

## Decentralization in Health Service Delivery

National Health Accounts (NHA) suggests that the health sector spending in India is around 4.6 per cent of GDP (GoI, 2005). Within that, the public expenditure constitutes only 0.94 per cent of GDP. The distribution of expenditure revealed that as a proportion to total health expenditure, public expenditure constituted 20.3 per cent, private sector expenditure 77.4 per cent and external support 2.3 per cent. While compared to the Asia Pacific countries, the public expenditure on health in India appears to be on the lower side than even the South Asian countries like Nepal (1.8 per cent) and Sri Lanka (2.0 per cent) (Table 6.1).

**Table 6.1: Selected public expenditure as percentage of GDP in Asia Pacific**

Country	HDI rank	Health exp./GDP	Education exp./GDP	Defence exp./GDP	Debt servicing/GDP
Australia	2	5.9	5.1	1.9	
Azerbaijan	82	1.2	3.2	2.9	0.8
Bangladesh	146	1.2	2.2	1.1	1
Bhutan	140	4.5	4		5.6
Brunei Darussalam	30	2.4	2	3.2	
Cambodia	138	2.1	2.6	1.6	0.6
Fiji Islands	96	3.4	4.5	1.6	0.7
Georgia	72	2.4	3.2	3.9	7
India	136	1.2	3.1	2.7	1.2
Indonesia	121	1.3	3	0.7	4.1
Japan	10	7.8	3.8	1	
Kazakhstan	69	2.5	3.1	1.1	32.3
Korea, Republic of	12	4.1	5	2.7	
Lao People's Demo Republic	138	1.5	3.3	0.3	4.3

*Table 6.1 continued*

*Table 6.1 continued*

Malaysia	64	2.4	5.8	1.6	5.6
Maldives	104	3.8	8.7		9.8
Mongolia	108	3	5.4	1.1	2.8
Myanmar	149	0.2		2.3	
Nepal	157	1.8	4.7	1.4	1.2
New Zealand	6	8.4	7.2	1.2	
Pakistan	146	0.8	2.4	2.8	2.5
Papua New Guinea	156	2.6		0.4	8.6
The Philippines	114	1.3	2.7	1.2	6.5
Samoa	96	5.7	5.3		1.8
Singapore	18	1.4	3.3	3.7	
Solomon Islands	143	8	6.1		3
Sri Lanka	92	1.3	2.1	3	2.9
China	101	2.7		2.1	1
Tajikistan	125	1.6	4		12.1
Thailand	103	2.9	3	1.5	3.5
Timor-Leste	134	5.1	14	4.9	
Tonga	95	4.1			1.4
Turkmenistan	102	1.5			0.8
Uzbekistan	114	2.8			1.5
Vanuatu	124	4.8	5.2		0.9
Vietnam	127	2.6	5.3	2.5	1.3

Source: UNDP (2013), Human Development Report.

Within the overall framework of committed current expenditure liabilities versus development spending in India, one can decipher a trade-off of expenditure between social sector and other committed liabilities like debt servicing and defense. The health sector expenditure and health sector outcomes are broadly correlated in the context of Asia Pacific. Broadly, higher the public expenditure on health sector, higher the health sector outcome (with a few exceptions). The countries like Australia and Japan spend around 6–8 per cent of GDP on health sector. The health outcome statistics revealed that these countries are relatively better in terms of life expectancy with relatively less gender gaps; maternal mortality is as low as 7 (per 100,000 live births) in Australia and 5 in Japan (Table 6.2).

MMR is strikingly high in India (200 per 100,000 live births), Bangladesh (240), Cambodia (250), Lao PDR (470) and Timor Leste (300).

**Table 6.2: Health sector diagnosis statistics of Asia Pacific**

<b>Country</b>	<b>TFR</b>	<b>MMR</b>	<b>Life expectancy</b>	
			<b>Female</b>	<b>Male</b>
Australia	1.9	7	84.8	80.3
Azerbaijan	1.9	43	73.9	67.6
Bangladesh	2.2	240	71.5	69.9
Bhutan	3.2	180	68.7	68
Brunei Darussalam	2	24	80.5	76.7
Cambodia	2.9	250	74.5	69.1
Fiji Islands	2.6	26	73	67
Georgia	2.2	67	77.8	70.5
India	2.5	200	68.3	64.7
Indonesia	2.4	220	72.9	68.8
Japan	1.4	5	87	80.1
Kazakhstan	2.4	51	72.3	61
Korea, Republic of	1.3	16	84.8	78.1
Lao People's Demo Republic	3.1	470	69.7	66.9
Malaysia	2	29	77.4	72.7
Maldives	2.3	60	79	76.9
Mongolia	2.4	63	71.6	63.7
Myanmar	2	200	67.2	63.1
Nepal	2.3	170	69.6	67.3
New Zealand	2.1	15	83	79.2
Pakistan	3.2	260	67.5	65.7
Papua New Guinea	3.8	230	64.6	60.4
The Philippines	3.1	99	72.2	65.4
Samoa	4.2	100	76.5	70.2
Singapore	1.3	3	84.7	79.8
Solomon Islands	4.1	93	69.2	66.3

*Table 6.2 continued*

*Table 6.2 continued*

Sri Lanka	2.4	35	77.4	71.2
China	1.7	37	76.7	74.1
Tajikistan	3.9	65	70.8	64.1
Thailand	1.4	48	77.8	71.4
Timor-Leste	5.9	300	69.1	66
Tonga	3.8	110	75.7	69.8
Turkmenistan	2.3	67	69.8	61.4
Uzbekistan	2.3	28	71.7	65
Vanuatu	3.4	110	73.8	69.7
Vietnam	1.8	59	80.5	71.3

Source: UNDP, Human Development Report, 2007.

Decentralization is considered as one of the effective modes of public health service delivery, at least at the policy realms. Ex-post to the 73rd and 74th Constitutional Amendments in India, the local self-governments (LSGs) were given significance in public service delivery with financial and functional devolution. A priori, decentralization is considered as one of the effective mechanisms to ensure transparency and accountability in public service delivery. This chapter analyzes this hypothesis whether decentralization catalyzes the effective public health service delivery in the context of India.

### Link between health spending and health sector outcome

Prima facie evidence from the preliminary data exploration on the positive correlation between public expenditure on health and health outcomes in the context of Asia Pacific requires further investigation. The empirical evidence on this link is inconclusive. For instance, Benu Bidani and Martin Ravallion (1995) attempted to analyze how different are health indicators between the poor and non-poor and what role does the differences in public health spending and schooling play. They estimated a random coefficients model, regressing aggregate life expectancy and infant/perinatal mortality rates across 35 countries against data on the distribution of consumption per person, allowing for differential impacts of public health spending and primary schooling.

The study highlighted those cross-country differences in public health spending and primary school enrolment matter, though far more to explaining the cross-country differences in health status of the poor than of the non-poor. These findings

reinforced efforts to protect public spending on basic health and education during times of fiscal contraction; not doing so could entail large costs to poor people.

Yet another study in the context of India by Sankar and Katuria (2004) using stochastic production frontier approach revealed that non-health inputs have more impact on health outcomes. Their study found that literacy level has more impact on health outcome than spending on health per se.

Chakraborty (2004) attempted to analyze the impact of public expenditure on health and economic growth on health indicators. The disaggregated data on variables like Child Mortality Rate (CMR) or Infant Mortality Rate (IMR) were not available for all Asia-Pacific countries, so the analysis was confined to using life expectancy at birth as a dependent variable. The model (illustrative) estimated the impact of public expenditure on health and economic growth on life expectancy at birth, including literacy rate as a non-health variable to examine the impact of education on health attainment. The results showed that literacy rate had a positive and significant impact on health outcome. This conforms that some of the earlier studies with non-health factors have a substantial impact on health indicators.

### ***What determines health outcome?***

The Q-squared factors of health care – quantity and quality – affect health outcome. The determinants are twofold: demand side and supply side determinants. The Commission on Macroeconomics and Health of the World Health Organization (2001) have argued that better health care is the key to improving health outcomes, but there is hardly any empirical evidence supporting this argument. Health is a merit good. Investing in health has positive externalities. On the cost side, there are direct and indirect costs. Direct costs consist of user fees, transport costs, medicine/drug costs, etc. Who bears the health expenditure burden in India? National Health Accounts of India reveal that the major part of health care financing consists of out-of-pocket expenditure. In the context of developing countries, whether opening up insurance markets for health care financing is an optimal solution to absorb health care costs is a matter of debate. When the health care expenditure crosses a threshold limit of entire budget of the household, it becomes ‘catastrophic’. Studies showed that catastrophic health expenditure is a significant cause of concern for poor income quintiles and their coping up mechanisms are largely through Ponzi finance (borrowing at high rate of interest to cope up the earlier debt incurred for health care financing) with indigenous ‘bad lemons’, viz., money lenders, pledging their wealth/collateral, etc.

