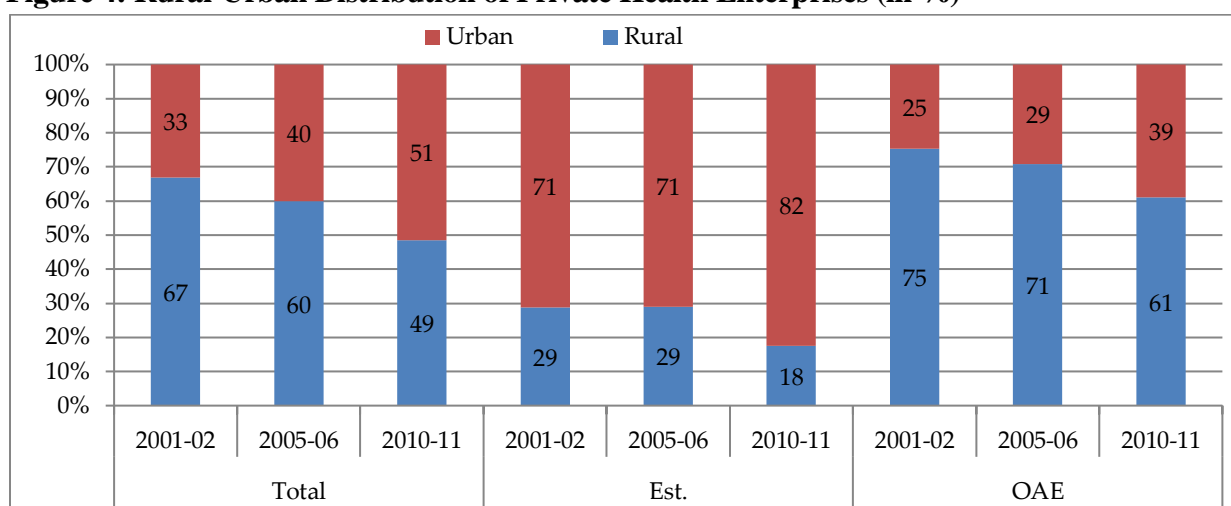
Source: various rounds of NSS

Regional Distribution of Private Health Entities

The regional distribution of private facilities shows that rural area is predominated with OAEs. In 2010-11, share of OAEs in rural area accounted to be around 61 per cent. The establishments in the rural area recorded marginal about 18 per cent, the rest 82 per cent establishment are reported to be

have in urban area in 2010-11 (Figure 4). This reflects that rural area has small/individual practitioners and lacking with formal organised and large facilities as compared to the urban area (Figure 3). The higher occupancy of OAEs/individual practitioners may be because the rural area is not compliance with proper guideline/regulation to start health practices as clinical establishment act has never been implemented properly in rural area. A closer examination of NSS data reveals that a large number of health enterprises are not registered under any Act (Table 4) and those who have registered get approval certificate from village Pardhan/Panchayat rather than a formal registration of clinical practice. NSS data also reflects that a majority of health practitioners of rural area have no formal education/degree. These conditions certainly affect the quality of health services of rural area. It can be said that rural area is lacking with formal organised and adequate quality health facilities.

Figure 4: Rural-Urban Distribution of Private Health Enterprises (in %)



Source: Unit level records of 57th, 63rd and 67th rounds of NSSO

Distribution of private health enterprises per 100 thousand population across states of India shows that number of private health enterprises (PHE) per 100,000 population are reported to be highest in high income states like Delhi, Punjab and Haryana. Followed by, the states like West Bengal, Uttar Pradesh, Uttaranchal, Tripura, Kerala, Chandigarh, Andhra Pradesh and Maharashtra have PHEs per 100,000 population almost more than the national average. Majority (around 72 percent) of these providers in these states are allopathic providers at the national level (Table 7). However, the share of allopathic providers in total vary considerable across the states ranges between less than 20 percent to 100 percent. Interestingly, the difference between total health enterprises and total allopathic enterprises per 100 thousand population is recorded to much higher around 94 enterprises per 100 thousand population in Tripura and followed by the difference recorded almost more than 40 enterprises per 100 thousand population in state like Punjab, West Bengal, Delhi, Kerala and Haryana indicating a significant number of other system of medicine providers do exist in these states.