Indirect costs are mostly related to the unpaid care sector of the economy. The consequences of man days lost due to morbidity and the unpaid non-market time of household care providers, etc. are a few among the indirect costs. Studies have noted that mother's education level has positive effects on the health and nutritional status and the schooling of children. It is also noted that mother's education is one of the significant variables in explaining the levels of child mortality, even after controlling for GDP of the country.

In addition to health- and education-related determinants, energy and water variables are also significant in explaining the health outcomes. The indoor air pollution and utilization of unsafe energy affects health outcome. Indoor air pollution is the cause of high respiratory distress and chronic illness and mortality. Yet another significant variable of better health outcome is access and utilization of safe drinking water, as well as adequate sanitation. Technological advancements in medical science have also led to the better health outcomes.

Empirical evidence suggests that the system of health care delivery is quite dysfunctional in many dimensions and it is a Herculean task to reform the health care system in India. For instance, a series of the World Bank surveys reveals that in several Indian states (Chaudhury et al., 2003), there is a very high level of absence (43 per cent) of health care providers in Primary Health Centres. Sen, Iyer and George (2002) used two NSS surveys two time points of two decades (1986–87 and 1995–96) to study the relationship between income and access to health care and showed a worsening of inequalities in access to health care.

Banerjee et al. (2008) in their paper revealed that the public health care system in India is plagued by high staff absence, low effort by providers and limited use by potential beneficiaries who prefer private alternatives. Interpreting the results of an experiment carried out with a district administration and a nongovernmental organization (NGO) in villages of Rajasthan, they highlighted that initially the nurses are responsive to financial incentives to come from headquarters to work in remote villages. But after a few months, the local health administration appears to have undermined the scheme from inside by letting the nurses claim an increasing number of 'exempt days'. Eighteen months after its inception, the programme had become completely ineffective.

### ***Interpreting selected state level health sector outcome***

Chakraborty and Mukherjee (2003) highlighted a series of disturbing incidents in the public hospitals in West Bengal which compelled the state government to take action about the service delivery issues related to health care system. They,

however, noted that the response by the government had not gone beyond a few ad hoc steps, in spite of the seriousness of the issue.<sup>1</sup>

Getting to the numbers (NSSO rounds), the authors highlighted that 80 per cent of poor, used public health care system in West Bengal. Moreover, only around 15–20 per cent of outpatients get treated in medical hospitals is a clear case of people exercising their ‘exit’ options to private health care provisioning.

### Interpreting health outcomes in terms of ‘exit’ and ‘voice’

The people respond to the deterioration in the public services broadly in two ways.<sup>2</sup> One, they exert their ‘voice’ to improve the quality of public health care system. Two, if they have access to alternative suppliers, they tend to ‘vote with their feet’ or ‘exit’ when dissatisfied with the public service provisioning of health care. The empirical evidence showed that most of the cases cater to the second option rather than the ‘voice’ option. However, this voice and exit phenomena is not the trend in West Bengal alone.

The personal ambulatory service (defined as the personal care services on an outpatient basis) is the most pluralistic and competitive segment of the health care system in India. Different systems of medicine along with a wide range of providers with a variety of quality exist side by side, and it is possible for patients to ‘shop around’ (Chakraborty and Mukherjee, 2003). This makes the personal ambulatory care part of the health system the least amenable to improvement solely from expanding public provision. It is high time that the government could step in with the required institutional structure to regulate the personal ambulatory health service market.

Banerjee et al. (2008) based on a clustered randomized – controlled evaluation of immunization campaigns with and without incentives – experiment conducted in

<sup>1</sup> The paper provided a few instances that in October 2003, a 20-year-old girl was taken to one of the public hospitals in West Bengal, but the doctors on duty ‘refused’ to admit her in spite of the seriousness of the case. When they finally decided to admit her at the end of the day, it was too late as the girl could not survive to see that admission granted. They also cited another instance of a six-month-old girl in critical condition who was being rushed by her parents to the Medical College (public) hospital, but severe traffic jam created by a massive political rally on the way rendered the parents completely helpless. When they finally reached the hospital they were told that they had to deposit ₹1,000 before the treatment was started. The poor parents did not have the amount with them. By the time they managed to return with the money, it was too late and the baby expired. The paper also put upfront that these are not isolated cases, but these types of incidents had been on rise in West Bengal.

<sup>2</sup> ‘Exit’ and ‘Voice’ are terms made popular by Hirschman, Albert O (1970) in his work ‘Exit, Voice and Loyalty’, Harvard University Press, Cambridge, Massachusetts.

rural Rajasthan found that reliability of health care services improves immunization rates, and small, non-financial incentives have large positive impacts on the uptake of immunization services in resource-poor areas. This study was set to examine why the immunization rate remains low despite free immunization offered in public health facilities. According to the National Family Health survey (NFHS-3), only 44 per cent of 1–2-year-old children have received the basic package of immunization, that rate dropped to 22 per cent in rural Rajasthan, and to less than 2 per cent in the rural area of this study was conducted in rural Udaipur district. Analyzing the gaps by assessing the relative efficacy and cost-effectiveness of only improving the supply of infrastructure for immunization, versus improving supply and simultaneously increasing demand through the use of incentives, the study highlighted that both reliable supply of free immunization services and incentives to improve the demand for these services may improve immunization rates.

This MIT randomized controlled study of immunization camps showed that offering modest, non-financial incentives (for instance lentils) to families in resource-poor settings can significantly increase uptake of immunization services. In their experiments, the reliable camps with incentives achieved significantly higher rates of full immunization for children aged 1–3 compared to control areas. While the lentils represented a cost to Seva Mandir in Udaipur villages, their distribution may have led to improved nutrition in an environment where malnutrition and anaemia are endemic (Banerjee et al., 2008). These results, thus, nuance prior conclusions that achieving the Millennium Development Goals is strictly a function of addressing inadequate health infrastructure. Therefore, the study suggested that simultaneously strengthening the supply and offering incentives to bolster demand for health service may be a more effective strategy.

Unpacking the results, we could find that in the hamlets even when access is good and a social worker constantly reminds parents of the benefits of immunization, more than 80 per cent do not get their children fully immunized. Nevertheless, more than 75 per cent obtained the first shot without the incentive and stopped attending the camps only after 2 or 3 shots. This showed that the parents do not have strong objections to immunization, but that they were not persuaded enough about its benefits to overcome the natural tendency to delay a slightly costly activity. This explained the tendency to not complete the whole course of immunization. Providing the lentils helps overcome this procrastination. Thus, in the case of preventive care, small barriers may turn out to have large implications. Finding effective ways to overcome small barriers may hold the key to large improvements in immunization rates and uptake of other preventive health behaviours (Banerjee et al., 2008). In case of immunization, small non-monetary incentives coupled with regular delivery of services appear to have the potential to play this role.

Broadly, empirical evidences suggested that the uptake of preventive behaviour is very sensitive to small incentives or small costs, suggesting that incentives can play a role in promoting preventive health services. However, the optimal solution to better health outcome in terms of immunization could be ensuring a reliable supply of health services and educating parents about the benefits of preventive care is more important than providing incentives.

### **Health sector diagnosis: Issues and challenges**

The decentralization of public service health delivery is pitched against the socio-economic asymmetry existing across States in India. The poverty (absolute) estimates, the broad indicator, which could capture this interstate asymmetry, suggest that 31.4 per cent of people live in abject poverty in India, with striking rural–urban differentials in poverty gaps (Table 6.3). These poverty estimates are based on the poverty line given by the Planning Commission in 2004–05. One approach to understand the effectiveness of public health spending is to analyze the distributional effects of public expenditure for health for BPL (below poverty line) and APL (above poverty line) categories across major states of India. In this study, we have used the CSO, NSSO 60th round Morbidity, Health Care and the Condition of the Aged survey (2004) to understand the access to health services, especially publicly provided health services by the APL and BPL categories.