Table 7: Distribution of Private Health Enterprise across States in India

States	Total private health enterp. (PHE)	Private Allopathic enterp. (PAE)	PHE per 100,000 pop.	PAE per 100,000 pop.	% of PAE	No. of OAE	No of Est.	% of OAEs	% of est.	% of FPE	% of PHE regd. under any act
Meghalaya	1058	239	36	8	22.6	865	193	81.8	18.2	100.0	16.0
Manipur	139	34	5	1	24.5	48	91	34.5	65.5	100.0	24.5
Bihar	59937	33164	58	32	55.3	50518	9419	84.3	15.7	99.8	29.6
Orissa	19782	8819	47	21	44.6	16750	3032	84.7	15.3	98.4	35.6
Assam	7109	2010	23	6	28.3	5353	1756	75.3	24.7	99.0	44.3
Jharkhand	19385	12267	59	37	63.3	13973	5412	72.1	27.9	97.3	44.5
Uttar Pr.	233826	189168	117	95	80.9	196319	37507	84.0	16.0	99.6	48.4
Arunachal Pr	66	41	5	3	62.1	14	52	21.2	78.8	83.3	50.0
Haryana	36312	26311	143	104	72.5	24864	11448	68.5	31.5	99.2	55.9
Punjab	40489	28163	146	102	69.6	31829	8660	78.6	21.4	98.1	59.3
Andhra Pr.	74603	57300	88	68	76.8	55871	18732	74.9	25.1	96.3	59.6
Rajasthan	40490	31853	59	46	78.7	32699	7791	80.8	19.2	97.1	63.0
Uttaranchal	11836	9083	117	90	76.7	9664	2172	81.6	18.4	100.0	65.1
Delhi	27741	21121	166	126	76.1	11188	16553	40.3	59.7	96.1	66.2
Mizoram	128	128	12	12	100.0	43	85	33.6	66.4	89.1	66.4
A&N Islands	66	62	17	16	93.9	4	62	6.1	93.9	100.0	77.3
J & Kashmir	4953	4283	39	34	86.5	2146	2807	43.3	56.7	100.0	80.1
West Bengal	112470	73245	123	80	65.1	95214	17256	84.7	15.3	98.5	80.7
Chattigarh	17039	13861	67	54	81.3	15189	1850	89.1	10.9	100.0	82.6
Tamil Nadu	43605	29812	60	41	68.4	15120	28485	34.7	65.3	93.3	82.6
Madhya Pr.	48740	34799	67	48	71.4	39343	9397	80.7	19.3	99.5	83.8
Maharashtra	95684	73505	85	65	76.8	45816	49868	47.9	52.1	99.3	86.9
Gujarat	46111	31328	76	52	67.9	24927	21184	54.1	45.9	97.7	87.6
Himachal Pr.	4302	3411	63	50	79.3	3284	1018	76.3	23.7	98.9	87.8
Pondicherry	822	652	66	52	79.3	357	465	43.4	56.6	94.3	88.7
Karnataka	48178	36069	79	59	74.9	24437	23741	50.7	49.3	99.0	90.6
Dadra &NH	89	89	26	26	100.0	5	84	5.6	94.4	100.0	91.0
Kerala	34846	21577	104	65	61.9	21257	13589	61.0	39.0	94.7	91.2
Tripura	4155	713	113	19	17.2	764	3391	18.4	81.6	100.0	95.4
Daman&Diu	50	38	21	16	76.0	27	23	54.0	46.0	100.0	98.0
Goa	483	483	33	33	100.0	4	479	0.8	99.2	100.0	99.2
Chandigarh	951	790	90	75	83.1	755	196	79.4	20.6	100.0	99.3
Nagaland	34	31	2	2	91.2		34	0.0	100.0	100.0	100.0
Sikkim	18	18	3	3	100.0		18	0.0	100.0	100.0	100.0
Total	1035497	744467	86	62	71.9	738647	296850	71.3	28.7	98.4	66.2

Note: PHE- all types of private health enterprises; PAE- private allopathic enterprises consisting of hospitals, medicals and dental hospitals, diagnostic centre/labs and blood banks

Source: 67th round of NSS

The classification of PHEs by type of enterprises reflects that the percentage of establishment as compared to the OAEs is either higher in North-Eastern and UTs or in states where health insurance penetration is high. The establishments are generally large size in nature. This reflects that it is not the economic prosperity of the states that attract large size hospitals but probably it is the insurance that have attracted them to exploit the health care market.

As regards to the registration status is concerned, in some of the states a significant number of health enterprise has not been registered under any Act. The registration status in states like Meghalaya, Manipur, Bihar, Orissa, Assam, Jharkhand, Uttar Pradesh, Arunachal Pradesh, Haryana, Punjab, Andhra Pradesh, Rajasthan, Uttaranchal and Delhi is even lower than the national level registration status about 66.2 percent of enterprises are registered under any Act (Table 7).

Factor Responsible for the Growth of Private Sector

As reported, there growth of private health enterprise started picking up during 1980-90s. This may be because during the period several multinational organisations like the World Bank, International Monetary Funds and other pro-market thinkers, while ignoring the welfare impact of public health sector on society, started questioning on the economic efficiency of public sector as compared to the private sector. The resource constraints, measured through fiscal capacity, is also cited as main reason of limited role of public sector in health care sector. Following which server private practitioner opened up health service enterprises either owing by individual or jointly or establishment or large size in nature.

One of the foremost reason of the overall growth of the private health sector is the inadequate of public intervention/spending in the sector. Low public spending has been a generic problem of India. Over a period of time the government spending in health sector has not increased even to provide the basic health services to the population. As per the recent Rural Health Statistics (2016), there is a shortfall in achieving the required number of CHCs, PHCs, and SCs - parameter of basic health services - in the country across states. The public spending in some of the states is significantly lower than the resources that are required to meet this minimum level of basic health facilities in the country. India currently spend 1.2 per cent of GDP public funds on health, which is significantly lower than the global average of 5 per cent of GDP. This spending even is lower than some of the low and middle income countries and countries whose per capita GDP being lower than that of India. Even after lot of ambitious commitment under National Rural Health Mission in 2005 and High Level Expert Group meeting in 2011 to raise the public spending to 2-3 per cent of GDP, government spending in health has not beyond 1.2 percent of GDP (Hooda, 2015a). Low public spending in health confirm the low state interventionism in health sector which lead to inadequacy of service and provide leverage to private sector to exploit the health care market.

In one sense, the low public spending in the sector is an indication of withdrawal of state from the health sector. On the other side, state has also come forward to be the facilitator of private sector during the recent period. In 2000, government of India allowed 100 per cent foreign direct investment (FDI) in hospital sector through automatic route. This was a major initiative to invite/attract foreign private players in the hospitals sector. These foreign players made a significant stride in hospital sector through foreign director investment. Foreign investment in hospital sectors increased to Rs. 3995 crore in 2013-14 from a meagre amount of Rs 31 crore in 2001-02 (Hooda, 2015b). The foreign players started some independent and several joint ventures in collaboration with the domestic players. The share of FDI equity inflow in hospital sector in total health sector FDI inflow increased from 12.8 per cent in 2000 to 25.5 per cent in 2013 (Hooda, 2015b). Further, in 2003-04 budget, the hospital

sector was confirmed with industry status and following which the long term and cheaper loan for private healthcare institutions were granted (Shah and Mohanty, 2010). With this confirmation health sector especially the hospitals sector receive various benefits of reduced custom duty on medical equipment (from 100% to 40% during late 80s and then to 15%), subsidise land and cheaper loan and income tax exemption, etc. Therefore, the growth of private hospital sector recorded to be higher during the period.

Currently, there is a change in the landscape of national health policy at the health financing front. The government's approach to finance healthcare has been shifted from its traditional way of tax-based health financing for the comprehensive provisioning of healthcare services to the financial protection through health insurance. Health insurance has been seen as a mean to finance healthcare expenses of the households. In addition to the employer base health insurance schemes like CGHS and ESIC, India opened up health insurance sector for private domestic insurers in 1999. The insurance sector further opened up for foreign players through FDI in health insurance. The FDI cap in health insurance increased from 26% to 49% in 2014. Note that these private health insurers generally targets the middle and upper-middle income group population, especially those who can pay the premium. These schemes generally allow people to avail health facilities both from public and private providers especially for hospitalisation care. Considering the fact of low level of per capita income level of majority of population, health insurance penetration under the private insurance remained low in India as majority of population show unwillingness to take premium based health insurance policy. Low level of income also leads to low paying capacity of high priced (costly) private healthcare facilities leading the inaccessibility of health services to majority of population. In order to increase the paying capacity, the private sector persuaded the central and some of the state governments to cover the poor and informal community under the government funded health insurance schemes. Following which some states like Karnataka, Andhra Pradesh and Tamil Nadu as well as central government introduced a pro-poor health insurance scheme to provide financial protection to poor community for availing healthcare from both public and private healthcare providers. There is a growing consensus to implement/introduce a nationally representative health insurance like the National Health Insurance which will cover and designed to cover most of Indian population under health insurance umbrella so as to access services from both public as well as private facility. Considering the fact that the person once enrolled under insurance generally avail service from private facility. Thus, health insurance indirectly promote the private healthcare providers. As can be seen from the above analysis that the existence and growth of private allopathic sector was much higher in states where insurance penetration is high

During the last decade, state has largely been seen as facilitator to private sector with limited or no role as regulator. Cross country experiences however reveals that the countries that have followed pro-market approach, the financing is largely been managed through insurance companies, provisioning by large hospital corporations and research by pharmaceutical and medical equipment companies. State's role has been limited to provide social insurance to the elderly and poor, giving subsidies for private medical care, but drawing up strong regulatory guidelines for the private sector. But, in Indian context, state has largely been facilitator rather than as strong regulator on private sector.

That is, as per the Constitution, health is essentially a state subject in India. It is state prerogative to make appropriate regulation and legislation for private sector to perform uniformly. Considering the fact that health sector is very critical for lifesaving, some regulation are required for private practitioners/providers under which they govern. The evidence shows that about 66% of the health enterprises are registered under any Act and only 43% were registered under medical practitioner Act (MPA). Regulation status of private practitioners at state level shows that out of 29 states, about 16 states do not have any legislation that make it mandatory for private establishments to have a licence to function. Remaining 13 states have clinical establishment Act¹ but these Acts are either outdated or lack in proper guidelines and rules. The act therefore could not be enforced properly in many of these states. For instance, minimum standards related to infrastructure, human resources, patient safety, display of information have not been developed, nor are the issues relating to accountability with respect to quality and price been addressed in the states that have legislations (Phadke, 2016). The service provision and quality norms even in many formal facility reported to be inadequate. For instance, in West Bengal, around 94 people died in a state-of-the-art corporate hospital on 9 December 2011 simply because hospital did not follow proper quality and safety rules. The mushrooming of the private health sector without or with inappropriate regulation leads to unhealthy and unethical health practices in the country which is a serious cause for concern.

On 3 May 2010, Parliament passed the Clinical Establishment (Registration and Regulation) Act, 2010 which is applicable to all type of health care providers. It covers all clinical establishments, those owned, controlled or managed by private or government, a society/trust-whether public or private, dental clinics, a corporation and a single doctor; and services by all recognised systems of medicine (ayurveda, unani, siddha, etc.), all type of laboratories, diagnostic institutions and therapy centres, etc. This is important for infrastructure, human resources, availability of medicines and equipment including their maintenance for the improvement in the quality of care provided in the provision of health care services to the people (Phadke, 2016). Till now the Clinical Establishment Act-2010 (CEA, 2010) has only been enforced by few states like Bihar, Jharkhand, Uttrakhand, Himachal Pradesh, Arunachal Pradesh, Sikkim, Pondicherry, Uttar Pradesh, Rajasthan, Mizorma with its inadequate form.

Coupled with various pro-market health sector reform initiatives, population dynamics, people awareness and perception about health, change in health seeking behaviour, double burden of disease, changing nature of life style disease, global integration, medical tourism are the other possible factors that have encouraged the private providers/enterprises and foreign investors to exploit the health especially the hospital market in India. All these factors in combine have resulted in the growth of formal, informal, individual practitioner, small and large corporate entities in the country. All these factors in combine have resulted in faster growth in private healthcare sector especially after the nineties when several pro-market initiatives were initiated. However, it would be interesting to know the effective of these initiatives as well as the implications of the growing size of private sector on health service delivery.

Is Private Sector Effective

Drawbacks of Pro-Market Initiatives

As reported, private sector in health care delivery has gained special attention with the approval of 100% foreign direct investment (FDI) through automatic route in hospital sector in 2000. After that the long term and cheaper loan for private healthcare institutions were also granted and the hospital sector was confirmed with industry status in 2003-04 budget. The private, social and targeted oriented (pro-poor) health insurance schemes is another way to promote privatisation in hospital sector. With these pro-market reform initiatives, the hospital sector, especially the large corporate type of hospitals, get different kinds of benefits like the subsidies land, loan at low interest, income tax and tariff rate exemption, etc. on conditions that they serve the poor/EWS people free of cost, provide affordable care services, locate their entities in rural/semi-urban area and fill the gap of health service provision deficiency area. The quantum of benefits and subsidies generally get enhanced once a hospital registered themselves under charitable, trust or society act as non-profit entities. In order to receive these benefits a large number of hospitals registered themselves under these Acts and their number over the period is increasing. However, it would be interesting to know whether these entities serve the purpose.