**Table 6.3: Distribution (in per cent) of inpatient bed days used by population below poverty line and state-wise poverty estimates**

	Poverty estimates			Share of inpatient bed days used by population BPL in last 365 days (in %)
	Rural	Urban	Total	
Andhra Pradesh	14.5	24.7	17.3	7.6
Assam	26.4	2.1	24.1	69.8
Bihar	48.8	32.1	47.0	32.8
Chhattisgarh	56.5	40	54.2	50.6
Delhi	0.1	15.3	12.9	14.1
Goa	0	33.7	11.2	16.9
Gujarat	18.4	11.1	15.9	11.0
Haryana	12.1	16.6	13.2	6.4
Himachal Pradesh	15.3	11.8	15.0	12.7
Jammu & Kashmir	9.9	15.3	10.9	8.2

*Table 6.3 continued*

Table 6.3 *continued*

Jharkhand	49.3	17	43.9	32.4
Karnataka	24.7	35.5	27.9	15.8
Kerala	17.5	26.2	19.8	22.7
Madhya Pradesh	36.7	48.4	39.6	28.8
Maharashtra	28.7	29	28.8	24.4
Orissa	55.5	35.6	53.1	38.2
Punjab	13.7	11.4	12.9	7.7
Rajasthan	30.1	26.9	29.4	19.5
Tamil Nadu	23	24.9	23.7	14.8
Uttar Pradesh	39.1	30.6	37.3	22.4
Uttarakhand	58.2	21.1	50.3	38.1
West Bengal	41.3	13.6	34.6	23.7
<b>Northeast</b>				
Arunachal Pradesh	28.1	2.1	25.1	36.8
Manipur	3.3	0.2	2.4	1.0
Meghalaya	11.3	0.3	9.9	5.1
Mizoram	3.6	1	2.5	1.9
Nagaland			0.0	0.0
Sikkim	19		16.5	23.1
Tripura	36.3	5.2	32.0	28.3
<b>All India</b>	<b>32.8</b>	<b>27.1</b>	<b>31.4</b>	<b>21.8</b>

*Note:* These poverty estimates are based on the poverty line given by the Planning Commission in 2004–05.

*Source:* Planning Commission, 2005 and CSO, NSSO 60th round: January–June 2004, Schedule 25: Morbidity, Health Care and the Condition of the Aged.

The analysis of the percentage share of inpatient bed days used by the BPL population (in the last 365 days) across states revealed that at all-India level, 21.8 per cent share of inpatient bed days were used by the population below the poverty line. The data revealed that the percentage is high in the states of Assam (69.8 per cent) and Chattisgarh (50.6 per cent).

The share of population using inpatient bed days by those below the poverty line was consistent with the per cent of the population below the poverty line in the states like Chattisgarh, Delhi, Himachal Pradesh, Jammu & Kashmir, Tripura, Manipur, Mizoram and Kerala. In states like Andhra Pradesh, Jammu & Kashmir, Haryana and Punjab, and in the north-eastern states like Manipur and Mizoram,

those below the poverty line accounted for a relatively small per cent (less than 10 per cent) of the inpatient bed days (Table 6.3).

On the contrary, the percentage of outpatient visits at the public hospitals by the poor (population below poverty line) is significantly higher only in the states of Bihar (50.8 per cent), Chattisgarh (54.2 per cent), Madhya Pradesh (38.2 per cent), Orissa (49.3 per cent), Maharashtra (29.4 per cent) and Tripura (42.8 per cent) (Table 6.4). In all other states, the public hospital-based outpatient care relatively favours those above the poverty line. At the aggregate national level, the figures revealed that only a quarter percentage of the outpatient visits at the public hospitals was by poor (population below poverty line). These outpatient data are given for the last 15 days and not for 365 days.

**Table 6.4: Distribution (in per cent) of outpatient visits at public hospitals by population BPL for last 15 days**

	Poverty estimates	Outpatient visits at public hospitals by population BPL for last 15 days (in %)
Andhra Pradesh	17.3	13.4
Assam	24.1	29.7
Bihar	47.0	50.8
Chhattisgarh	54.2	54.2
Delhi	12.9	4.9
Goa	11.2	8.3
Gujarat	15.9	11.0
Haryana	13.2	11.8
Himachal Pradesh	15.0	13.4
Jammu & Kashmir	10.9	14.2
Jharkhand	43.9	30.7
Karnataka	27.9	22.3
Kerala	19.8	20.7
Madhya Pradesh	39.6	38.2
Maharashtra	28.8	29.4
Orissa	53.1	49.3
Punjab	12.9	3.1
Rajasthan	29.4	23.9
Tamil Nadu	23.7	31.1
Uttar Pradesh	37.3	32.0

*Table 6.4 continued*

*Table 6.4 continued*

Uttarakhand	50.3	28.0
West Bengal	34.6	30.4
<b>Northeast</b>		
Arunachal Pradesh	25.1	19.1
Manipur	2.4	0.0
Meghalaya	9.9	0.8
Mizoram	2.5	0.0
Nagaland	0.0	0.0
Sikkim	16.5	17.0
Tripura	32.0	42.8
<b>All India</b>	<b>31.4</b>	<b>25.3</b>

*Note:* Same as for Table 6.3.

*Source:* *Ibid.*

The determinants of utilization of health services by the population below poverty line are a combination of both demand side and supply side factors. In other words, the determinants of equity in health care access and utilization by the poor range from the demand side factors such as education (literacy rate), empowerment, household budget constraints, distance criterion (location of public hospital), etc. to the supply side constraints such as availability of health professionals, the physical infrastructure, the level of facilities and availability of drugs.

**Table 6.5: Distribution (in per cent) of children aged 0–4 years without any immunizations among those above and below poverty line**

	APL	BPL
Andhra Pradesh	1.9	2.8
Assam	11.9	15.7
Bihar	20.2	16.6
Chhattisgarh	12.4	7.6
Delhi	8.9	9.0
Goa	23.4	9.1
Gujarat	7.1	1.7
Haryana	9.7	11.0
Himachal Pradesh	2.0	17.6
Jammu & Kashmir	0.8	3.2

*Table 6.5 continued*

*Table 6.5 continued*

Jharkhand	12.7	5.0
Karnataka	2.6	3.0
Kerala	2.7	3.7
Madhya Pradesh	10.1	9.8
Maharashtra	1.9	3.1
Orissa	1.3	3.9
Punjab	7.7	4.3
Rajasthan	5.0	11.2
Tamil Nadu	2.9	2.8
Uttar Pradesh	8.8	11.6
Uttarakhand	6.4	4.7
West Bengal	3.3	3.7
<b>Northeast</b>		
Arunachal Pradesh	18.3	17.4
Manipur	8.8	43.6
Meghalaya	8.4	
Mizoram	12.2	
Nagaland	6.6	
Sikkim		
Tripura	7.4	11.1
<b>All India</b>	<b>6.9</b>	<b>8.8</b>

Source: CSO, NSSO 60th round: January–June 2004, Schedule 25: Morbidity, Health Care and the Condition of the Aged.

Turning to preventive health services, the data analysis revealed that a significant percentage of poor children within the age group of 0–4 are without any immunization. It is as high as 43.6 per cent in Manipur, 16–17 per cent in Assam, Bihar, Himachal Pradesh and Arunachal Pradesh (Table 6.5). The aggregate level data revealed that 8.8 per cent of poor children (population 0–4 below poverty line) are without any immunization. The picture is similar in case of children above poverty line, though little less; the data revealed that to be 6.9 per cent among APL (Table 6.5). The states with relatively lower share of poor children without any immunization are Gujarat (1.7 per cent), Tamil Nadu and Andhra Pradesh (2.8 per cent), Maharashtra (3.1 per cent), Jammu & Kashmir (3.2 per cent) and Kerala (3.7 per cent).