Table 8: Charitable and Trust Hospitals: Charity are Market Prices

Price in Delhi for one day Hospital Stay, in Rs.				
Hospitals	Type of Management	Price of General Ward	Price of Shared Room	Single Room
Max Devki Devi DDF (in 2008)	Corporate	13,000	16,000	21,000
Indraprastha Apollo (in 2008)	Corporate	14,000	15,500	19,000
Sri Ganga Ram Hospital (in 2008)	Trust	13,000	13,500	19,000
AIIMS (in 2008)	Public	---	---	5,000
Forties (in 2015)	Corporate	10,000	11,000	12,000
Sant Parmanand Hospital (in 2015)	Charitable			13,000

Source: Data for 2008 taken from Lefebvre (2008) and for 2015, through phone call in the hospitals.

Some studies have pointed out that these hospitals found to be violating such conditions. These hospitals used to provide free or at low cost care to general population during the time of independence. These entities are now no more charitable (Kurian, 2012). They provide medical services at market prices. Table-8 shows a comparative picture of price of one day hospital stay in Delhi. They charge almost equal price what the corporate hospitals charge for one day stay in hospital. This reflects that these charitable hospitals are no more charitable. They provide services at market prices. On the top of this some of them avoid tax compliances. For instance, in Delhi, Max hospital found to be in tax trouble and found flouting charity clause (5 April, 2015, HT). Our regulation system is so weak that even if one violate any rule cannot be punished adequately. For instance, Delhi Nursing Home Registration Act 1953 refers that “*whoever contravenes any of the provision of the Act will be punished with a fine which may extent to Rs. 100 and in case of continuing offence to a further fine of Rs. 25 in respect of each day on which the offence continues after such conviction*”, reflecting lack of

adequate and ineffective provision of regulation. Similarly, in West Bengal on 9 December 2011, around 94 people died in a state-of-the-art corporate hospital simply because hospital did not follow proper quality and safety rules. This happened because of inadequate and ineffective regulations in the states. It can be argued that the pro-market reform initiative are not so effective from society and country point of view.

These hospitals do not only manage to get land at subsidised rate but also get land in large size, high amount of loan with low interest rate and several other tax exemptions. These benefits allow them to get benefit of economics of scale. Due to that they managed per worker and per enterprise high value of gross value added (GVA) as compared to the per unit GVA of for-profit enterprises. Per worker and per enterprise GVA in Rupees term of non-profit enterprise, charitable, trust and hospitals that are registered under society act reported to be much higher even as compared to the for profit enterprises (Table 9). Thus, hospital sector for these entities has become a profit making business or one can say hospital sector turned out to profit maximize sector in the country. This probably has resulted in high growth in allopathic hospitals and diagnostic labs/centres in India especially after liberalisation era.

Table 9: GVA per Worker and per Enterprise: A Comparison (Rs. in '000')

<i>GVA per workers</i>	<i>OAE</i>	<i>Est.</i>	<i>NPE</i>	<i>FPE</i>	<i>Charitable</i>	<i>Society</i>	<i>Public Trust</i>	<i>Total</i>
Allopathic	79	125	115	108	163	126	111	108
AYUSH	66	94	22	77	20	86	49	76
Other	123	93	56	122	40	65	45	102
Social	15	79	77	39	143	21	305	74
Total	76	118	83	103	110	71	185	101
<i>GVA per enterprise</i>								
Allopathic	89	539	1173	225	1115	2526	735	231
AYUSH	73	244	96	104	41	257	133	104
Other	144	511	334	258	251	481	131	268
Social	51	815	759	143	1126	281	2867	640
Total	86	500	721	196	708	984	1204	205

Source: Unit level records of 67th round

Due to high price of care in charitable/trust hospitals, other non-profit entities and not-for-profit enterprises, the health care services has become costly which has resulted in high OOP burden and household impoverishment due to health payments. The proper regulation and their effective implementation are urgent for cost-effective service delivered through private sector.

Unable to Mend the Health Service Deficiency Gaps

It is interesting to observe whether private sector serve the underserved (where government facilities are low) area/state. This would be possible only if one analyse data of both public and private health facilities at the disaggregated level, say at state and districts level. A simple correlation between the number of private allopathic enterprises (PAE) and public allopathic hospitals (PAH) per 100

thousand population at the state level found to be negative with coefficient value -0.56. This indicates that number of private allopathic enterprises per 100 thousand population are lower in states where public allopathic hospitals are higher in numbers and vice-versa. That is, if a state ensure high number of government health facilities to serve its population, the probability of having private facilities would be low. This is a healthy indication for general population because public facility are considered to be more cost-effective. The above notion however break-down, once we analyse health providers data at districts level.

Districts level information on private health enterprises shows that out of 568 districts only 29 per cent (166 in number) districts are covered with large (having more than 10 workers) private allopathic facilities (Appendix 1). The remaining 71 per cent districts has only small providers. Of which majority of them are informal providers whose education status is very low and involved in unethical practices. Interestingly, in states like Himachal Pradesh, Tamil Nadu, Andhra Pradesh and Kerala around 50%, 60%, 70% and 86% of the districts are covered with large private allopathic facility. The coverage of districts with large private allopathic facilities in high income states like Gujarat, Haryana, Punjab and Maharashtra is noticed to be lower than the above mentioned four states namely, Himachal Pradesh, Tamil Nadu, Andhra Pradesh and Kerala. This may be because, health insurance penetration in Himachal Pradesh, Tamil Nadu, Andhra Pradesh and Kerala is much higher than India average. As discussed, health insurance generally promote private sector to exploit the health care delivery market. So it can be interpreted that it is not the aggregate income, the paying capacity protected through health insurance matter more for the location of private sector. The notion that states having high income can attract high private facility does not hold true.

The above analysis confirm that more than 70 percent of India's districts are lacking with appropriate private health facilities, indicating high inequality in provisioning of private health facility in the country. Similarly, an analysis of the status of govt/public health facilities at the district level measured though an Index using information on sub-centres, primary health centres, community health centres, sub-divisional and district hospitals (per 100 thousand population) across all districts of India shows a high variation across districts. The value of Index is turned out to be very high 21.11 in one district and as low as 0.0000184 in another district, indicating there exist high inequality in public provisioning of health facilities across districts of India. That is, high inequality in provisioning of both public and private health facility across Indian districts.

In order to understand whether the private health sector fill the health deficiency gaps across Indian districts, a simple correlation between the status of public health facilities (the index value) and number of private allopathic enterprises is estimated using these districts level information. The correlation coefficient between these two turned out to be positive. This means that private large allopathic enterprises locate in those districts where public facilities are already exist in higher number. Thus, state level notion of negative correlation break-down once one analyse public and private health facilities information at the district level. It can be interpreted that private sector has not come forward to fill the health service deficiency gap of a districts rather they see health service cluster as an opportunity of business. Effectively there is dearth of both public as well as private facilities in many of the districts. There is no one to serve the people in many of the districts while other are

surrounding with both public as well as private health facilities. This reflects that private sector is not inclined to fill the regional gap in health infrastructure in the country, but take it as profit making business. Private health facility is urban centric phenomena or area where market for health care already exist.

The locational preference of charitable/trust hospitals is also urban centric. A closer examination of NSS 2010-11 data shows that existence of these entities in rural/semi-urban area and districts with inadequate service provision is negligible. Data analysis from Appendix-1 reflects that charitable and trust hospitals taken together are located only in 43 districts of India out of total 568 NSS districts. If one add hospitals that are registered under society act in to it, the coverage of districts reached to just 81 districts (Appendix 1). This reflects that these entities are not inclined to service the deficiency or underserved area or fill the regional gap in health service provision.

Note that the above reported estimates are based on NSS data on health service sector enterprises of the informal sector which generally does not capture information on formal-organised sector. In order to show the distribution of large and corporate hospitals of organized sector across states and districts, the data information are collected on national hospital directory prepared by Ministry of Health and family Welfare. National hospital directory reported to have 30,273 organised large size including 1048 corporate hospitals in both public and private sector in 2015 in the country.

Analysis shows that most of the large size hospitals of organised sector are also concentrated in some of the districts of India. For instance, around 76 percent of the large hospitals are located in only 26 percent (155 in number) districts out of total 585 districts of India (Appendix 2). The seven districts of India namely, Mumbai, Ahmadabad, Bengaluru Urban, Thane, Hyderabad, Pune and Chennai occupy on average (865 in number per district) 20 percent of India organized large hospitals (Appendix 2). Similar to the large organised sector hospitals, most (around 77%) of the private corporate hospitals including medical institutions are located in 15 states covering only 33 districts of India (Appendix 3). This analysis reflects that similar to the localisation pattern of private informal health providers, the public facility as well as formal organised hospitals facilities are concentrated in only some of the districts of India which is a grave cause of concern relating to inequality in availability of health facilities in the country and private sector is not to fill such deficiency gaps in health facilities.

Increase in Healthcare Cost

The dominance of private sector in health service delivery market has resulted in high healthcare cost in the country. The cost of care has increase manifolds. With the increase in healthcare cost the services has became unaffordable to general population. Table 10 shows that cost of hospitalisation in private facility as compared to the public was around 2.3 times in rural and 3.1 times in urban in 1986-87. In 2014, the cost of hospitalisation in private facility increased to 4.2 times as compared to the public facility (Table 10). The disease-wise cost analysis shows that cost of some of the diseases in private facility is around 8 times as compared to the private facility (Table 11). This reflects that cost of hospitalisation in the private facility is increasing over the period as compared to the public facility and in some cases the private sector cost is significantly high. The private sector is not cost-

effective. With the increase in high private sector role in service provision, not only the health care cost is increasing but services are becoming unaffordable to the general population. In order to reverse this trends, public spending for health service provision is urgently warranted.

Table 10: Cost of per Hospitalisation Cases in Public/Private Facility (Rs.)

<i>Years/ Rounds</i>		<i>Public (Rs.)</i>	<i>Private (Rs.)</i>	<i>Pvt/pub (ratio/times)</i>
42 nd 1986-87	Rural	1120	2566	2.3
	Urban	1348	4221	3.1
52 nd 1995-96	Rural	3307	5091	1.5
	Urban	3490	6234	1.8
60 th 2004-05	Rural	3238	7408	2.3
	Urban	3877	11553	3.0
71 st 2014	Total	6120	25850	4.2

Source: Respective NSS rounds

Table 11: Average Medical Expenditure per Hospitalisation Case by different Ailment Category (in Rs.): 2014

	<i>Public Hospital</i>	<i>Private Hospital</i>	<i>Pvt/Pub (Ratio/times)</i>
Cancers	24526	78050	3.18
Other	14030	35572	2.54
Cardio-vascular	11549	43262	3.75
Genito-urinary	9295	29608	3.19
Musculo-skeletal	8165	28396	3.48
Psychiatric & neurological	7482	34561	4.62
Injuries	6729	36255	5.39
Ear	6626	19158	2.89
Gastro-intestinal	5281	23933	4.53
Respiratory	4811	18705	3.89
Blood diseases (including anaemia)	4752	17607	3.71
Endocrine, metabolic & nutrition	4625	19206	4.15
Skin	3142	14664	4.67
Infections	3007	11810	3.93
Obstetric and neonatal	2651	21626	8.16
Eye	1778	13374	7.52
All	6120	25850	4.22