**Table 6.6: Distribution (in per cent) of inpatient bed days in the public and private sector for those below poverty line, for last 365 days**

	<b>Public</b>	<b>Private</b>
Andhra Pradesh	58.0	42.0
Assam	96.5	3.5
Bihar	18.0	82.0
Chhattisgarh	66.8	33.2
Delhi	26.3	73.7
Goa	65.5	34.5
Gujarat	53.4	46.6
Haryana	30.1	69.9
Himachal Pradesh	93.1	6.9
Jammu & Kashmir	99.2	0.8
Jharkhand	50.0	50.0
Karnataka	46.3	53.7
Kerala	66.6	33.4
Madhya Pradesh	66.2	33.8
Maharashtra	60.4	39.6
Orissa	75.5	24.5
Punjab	51.4	48.6
Rajasthan	63.1	36.9
Tamil Nadu	59.8	40.2
Uttar Pradesh	32.5	67.5
Uttarakhand	50.8	49.2
West Bengal	88.0	12.0
<b>Northeast</b>		
Arunachal Pradesh	96.4	3.6
Manipur	100.0	0.0
Meghalaya	100.0	0.0
Mizoram	71.2	28.8
Nagaland		100.0
Sikkim	99.6	0.4
Tripura	99.7	0.3
<b>All India</b>	<b>63.2</b>	<b>36.8</b>

*Source: Ibid.*

The aggregate data on the distribution (percentage share) of inpatient beds in the public and private sector for the population below poverty line revealed that at the national level, 63.2 per cent of poor utilized the public health sector (Table 6.6). The interstate differentials in utilization rates revealed that the public health sector is relatively utilized by the poor people more than that of private health services, except in the states of Bihar (82 per cent in private) followed by Delhi (73.7 per cent), Haryana (69.9 per cent), Uttar Pradesh (67.5 per cent) and Karnataka (53.7 per cent). On the contrary, the states with relatively higher utilization of public hospitals are Assam (96.5 per cent), Himachal Pradesh (93.1 per cent), Jammu & Kashmir (99.2 per cent), Orissa (75.5 per cent), West Bengal (88.0 per cent) and the North Eastern States (Table 6.6).

**Table 6.7: Distribution (in per cent) of institutional delivery (bed days) by BPL women in the public and private sectors**

	Public	Private
Andhra Pradesh	61.5	38.5
Assam	24.1	75.9
Bihar	56.8	43.2
Chhattisgarh	40.6	59.4
Delhi	100.0	0.0
Goa	100.0	0.0
Gujarat	54.7	45.3
Haryana	86.9	13.1
Himachal Pradesh	7.5	92.5
Jammu & Kashmir	73.7	26.3
Jharkhand	71.6	28.4
Karnataka	44.1	55.9
Kerala	47.3	52.7
Madhya Pradesh	48.8	51.2
Maharashtra	52.2	47.8
Orissa	26.1	73.9
Punjab	37.3	62.7
Rajasthan	31.9	68.1
Tamil Nadu	36.6	63.4
Uttar Pradesh	55.5	44.5
Uttarakhand	14.4	85.6

*Table 6.7 continued*

*Table 6.7 continued*

West Bengal	21.7	78.3
<b>Northeast</b>		
Arunachal Pradesh	41.8	58.2
Manipur	0.0	
Meghalaya	0.0	
Mizoram	0.0	
Nagaland		
Sikkim	0.0	
Tripura	0.0	
<b>All India</b>	<b>44.5</b>	<b>55.5</b>

*Source:* *Ibid.*

Containing Maternal Mortality is a silent emergency in India. It is as high as 543 deaths per 100,000 live births in India. The significance of data on the institutional deliveries is that it is a significant determinant of maternal morbidity and mortality. The analysis of institutional delivery across public and private sectors revealed that the share of bed days for deliveries at the national level in the public sector was 44.5 per cent and in the private sector was 55.5 per cent. The interstate analysis revealed that significantly higher share of institutional delivery in public sector was reported for the states like Delhi (100 per cent), Goa (100 per cent), Haryana (86.9 per cent), Jammu & Kashmir (73.7 per cent), Jharkhand (71.6 per cent), Andhra Pradesh (61.5 per cent), Bihar (56.8 per cent), Gujarat (54.7 per cent), Kerala (47.3 per cent), Madhya Pradesh (48.8 per cent), Maharashtra (52.2 per cent) and Uttar Pradesh (55.5 per cent) (Table 6.7). These states have higher utilization rates for public sector than that of the national average in case of institutional delivery. On the contrary, the states with heavy reliance on the private sector for institutional delivery are Himachal Pradesh (92.5 per cent of the bed days in the private sector), Uttarakhand (85.6 per cent) and West Bengal (78.3 per cent).

### **Decentralized health care system in India: Federal fiscal financing of health sector**

Theoretically decentralizing health care sector can be beneficial; reasons are fivefold, via (i) increasing local ownership and accountability; (ii) improving community participation and responsiveness to local needs; (iii) strengthening integration of services at the local level; (iv) enhancing the streamlining of services and (v) promoting innovation and experimentation (Kolehmainen-Aitken, 1999). However, the cross-country evidence is inconclusive. In the early phase of the

Philippines, experience indicates that decentralization *per se* does not always improve efficiency, equity and effectiveness of the health sector; instead it could exacerbate inequities, weaken local commitment to priority health issues and decrease the efficiency and effectiveness of service delivery by disrupting the ‘referral chain’ (Lakshminarayanan, 2003).

**Table 6.8: Financing pattern of public health sector in India**

State	Central	State	Local (Rural)	Local (Urban)
Health spending by funds source <sup>*</sup> (`Billion)	67.1	132.7	4.7	9.7
Health spending by channel <sup>**</sup> (`Billion)	53.5	173.1	15.3	16.5
Spending categories *** (percentages)				
Curative	29.4	47.6	29.8	41.4
Reproductive and child health	21.8	12.2	17.1	3.3
Communicable disease control	14.1	6.2	35.2	14.1
Medical education and training	11.9	8.7	0.3	2.4
Research and Development	11.1	0.2	0.0	0.0
Administration	4.6	8.4	8.6	27.1
Capital expenditure	1.0	4.7	4.9	4.3

*Notes:* \*Excludes ₹24.8 billion external support, of which ₹19.7 billion was to governments, and the rest to NGOs; \*\*Includes spending by non-health ministries and agencies; \*\*\*Only Ministry of Health and Family Welfare for Central Government, and Health Ministries for states. The figures relate to 2001–02.

*Source:* Singh et. al. (2009).

The health care service in India is a heterogeneous domain.<sup>3</sup> Table 6.8 makes it clear, when we disaggregate the basic data on federal financing patterns of health sector spending. The analysis revealed that states are responsible for a

<sup>3</sup> Health care is also distinguished by the diversity of services that are covered by the term. Care may involve prevention or treatment of a disease, treatment may be for acute or chronic problems, health problems may be exclusively individual or have collective dimensions, be specific to particular groups (e.g. children or women) and, increasingly, health care includes attention to broader aspects of well-being. From an economic policy perspective, the key issues are the degree of ‘publicness’ or spillovers associated with each component of health care, the minimum efficient scale for provision, and the potential for economies of scope, either in costs or benefits (Singh, et. al. 2009).

major chunk of public expenditure on health. The analysis of financing patterns of health sector is constrained by data paucities; for instance, the data for rural and urban local government are probably overstated and include spending, that is effectively determined by state governments. In addition, health care workers are almost always state employees (Singh et. al., 2009). The significance of curative spending at all levels is also revealed in the analysis and the high proportionate cost of administration in the urban areas. The latter undoubtedly is a function of the fact that running large hospitals is a major component of urban health spending.<sup>4</sup> The other issue in health spending is the large-scale inequality in health spending in India across states, and it is important to understand if the decentralized system and intergovernmental transfer mechanisms have tried to address these concerns.

### **Constitutional domain of health: Financial and functional assignments**

The Constitution of India laid out the areas of functional responsibility of the central, state and local governments, with respect to the assignment of expenditure authority, revenue-raising mechanisms and the legal fiat needed to implement either. The expenditure assignments are specified in separate Union and State Lists, with a Concurrent List covering areas of joint authority. The major subjects/functions assigned to the states include public health along with public order, agriculture and irrigation. Yet another point to be noted is that the states also assume a significant role for subjects in the Concurrent List, such as education and social insurance.

The Constitution of India also deals with revenue assignment. The constitution assigns revenue powers by creating exclusive revenue domains for the centre and states. The broad-based taxes were assigned to the centre, which includes taxes on income from non-agricultural sources, corporation tax and customs duty. The tax powers are assigned to local bodies based on congruence principle, that is, less mobile a tax base which is assigned to the lowest tier. Examples of such immobile taxes are property taxes. The situation with respect to local governments is somewhat distinct from the centre-state division of powers. The 1993 Constitutional Amendments left legislative details to the states, since local government was, and remains, in the State List. Furthermore most local responsibilities are subsets of those in the State

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<sup>4</sup> It is impossible to infer too much from such aggregate figures, with respect to whether the observed pattern of spending is in some sense the ‘right’ one. Certainly, there is clear conceptual understanding among policymakers of the multifaceted nature of health care, the need to make spending decisions at the appropriate scale, and the problems of poor incentives in the current system (Singh, 2008).

List. There is no ‘Local List’, but the constitution now includes separate lists of responsibilities and powers of rural and urban local governments. For example, rural local governments are now potentially responsible for ‘health and sanitation, including hospitals, primary health centres and dispensaries’, family welfare and ‘women and child development’. However, there are interstate variations in the assignment of tax powers and expenditure assignments to local governments. The fiscal autonomy as well as the legislative autonomy of the local governments is limited.