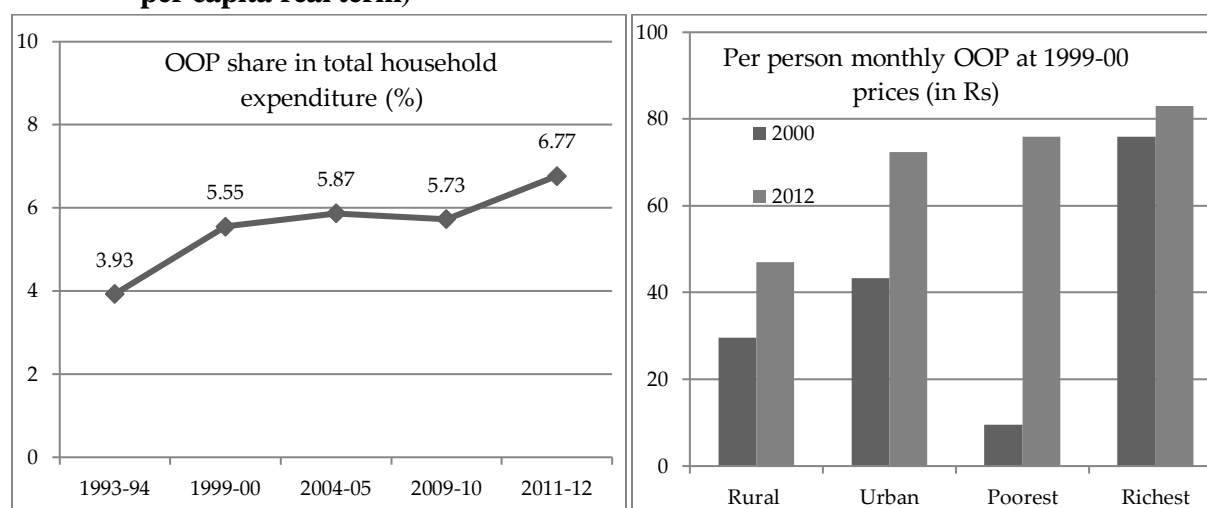
Source: Unit level records of 71st round of NSS

Increase in Health Payment Burden

As majority of people receive inpatient and outpatient care treatment from private facility whose cost is round 4 to 8 times higher than the public facility. This has not only resulted in high per capita

spending on health but out-of-pocket (OOP) burden has also increased. For instance, the share of OOP spending in total household spending increased to 6.77 per cent in 2011-12 from a low 3.93 per cent in 1993-94 (Figure 5). The real per capita monthly OOP spending (at 1999-200 prices) also shows a sharp rise across rural-urban residents and poor-rich households between 2000 to 2012. The increment in per capita monthly OOP spending is noticed to be at much high rate amongst the poorest households than the richest. Amongst the poor it increased from its meagre share of Rs. 9.5 in 2000 to Rs. 75.9 per person in 2012 (Figure 5), but in case of rich it increased marginally.

Figure 5: Trends in OOP spending in India (OOP share in total expenditure and in per capita real term)



Source: Designed using published documents (Selvaraj et al 2015:169; Karan et al 2014:4-5).

Relative Role of Public and Private Sector

Pro-market scholars generally raise two major points. One, public sector in broader sense is ineffective to delivery services as people has less faith due to low quality and long queue or long waiting time in the public facility. Second, private sector can fill the gap and provide cost-effective services to the general population. These arguments does not hold true once we analyse data on related variables in Indian context.

Table-12 presents an association between the provisioning of health facility by private health enterprise, private allopathic enterprises and by public sector with two outcome variables like the utilisation status (both for inpatient and outpatient care) and cost of cares. The results show that high availability of public provisioning in a state do not only reduce inpatient and outpatient care usage from private facility but also reduce overall medical care (per case) cost amongst the households. This reflects that health utilisation from private facility would be low if government ensure high public facility in the states. The argument that people have less faith in public facility does not hold true in Indian context. Secondly, public facility is more cost effective than the private facility, as per cases

hospitalisation cost is reported to be high in states where number of private health/allopathic practitioners are high, whereas the cost of hospitalisation reduces with the increase in public health facility in the states.

Table 12: Association of Public/Private Facility with Cost/Utilisation Parameters

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>
a. Private health enterprises-PHE	1.00							
b. Government allopathic hospital-GAH	-0.58	1.00						
c. Private allopathic hospital-PAH	0.93	-0.56	1.00					
d. Share of establishment in total PHE	-0.48	0.36	-0.47	1.00				
e. % of OPV in private facility: Male	0.67	-0.62	0.68	-0.40	1.00			
f. % of OPV in private facility: Female	0.48	-0.65	0.58	-0.27	0.67	1.00		
g. % of IPD in private facility: Persons	0.44	-0.54	0.54	-0.29	0.71	0.76	1.00	
h. Cost of hospitalization: per cases	0.69	-0.61	0.79	-0.32	0.55	0.46	0.41	1

Source: Appendix 4

Thus, in order to reduce the hospitalisation cost and OOP burden, governments needs to spend adequate public funds in health sector so as to ensure high availability of public health facility. With the high availability of public health services the state can ensure greater utilisation of inpatient as well as outpatient services from government facility. If states fails in providing adequate facility, the private sector capture the healthcare delivery market and leading the high healthcare cost which is borne by individual households.

One interesting observation from Table-12 can be drawn is that the association between availability of government allopathic hospitals (GAH) and share of private establishment health enterprises turned out to be positive. However, correlation coefficient turned negative between GAH and total private enterprises. This reflects that with the increase in govt hospitals/facility, the share of establishment (large formal/organised hospitals) would increase . On the other side, informal/OAE enterprise would decrease. Decrease in informal small providers can be a healthy indication, as majority of these providers practice without formal education/degree leading to unhealthy practices and low quality services. However service access would be undermined. A study about which argument hold true is beyond the scope of the present study. Overall, these evidences suggest that public sector is always better than the private sector in terms of providing cost effective services to the general population.

Conclusion

This study has analysed the changing nature of the growth of private sector in healthcare delivery market in India. The study has also listed out the factors that are responsible for its growth. In order to provide the comprehensive picture of the role of private sector especially whether it can serve the purpose or not has also been highlighted.