## Fiscal transfers in health

As significant part of the sub-national government, revenue accrues from fiscal transfers, and the effectiveness of public health care service delivery at local level in India does not go far enough, unless the institutional mechanisms of fiscal decentralization and degree of fiscal autonomy are varied. There is a lack of transparency and accountability in the system because of extensive use of inadequate revenue assignments, lack of sufficient decentralization to local bodies and a poorly designed intergovernmental transfer system.

Multiplicity of fiscal transfer channels from the Centre to the states constitutes one of the salient features of fiscal decentralization in India. First, there is a constitutional mechanism to devolve tax shares and give grants. Fiscal imbalances for state governments were anticipated in the constitution, which mandated a Finance Commission (FC) that recommends on centre-state transfers. The FC served as a model for State Finance Commissions (SFCs), created in 1993 to recommend on state-local transfers. In both cases, other transfer channels also exist. The creation of an apparatus of central planning in the 1950s led to a complex system of plan transfers involving both sub-national levels. In addition, intertwined with the planning system, there are various specific purpose transfers from central and state government ministries to lower levels.

The current constitutional tax-sharing arrangement entitles the states to an overall share of the consolidated fund of India. The shares of the centre and the states, and the states’ individual shares are determined by a new FC every five years. Tax sharing is unconditional, based on an elaborate formula. The FC also recommends grants, typically based on projected gaps between non-plan current expenditures and post-tax devolution revenues. These grants are mostly unconditional, although some commissions have made close-ended, specific purpose non-matching grants for areas such as health and education.

Second, the Planning Commission gives grants and loans for implementing development plans. A separate body, the Planning Commission (PC), makes grants and loans for implementing development plans, and it also coordinates central ministry transfers – almost one-third of Centre-state transfers are made through

these channels. Plan transfers are made using a different formula than that of the FC. In contrast to the FC, PC transfers are conditional, being earmarked for particular ‘developmental’ purposes. The process for determining plan transfers involves bargaining between the PC and the states.

Finally, various ministries give grants to their counterparts in the states for specific projects which are either wholly funded by the Centre (central sector projects) or requiring the states to share a proportion of the cost (centrally sponsored schemes) (Rao and Singh, 1998). Moreover, there is a lack of coordination among the three current institutions in charge of implementing transfers. Central ministry transfers are categorical and typically made to their counterparts in the states for specified projects, with (centrally sponsored schemes) or without (central sector projects) state cost sharing. Health, education, social insurance and rural infrastructure have all received increased attention and funding in recent years through flagship programmes of government. However, monitoring and coordination of these transfers are relatively ineffective. There are well over 100 schemes, and attempts to consolidate them into broad sectoral programmes have been unsuccessful.

Thus, the institutional mechanism of federal transfers in India revolves around three institutions, viz. Finance Commission,<sup>5</sup> Planning Commission and various ministries of the Central Government. The Finance Commission’s recommendations, once accepted by the Parliament become mandatory, so that the transfers of funds affected in pursuance of these recommendations could be said to have a statutory sanction behind them.<sup>6</sup> However, given the system of transfers so evolved over the years, substantial part of the transfer of resources have fallen largely outside the ambit of Finance Commission, and it is the Planning Commission through which larger share of resources are transferred to the states.<sup>7</sup> The Planning Commission transfers are in the form of plan grants, which has emerged as the single largest component of grants transferred to the states from the centre.<sup>8</sup> The plan grants in recent years have also become largely discretionary

<sup>5</sup> Under the Constitution, the Finance Commission is appointed by the President of India every five years mainly to decide on the distribution of resources, viz. tax sharing and grants from the Centre to the states.

<sup>6</sup> These statutory transfers are unconditional transfers and the state governments according to their own expenditure priorities based on local needs use resources thus transferred through these channels.

<sup>7</sup> It is important in this context to remember that Planning Commission is an executive authority of the Central government rather than a constitutional body like Finance Commission.

<sup>8</sup> The share of plan grants in total grants constitutes 47 per cent of the total grants transferred to the states.

as substantial portion of the plan grants fall outside the Gadgil formula (see Chakraborty, Mukherjee and Amarnath, 2010). Apart from these, there are non-statutory discretionary transfers made to the states by various ministries of the central government in the form of centrally sponsored schemes (hereafter CSS). By nature, CSS grants are conditional specific purpose grants.<sup>9</sup> The CSS grants constituted 50 per cent of the total grants to the states.<sup>10</sup> In recent years, big ticket centrally sponsored schemes, viz. NREGA, SSA and NRHM, have become the principal drivers of resource transfers to the states in the form of CSS. All these big ticket CSS transfers also bypass the state budget and are directly given to panchayats or to various implementing agencies. As these funds bypass the consolidated fund of the states, it naturally raises the question of accountability.<sup>11</sup>

Twelfth Finance Commission noted that the newly created State Finance Commissions (SFCs) have struggled to create a system of formal state-local transfers. SFCs are required to make recommendations on the assignment of

<sup>9</sup> The Eleventh Finance Commission (hereafter EFC) (2000), noted that during the course of the last three decades, the central sector plan schemes/CSS have become an important vehicle for transfer of resources to the states, outside the state plans, and over and above the transfers following through the mechanism of Finance Commission. These were started primarily to provide funding for projects in areas/subjects considered to be of national importance and priority by the Central government. The details of the schemes are drawn up by the centre, and their implementation and funds for implementation are allocated to the state governments directly through District Rural Development Agencies or similar created organization. There is little freedom left to the state governments to modify the schemes to local governments or to divert funds to areas which are considered of local priority. On the other hand, the state budgets are burdened with additional revenue expenditure when the schemes are completed and their maintenance expenditure is pushed under the non-plan category. The EFC recommended that CSS need to be transferred to the states along with funds. Plans for transfer of CSS were contemplated and recommended by earlier Finance Commissions also to improve the flexibility of the state governments in deciding their own expenditure priorities and improve its financial position. But so far, no decision in this regard has been considered necessary by the Central government.

<sup>10</sup> Data pertains to the Fiscal Year 2002–03 taken from the Reserve Bank of India (2004).

<sup>11</sup> As mentioned by Rao (2007: 1,253), this kind of transfers has been: ‘undermining the role of systems and institutions in the transfer system. In fact, even under the transfers for state plans, normal assistance, which is given according to the Gadgil formula, constituted less than 48 percent. Thus, we have a situation where the grants system has become predominantly purpose specific with a cobweb of conditionalities specified by various central ministries. Furthermore, quite a considerable proportion of grants which used to be given to the states now directly goes to autonomous agencies. This raises questions about the capacity to deliver public services by these autonomous agencies, mechanisms to augment the capacity and as the funds do not pass through states’ consolidated funds, of accountability’.

tax revenues to local bodies, sharing of tax revenues between states and the local governments and their distribution among individual local bodies as also grants. The experience of implementation of SFC across states, however, depicts a disappointing picture as many states are reluctant to devolve revenue and expenditure powers to third level governments (Rao, 2005). Some states have devolved functions, functionaries and finances, but the functions have been encapsulated in terms of schemes in the interest of transferred employees, and local governments do not have the autonomy in either changing the schemes or exit them. Yet another problem at the third tier is that as the salary of the devolved functionaries is paid by the state and their transfers and promotions are decided by the state government, the local governments cannot effectively ensure their accountability. Further, the twin dangers of 'elite capture' and 'corruption' need to be resolved in many states.

The empirical analysis based on the available local level data created by the Twelfth Finance Commission and the World Bank (2004) revealed that the rural local governments heavily depend on intergovernmental grants. Rajaraman (2001) also noted that the rural local revenues include a large component whose spending is predetermined by higher-level agencies. The untied component of the intergovernmental fiscal grants has thwarted the fiscal autonomy of the local governments to a great extent.

## **Health equalization grants**

Considering acute spatial disparities in the service standards in the provision of health and education, the TFC has tried to bring in the equalization principle for certain specific grants for education and health on the expenditure side. Although equalization should be pursued mostly, if not exclusively, by the equalization grant system in order to free up other grant instruments to pursue other objectives, this is a temporary positive move given the present need for more equalization in the system (Eunice Heredia-Ortíz and Mark Rider, 2006). It is also noted that after gaining experience in implementing these grants, larger grants and a more comprehensive approach can be developed for meeting the needs fully, which also requires supplementation by plan grants (Srivastava, 2005).

When unconditional transfers are made, equalization transfers aim to neutralize deficiency in fiscal capacity but not that in revenue effort. Sometimes adjustments affecting cost and need factors may also be accommodated. In many ways, the Finance Commission formula-based fiscal transfer is not a part of an equalization grant system but rather a part of general or unconditional funding, which might have equalization grant features. Chakraborty (2003) seeks to empirically investigate if the fiscal transfers in India follow the principles of fiscal equalization.

Econometric investigation using a panel data for 15 major states for the years 1990–91 to 1999–00 in a ‘fixed effects model’ revealed a strikingly regressive element of the transfers, with aggregate tax transfers per capita positively related to state per capita income. However, grant transfers negated this trend, showing clear progressivity though not sufficient to eliminate horizontal inequalities owing to the smaller proportion of grants in the overall transfer in comparison to tax transfers.

## **Effectiveness of decentralization on health sector delivery**

Despite the growing recognition of the effectiveness of fiscal decentralization on public service provisioning, there has been relatively few empirical studies on this topic. Sarkar (2000) highlighted this issue and provided a survey of empirical studies in fiscal decentralization as follows to put forward the paucity of studies on the link between fiscal decentralization and human development outcome, especially in education and health. The existing studies focus largely on the impact of fiscal decentralization on economic growth either using cross-country regressions (for instance, study by Davoodi and Zou, 1998) or examine the same for a particular country (for instance, Zhang and Zou, 1998, and Xie and Zou, 1999, for China and the United States, respectively, and for the survey of other country studies, Ranis and Stewart, 1994, and 1995). However, Duret (1999) examines the relationship between infant mortality rates and fiscal decentralization variables in a cross-country set-up, which aims to measure any efficiency gains from decentralization in less-developed countries from the perspective of human development. Using macro-level data, Sarkar (2000) in the case of Argentina, examined the link between fiscal decentralization and outcomes, picking up two crucial sectors for development, viz. health and education and test whether decentralization had any impact on these. The evidence from the study was mixed. The studies of this stature – analyzing the impact of fiscal decentralization on service delivery or outcome – are a rare gamut.

### *Decentralizing health services: Cross-country evidence*

Decentralizing health services – the transfer of functions and finance from the central to the sub-national governments – theoretically could be pro-poor if and only if the resources, accountability mechanisms and governance structure are competent. The process of decentralization may lead to negative effects if sub-national governments have unfunded mandates as well as the health sector is not a part of priority expenditure decisions.

Can decentralization help in achieving better health outcomes? How does decentralization affect health sector performance? What could be the sequence of decentralization that leads to efficient, accountable and participatory systems? Would the countries with relatively better decentralization efforts include the health sector?

Public expenditure on health care at sub-national levels is a significant determinant of effectiveness of decentralization. Advocates of decentralizing health services say that incorporating local data in decision-making, altering patterns of authority and holding officials and health workers accountable improve performance, outputs and outcomes such as mortality rates, and thus benefits the poor. However, empirical evidence from Asian countries is discouraging. The percentage of government health spending as part of total health expenditure fell in China and India and stagnated in Indonesia and the Philippines during the period of decentralization (OECD, 2006).

The fall in China and India, as noted by the study, can mostly be explained by three factors. First, fiscal decentralization shifts the burden to local governments without properly funding their new responsibilities. After China reformed its intergovernmental transfer system in 1994, social service spending remained decentralized, but revenues were recentralized. A complicated transfer system to equalize revenue and expenditure across provinces is barely functioning and is increasing the health funding gap between poorer and richer provinces. Secondly, local governments have no incentive to invest in health as they do in infrastructure and private sector development. Thirdly, the impact of different types of health services varied. More autonomy for hospitals in China, for example, led to buying more expensive equipment and drugs to generate local revenue, leading to greatly increased medical costs and an under-supply of those services with inter-jurisdictional spillover such as immunization. This also happened in the Philippines and Indonesia where vaccination coverage dropped significantly after decentralization.

The study further noted that in Indonesia and the Philippines, which did not reduce health spending, outcomes have improved with decentralization. The under-five mortality rate has sharply fallen, while it was stable or slightly worse in China and India. The difference may be because the already high out-of-pocket (OOP) expenditure, mostly paid by the patient at the point of delivery, in China and India has steadily risen, probably due to less government health spending. In Indonesia and the Philippines, the OOP share remained stable or fell slightly, also due to early investment in health care funding reform. So, improving the health care financing system towards more pre-payment and less OOP is a key to successful decentralization.

World Bank (1993) states that decentralization of the planning and management of government health services can improve both efficiency and responsiveness to local needs. However, the effectiveness of decentralization on health service delivery depends not only on overall governmental political and administrative structures and objectives, but also on the pattern of health system organization prevailing in the particular country (WHO, 1990).

Wang, Collins, Tang and Martineau (2002) and WHO (1990) highlighted the significance of public private participation in health service decentralization and enhanced cross-sectoral linkages could be the reasons for decentralizing health sector services. However, public policy and public action should be intertwined for effective decentralization. For instance, decentralized governance coupled with local level participation can contribute to improving the health care facilities through better monitoring and supervision of the functioning of the health system at the local level.

In 2008, the OECD launched a survey to collect information on the health systems characteristics of member countries. Paris, Devaux and Wei (2010) analyze the data provided by 29 of these countries in 2009. It describes country-specific arrangements to organize the population coverage against health risks and the financing of health spending. It depicts the organization of health care delivery, focusing on the public/private mix of health care provision, provider payment schemes, user choice and competition among providers, as well as the regulation of health care supply and prices. This study also provides information on governance and resource allocation in health systems, especially with respect to the decentralization in decision-making, nature of budget constraints and priority setting.

David and Saez (2008) explored the impact of decentralization on health care outcomes in the context of European Union. Using infant mortality and life expectancy as dependent variables, the study investigated the hypothesis that shifts towards greater decentralization would be accompanied by improvements in population health. The empirical results suggested that income, decentralization, health care resources and lifestyles in European Union did have an influence on infant mortality and life expectancy. The significance of the study is that it added a new empirical perspective to the evaluation of the economic gains arising from greater decentralization in health care.

Crook and Sverrisson (1999) has analyzed the decentralization experience with respect to the developing countries and highlighted the experiences of decentralization in Indian state of West Bengal, and Brazil had positive impact on growth and equity; while the decentralization experiences in Bangladesh and Nigeria has bad impact on growth and equity due to corruption and political patronage. There is evidence of less positive impact of decentralization on growth

and equity in the context of Ghana as the resources involved are too insignificant to have made much impact.

Maganu (1990) analyzed that lack of effective administrative structure at district level thwarted the effective decentralization of health services in case of Botswana. In the context of Chile, Montoya – Aguilar and Vaughan (1990) deciphered that the transfer of primary care clinics to municipalities has not resulted in extending coverage or in improving the quality of the services, mainly due to lack of professional supervision and poor planning by the area health services.

Crook and Sverrisson's (1999) cross-country comparisons conclude that 'the notion that there is a predictable or general link between decentralization of government and the development of more "pro-poor" policies or poverty-alleviating outcomes clearly lacks any convincing evidence.' Those who advocate decentralization on these grounds, at least, should be more cautious, which is not to say that there are no other important benefits, particularly in the field of participation and empowerment.

Using a panel dataset with nationwide county-level data, Hiroko and Johannes (2007) analyze the effect of fiscal decentralization on health outcomes in China. The study found that counties in more fiscally decentralized provinces have lower infant mortality rates than counties where the provincial government remains the main spending authority, if certain conditions are met. Public expenditure responsibilities at the local level need to be matched with county governments' own fiscal capacity. For county governments that have only limited revenues, the ability to spend on local public goods such as health care depends crucially upon intergovernmental transfers. The findings of the study, therefore, support that fiscal decentralization can lead to more efficient production of local public goods, while also highlighting the conditions required for this result to be obtained.

Schrijvers (1990) argued that in the context of the Netherlands, the 'trial and error method' of introducing decentralized decision-making made the process significantly slow, and the process also got complicated because of the implementation of too many structural policy changes. Reilly (1990), in the context of Papua New Guinea, observed that decentralization has enabled the Department of Health to become revitalized and more technically competent; while in Senegal, Ndiaye (1990) reported that there was strong political will at the decentralization levels along with community involvement in health care system.