The evidences show that in India around 10.4 lakhs private health enterprises are providing health care services as compared to very low 1.96 lakhs public health facilities. The private sector provides a wide range of healthcare services ranging from hospital, medical, dental, diagnostics, homoeopathic, unani, ayurvedic, residential nursing to social services. Over the period, private allopathic providers are increasing faster as compared to the AYUSH providers. Indian private allopathic health sector is shifting from informal to formal organised and gradually it taking a corporatisation shape. Majority of allopathic providers unskilled without formal degree. A large number of private health enterprises are not registered under any act/legislation leading to unhealthy and unethical practices in the country. Over the period, private sector has become dominate in both healthcare provision and healthcare delivery market. This has resulted in high healthcare cost and high OOP burden in the country. Most of the Indian districts and rural area are suffering with deficiency of health facility, the growth phenomena of private sector however has largely been urban centric but not to fill the regional or deficient gap.

India has experienced with private sector even at the time of independence in the healthcare delivery market, while it has grown and diversified over the period. The role of private sector in health care delivery market however gained special attention during 2000 when Government of India approved the 100% foreign direct investment through automatic route in hospital sector in 2000. After that the long term and cheaper loan for private healthcare institutions were also granted and the hospital sector was confirmed with industry status in 2003-04 budget. These pro-market reform initiatives, along with the factors like population dynamics, people awareness and perception about health, change in health seeking behaviour, double burden of disease, changing nature of life style disease, global integration, medical tourism have encouraged the private providers/enterprises including foreign investors to exploit the hospital market in India. National and state level social and pro-poor health insurance schemes are another motivational factor that allow the private sector to grow. With the growth of private sector services has become costly leading to high OOP burden in the country.

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Appendices

Appendix 1: Concentration of Informal Private Health Sector Providers in 2010-11

	<i>No of districts covered with large and Charitable/Trust private allopathic enterprises (PAE)</i>					<i>%age of Establishment</i>
	<i>Total no of NSS districts</i>	<i>Large PAE (>10 workers)</i>	<i>% of district covered with large PAE</i>	<i>PAE registered under charitable and trust</i>	<i>PAE regd. charitable, trust & society act</i>	
Andhra Pr.	23	16	70	3	6	25
Assam	24	4	17	1	1	25
Bihar	38	4	11	1	1	16
Chhattisgarh	18	1	6			11
Delhi	7	3	43	2	3	60
Gujarat	25	7	28	5	7	46
Haryana	20	7	35	2	2	32
Himachal Pr.	12	6	50	1	3	24
J & Kashmir	11	1	9			57
Jharkhand	22	2	9	1	1	28
Karnataka	28	9	32	1	1	49
Kerala	14	12	86	3	9	39
Madhya Pr.	48	6	13	1	2	19
Maharashtra	34	12	35	2	4	52
NE-states	21	5	24		1	
Orissa	29	5	17	2	4	15
Punjab	19	9	47	1	3	21
Rajasthan	31	3	10	3	6	19
Tamil Nadu	30	18	60	6	13	65
Uttar Pradesh	71	19	27	5	8	16
Uttaranchal	14	5	36	2	2	18
West Bengal	19	9	47	1	4	15
Total/Average	568	166	29	43	81	29

Note: CPT- is hospitals registered under Charitable and Public Trust Acts; CPTS hospitals registered under Charitable, Public Trust and Societies Acts; Large PHE are having worker>10.

Source: NSS 67th round.

Appendix 2: Distribution of large size public and private hospitals in India, Sept. 2015

States/ Hospitals range	Number of Districts with hospitals range (in Number)							Total no of districts covered	Total no of hospitals
	>500	251-500	101-250	51-100	21-50	6-20	≤ 5		
Andhra Pradesh			Krishna (193), Guntur (184), Hyderabad (165), East Godavari (163), Chittoor, Visakhapatnam	5	3			14	1,380
Assam				1		9	12	22	183
Bihar			Patna (248)		13	22	3	39	1,039
Chhattisgarh			Raipur (170)	2	1	11	4	19	445
Goa					2			2	84
Gujarat	Ahmedabad (1130)	Surat (241), Vadodara (482)	Mahesana (199), Rajkot (172), Anand (145), Kheda, Sabar, Kantha	11	4	2	1	26	3,807
Haryana		Faridabad (281), Gurgaon (262)	Hisar (120)	10	7	1		21	1,669
Himachal Pradesh				4	5	3		12	485
Jammu and Kashmir				1	1		7	9	96
Jharkhand			Ranchi		4	15	5	25	478
Karnataka	Bengaluru Urban (993)		Belagavi, Dakshina Kannada	6	12	7	2	30	2,226
Kerala			Ernakulam (180), Thiruvananthapuram	6	5	1	1	15	890
Madhya Pradesh			Indore (244), Bhopal (146)	2	2	20	23	49	899
Maharashtra	Mumbai (1308), Pune (660), Thane (725)	Nagpur (290)	Kolhapur (178), Nashik (176), Raigarh (167), Solapur (167), Satara (160), Ahmednagar, Aurangabad, Jalgaon	3	8	10	2	34	4,807
Odisha			Cuttack	3	7	15	5	31	718
Punjab			Ludhiana (211), Amritsar (185), Jalandhar	5	8	3	1	20	1,201
Rajasthan		Jaipur (408)		5	6	17	3	32	1,209
Tamil Nadu	Chennai (552)	Coimbatore (262)	Madurai (167), Erode, Kanchipuram (151), Kanniyakumari, Salem, Tiruchirappalli	5	13	4	1	31	2,399
Telangana	Hyderabad (687)			4	4	1		10	1,175
Uttar Pradesh		Ghaziabad (660),	Agra (199), Gautam Buddha Nagar (188), Kanpur Nagar (175),	7	16	33	5	71	3,158

		Lucknow (272)	Meerut (189), Varanasi (169), Allahabad (145), Bareilly, Gorakhpur						
Uttarakhand			Dehradun	2	1	4	5	13	390
West Bengal		Kolkata (415)	Bardhaman	5	7	4	1	19	1,165
NE-States					2	11	21	34	234
UTs			Chandigarh	1		1	4	7	136
Total no of districts	7	10	50	88	131	194	106	585	
Total no & (%) of hospitals	6055 (20.0)	3273 (10.8)	7579 (25.0)	6173 (20.4)	4429 (14.6)	2460 (8.1)	304 (1.0)		30,273 (100.0)
Hospitals per district (in no)	865	327	152	70	34	13	3	52	

Source: data.gov.in. Districts having around or more than 150 hospitals are reported in the parenthesis.

Appendix 3: Concentration of Public and Private Corporate Hospitals in India, Sept. 2015

	Public	Private	Total	Concentration of hospitals (≥ 2 digits in no.) across districts
Andhra Pradesh	1	31	32	Hyderabad(27)
Assam	6	0	6	
Bihar	8	11	19	Patna(16)
Chhattisgarh	4	3	7	
Delhi	61	272	333	South (67), West (55), Central(42), South West(41), North West(39), New Delhi(34), East (32), North(15)
Goa	1	5	6	
Gujarat	12	23	35	Vadodara (8), Surat(6)
Haryana	5	192	197	Gurgaon (58), faridabad(29), Sirsa(16), Hisar(15), Ambala(11), Rohtak(11)
Himachal Pradesh	2	0	2	
Jammu and Kashmir	7	8	15	Jammu (13)
Jharkhand	3	0	3	
Karnataka	2	24	26	Bengaluru(22)
Kerala	26	6	32	Kollam (8), Kochi (7)
Madhya Pradesh	0	32	32	Indore(32)
Maharashtra	0	42	42	Mumbai(23), Pune(18)
Odisha	5	3	8	
Punjab	2	87	89	(Ludhiana(41), Amritsar(25), Mohali(10)
Rajasthan	3	4	7	
Tamil Nadu	3	30	33	Chennai(20)
Uttar Pradesh	1	65	66	Kanpur(20), Noida(13), Ghaziabad(10)
Uttarakhand	3	4	7	
West Bengal	0	21	21	Kolkata(21)
NE-states	7	5	12	
UTs	13	5	18	
Total	175	873	1048	806 (76.9%): covering only 33 districts

Source: <https://data.gov.in/catalog/hospital-directory-national-health-portal>

Appendix 4: Public and Private Health Facilities at State level: A Comparison

	Govt hospitals and private health enterprises (in No)#			Govt & pvt. facility Per 100,000 Population (No)			Service utilisation from private facility (in %)###		
	PHE#	PAE#	GAH##	PHE	PAE	GAH	OPV Male	OPV Female	IPD Person
Manipur	139	34	725	5	1	27	57	40	11
Nagaland	34	31	575	2	2	29	9	58	27
Arunachal Pr.	66	41	767	5	3	55	3	1	11
Sikkim	18	18	204	3	3	34	23	21	27
Assam	7109	2010	6599	23	6	21	25	21	11
Meghalaya	1058	239	546	36	8	18	4	52	11
Mizoram	128	128	449	12	12	41	32	49	14
A & N Islands	66	62	173	17	16	46	41	19	6
Daman & Diu	50	38	33	21	16	14	88	98	75
Tripura	4155	713	837	113	19	23	69	30	7
Orissa	19782	8819	9664	47	21	23	32	25	19
D & N Haveli	89	89	58	26	26	17	30	69	30
Bihar	59937	33164	12230	58	32	12	98	47	57
Goa	483	483	235	33	33	16	70	80	49
J & Kashmir	4953	4283	4272	39	34	34	52	53	6
Jharkhand	19385	12267	4837	59	37	15	68	84	60
Tamil Nadu	43605	29812	11928	60	41	17	69	65	60
Rajasthan	40490	31853	15527	59	46	23	64	61	46
Madhya Pradesh	48740	34799	11564	67	48	16	73	74	47
Himachal Pr.	4302	3411	2688	63	50	39	43	60	24
Gujarat	46111	31328	9985	76	52	17	82	82	77
Pondicherry	822	652	125	66	52	10	63	65	68
Chhattisgarh	17039	13861	7889	67	54	31	87	53	51
Karnataka	48178	36069	11946	79	59	20	82	78	73
Kerala	34846	21577	6639	104	65	20	72	64	65
Maharashtra	95684	73505	13564	85	65	12	87	81	81
Andhra Pradesh	74603	57300	14606	88	68	17	89	85	78
Chandigarh	951	790	21	90	75	2	69	50	23
West Bengal	112470	73245	12831	123	80	14	82	80	23
Uttaranchal	11836	9083	2966	117	90	29	60	47	49
Uttar Pradesh	233826	189168	24908	117	95	12	87	84	70
Punjab	40489	28163	3643	146	102	13	79	83	71
Haryana	36312	26311	3121	143	104	12	89	92	67
Delhi	27741	21121	155	166	126	1	88	71	37
Total/Average	1035497	744467	196331	86	62	16	76	74	58

Note: PHE- all types of private health enterprises; PAE- private allopathic enterprises consisting of hospitals, medicals and dental hospitals, diagnostic centre/labs and blood banks; GAH- govt allopathic hospitals consisting of SCs, PHCs, CHCs, DH for 2012; OPV- Outpatient visits, IPD- inpatient as hospitalisation.

Source: #- NSS 67th (2010-11) round; ##-Rural Health Statistics 2012, ###- NSS 71st (2014) round.

ⁱ Namely, Bombay Nursing Home Registration Act 1949; West Bengal Clinical Establishment Act, 1950; Delhi Nursing Homes Registration Act, 1953; J & K Nursing Homes and Clinical Establishments (Registration and Licensing) Act, 1963; Madhya Pradesh Upcharya Griha Tatha Rujopchar Sambandi Sthampamaue (Ragistrikan Tatha Anugyapan) Adhnyam, 1973; Punjab State Nursing home registration Act, 1991; Orissa clinical Establishment (Control and Regulation) Act 1991; Manipur Nursing Home and Clinics Registration Act 1992; Sikkim Clinical Establishments (Licensing and Registration) Act, 1995; Nagaland Healthcare Establishments Act 1997; Tamil Nadu Private Clinical Establishments Regulation Act, 1997; Andhra Pradesh Private Medical Care Establishments (Regulation and Registration) Act 2002, Rules 2005 and 2007; Karnataka Private Medical Establishment Act 2007.