John Akin et al. (2005) analyzes whether decentralization actually leads to greater health sector allocative efficiency by modelling local government budgeting decisions under decentralization. The model led to the conclusions

not all favourable to decentralization and produces several testable hypotheses concerning local government spending choices. For a brief empirical test of the model, the study also looked at data from Uganda. The data are of a type seldom available to researchers, the actual local government budgets for the health sector in a developing country. The empirical results provide preliminary evidence that local government health planners are allocating declining proportions of their budgets to public goods activities.

Artigas (1990) in the context of Spain suggests that legal fiat and autonomous administrative framework are prerequisite for successful decentralization. However, recently the devolution of responsibilities allows for a sort of 'de-construction' of the status quo by changing both organizational forms and service provision in the context of Spain. Guillem (2006) examined the 'pros' and 'cons' of the decentralization process of health care in Spain, drawing on the experience of regional reforms from the pioneering organizational innovations implemented in Catalonia in 1981, up to the observed dispersion of health care spending per capita among regions at present.

Chakraborty (2006) analyzes the scope and limitations of public service provisioning in terms of gender responsive budgeting in Mexico within the overall framework of fiscal decentralization. The study noted that decentralized gender responsive budgeting (GRB) can be meaningful only when the local governments have significant assignment of functions and finance. Therefore, although the focus of the paper is gender responsiveness in decentralized budgetary policies, the initiatives to incorporate gender concerns in federal budgets are also analyzed to capture the effectiveness of top-down approach in conducting gender budgeting. Specifically, the paper attempted to analyze the fiscal decentralization in terms of revenue and expenditure assignments and intergovernmental transfers in Mexico with a gender perspective; examine the federal government initiative in gender-sensitive public service delivery in health sector; and evaluate the role of provincial government and civil society organizations in the process of institutionalizing gender responsive budgeting in the state of Oaxaca; through legislations, public policies and budgetary process. The overall conclusion of the study is that unless there is fiscal autonomy at the local level, the service delivery in terms of GRB is ineffective.

In the context of Sri Lanka, Cooray (1990) highlighted that active agents from heterogeneous realms like governmental and non-governmental sectors led to the success of health sector delivery at the local level.

Broadly the reforms in health sector along with fiscal autonomy at the local level are significant for effectiveness of decentralization of health outcomes. Kolehmainen-Aitken (1999) underlines the pre-requisites for decentralization of health services such as active involvement of health managers in the decentralized

design, clear national resources allocation standards and health services norms, and regular system for monitoring.

***Decentralizing health services: Recent empirical evidence from India***

India has relatively poor health outcomes, despite having a well-developed administrative system, good technical skills in many fields, and an extensive network of public health institutions for research, training and diagnostics. This suggests that the health system may be misdirecting its efforts or may be poorly designed. To explore this, Das Gupta and Rani (2004) use instruments developed to assess the performance of public health systems in the United States and Latin America based on the framework of the Essential Public Health Functions, identified as the basic functions that an effective public health system must fulfil. The authors focus on the federal level in India, using data obtained from senior health officials in the central government. The data indicate that the reported strengths of the system lie in having the capacity to carry out most of the public health functions. Its reported weaknesses lie in three broad areas (Das Gupta and Rani, 2004). First, it has overlooked some fundamental public health functions such as public health regulations and their enforcement. Second, deep management flaws hinder effective use of resources – including inadequate focus on evaluation, on assessing quality of services, on dissemination and use of information, and on openness to learning and innovation. Resources could also be much better used with small changes, such as the use of incentives and challenge funds, and greater flexibility to reassign resources as priorities and needs change. Third, the central government functions too much in isolation and needs to work more closely with other key actors, especially with sub-national governments, as well as with the private sector and with communities. The authors conclude that with some reassessment of priorities and better management practices, health outcomes could be substantially improved.

Yet another study by Sunil (2009) suggests that history is essential to an understanding of the challenges facing health policy in India today. Institutional trajectories matter, and the paper tries to show that a history of under-investment and poor health infrastructure in the colonial period continued to shape the conditions of possibility for health policy in India after independence. The focus of the paper is on the insights intellectual history may bring to our understanding of deeply rooted features of public health in India, which continue to characterize the situation confronting policymakers in the field of health today. The ethical and intellectual origins of the Indian state's founding commitment to improve public health continue to shape a sense of the possible

in public health to this day. The paper shows that a top-down, statist approach to public health was not the only option available to India in the 1940s, and that there was a powerful legacy of civic involvement and voluntary activity in the field of public health.

In response to the challenge of sustaining the health gains achieved in the better-performing states and ensuring that the lagging states catch up with the rest of the country, the Indian government has launched the National Rural Health Mission. A central goal of the effort is to increase public spending on health from the current 1.1 per cent of GDP to roughly 2–3 per cent of GDP within the next five years. Against this backdrop, Deolalikar, Jamison, Laxminarayan and Ramanan (2007) examine the current status of health financing in India, as well as alternatives for realizing maximal health gains for the incremental expenditures.

The empirical studies on the link between the fiscal decentralization and public service delivery are rare in the context of states of India. Among the few studies, a study by Narayana and Kurup (2000) is notable, in the context of Kerala. Kerala is in the forefront of decentralization of powers following the 73rd and 74th Constitutional Amendments. The existence of a large number of health care, educational and other institutions in every Panchayat in Kerala has necessitated decentralization of every sector as part of the overall decentralization. The government order of 1995 has transferred the health care institutions at various levels to the local self-government institutions (LSGI). The study analyzed decentralization of the health care sector in Kerala and the associated problems as perceived by the elected members. They also argued that three basic problems of decentralizing the health care sector, namely spillover effect, role and relevance of a pre-existing body (Hospital Development Committee or HDC) and the level of minimum health care service to be provided by the health care institutions, have not been adequately addressed. The study noted that the problem of benefit spillover is quite serious with regard to the secondary health care services.

### ***Locus of decision-making: Understanding a decentralized flagship programme on health in India***

The National Rural Health Mission (NRHM) was launched in 2005 to provide accessible, affordable, accountable, effective and reliable health care facilities in the rural areas, especially to the poor and vulnerable sections of the population within the period 2005–2012. This programme involves community in planning and monitoring. The ultimate aim of NRHM is to reduce infant mortality rate (IMR),

maternal mortality rate (MMR) and total fertility rate (TFR) for population stabilization; and prevent and control communicable and non-communicable diseases, including locally endemic diseases.

### Strategies of NRHM

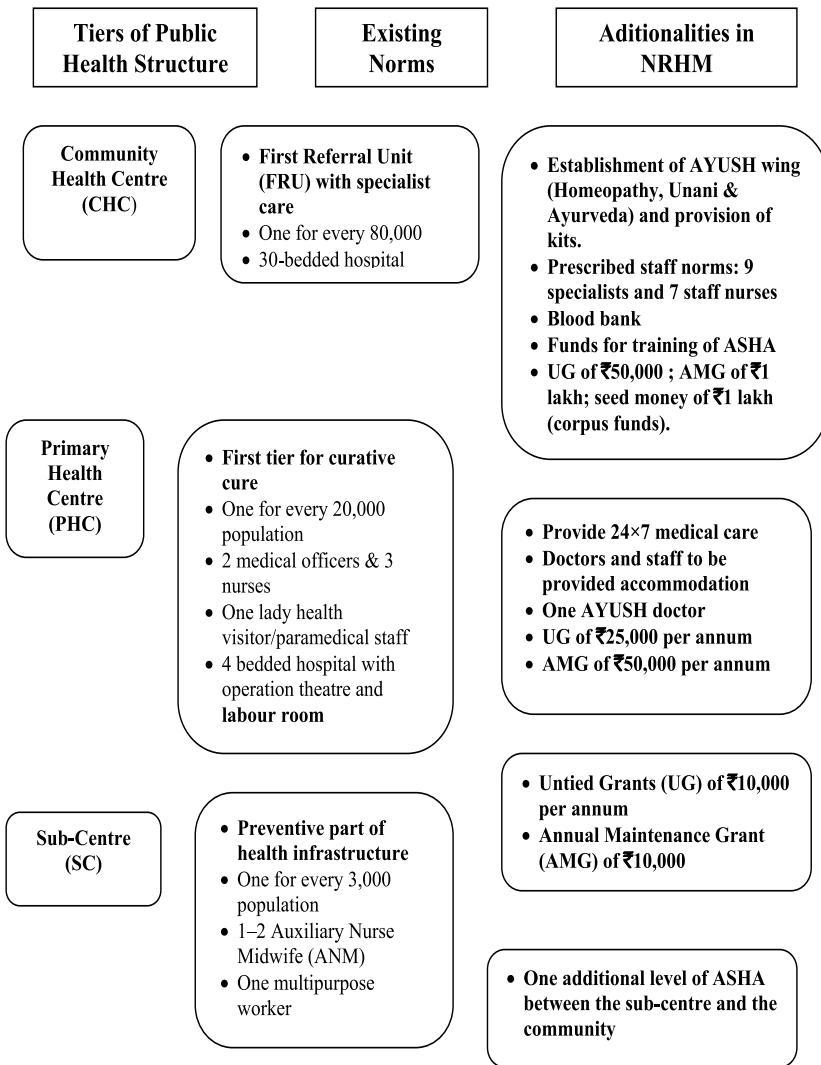
The planning and finance strategies through which the objectives of the NRHM could be achieved during the period 2005–12 are the following:

- (i) Public expenditure on health from the current level of 0.9 *per cent* of Gross Domestic Product (GDP) to 2–3 *per cent* of GDP over the period till 2012.
- (ii) Convergence of health programmes such as Reproductive and Child Health (RCH) and immunization programme as well as with various national disease control programmes with NRHM, at the established planning level.
- (iii) Cross-sectoral convergence was also included in the perspective plan, expected to reflect convergence with other departments, thus placing health in the macro-context of other health determinants like drinking water, sanitation, nutrition and hygiene.
- (iv) Norms to bridge the gaps in health care facilities by upgrading the public health infrastructure to Indian Public Health Standards (IPHS).
- (v) Accredited Social Health Activist – ASHA – is central to NRHM. ASHA is to promote access to improved health care at household level through a trained female for every 1,000 people in a village, who would act as a bridge between the sub-centre and the community.
- (vi) Public policy intertwined with public action is core to any successful policy. Institutional mechanisms to promote community participation at every level are there in NRHM and this would be funded with untied grants (UG) and annual maintenance grants (AMG).

### Institutional mechanism of public health system

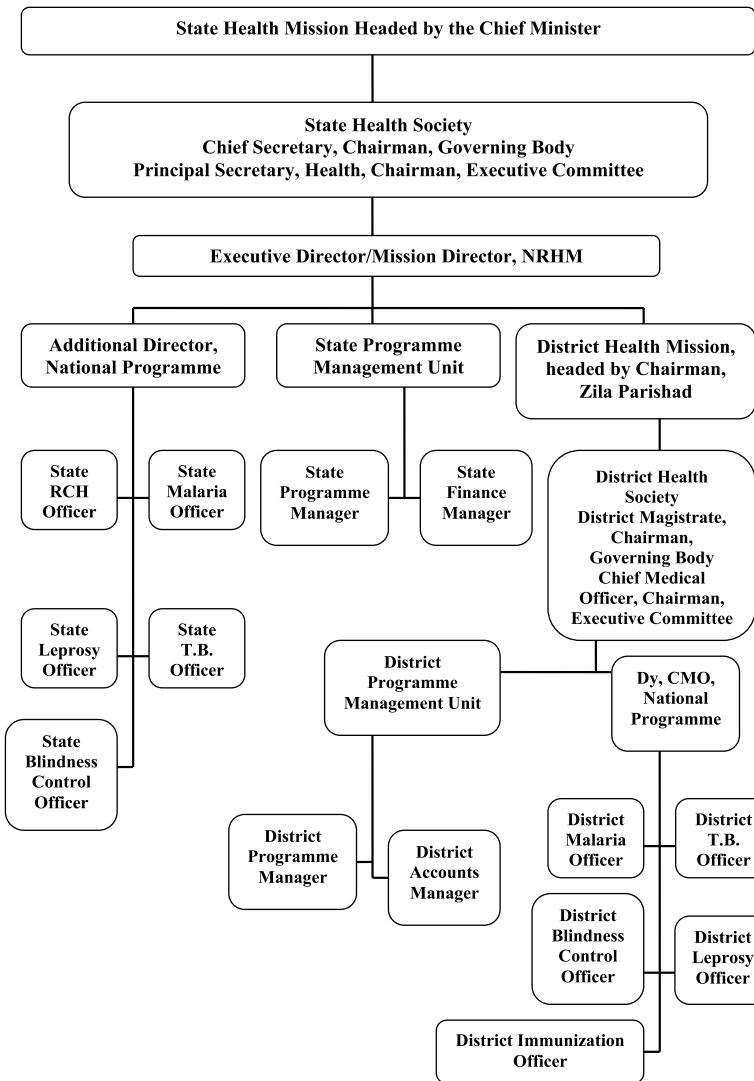
In India, three pillars of public health infrastructure are Sub-centre (SC), Primary Health Centre (PHC) and Community Health Centre (CHC). The strengthening of these three pillars is one of the significant objectives of NRHM. The mechanism to improve the NRHM from the existing norms to additional features is given in Figure 6.1, and the locus of decision-making is given in Figure 6.2.

**Figure 6.1: Institutional mechanism of public health system: Graphical presentation**



Source: [www.nrhm.gov.in](http://www.nrhm.gov.in)

**Figure 6.2: Locus of decision-making**



Source: [www.nrhm.gov.in](http://www.nrhm.gov.in)

The mid-term reviews of the implementation of NRHM by the Comptroller and Auditor General have revealed that many of the aspects visualized at its planning stage are missing while implementation. Most of the states have expended the NRHM money with nil preparation of plans. The CAG reviews also highlighted that the community participation was not in any aspect of health care system under NRHM, neither in planning nor in implementation and monitoring.

Block and village plans, which were to form the basis for district plans, were not prepared. Though some of the states prepared plans with external support, the district level health authorities do not 'own' these plans.

Identifying the spatial health needs is one of the core features of NRHM. However, CAG reviews highlighted that the health sector needs suggested in the district level were broadly similar in nature. Most of the district plans appeared to be homogenous in nature, without reflecting the real spatial health needs of the particular district. This has serious implications on the effectiveness of public expenditure on health sector outcomes.

The baseline household surveys were not completed in many of the districts. The baseline survey was supposed to bring out the availability of services at various levels of health care system; however, the surveys were incomplete.

'Convergence' was yet another core aspect of NRHM. The convergence of many health schemes as well as cross-sectoral convergence of many schemes related to health across Departments was ineffective under NRHM in many of the states.

NRHM proved faulty at two stages: planning stage and implementation and monitoring stage. The previous pre-implementation stage of planning has been with lacunae which did spill over to the subsequent stages. Further, monitoring and planning committees at state, district, block and PHC (primary health centre) levels required to be formed to ensure regular community-based monitoring of activities and facilitating relevant inputs for integrated planning were not constituted at any level, thereby diluting the objective of community participation in monitoring activities.

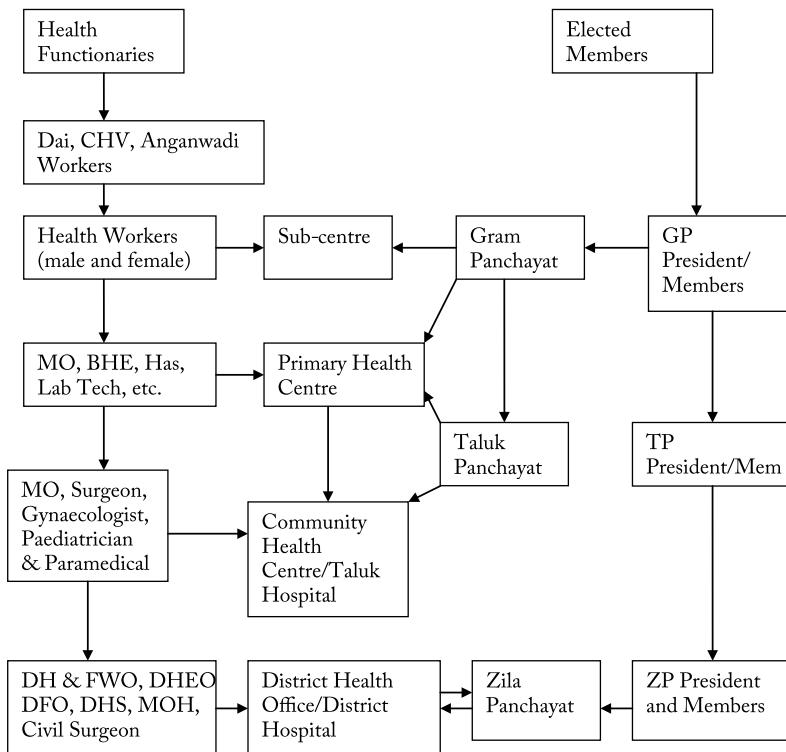
Unless the Department of Health strengthens the planning process under NRHM immediately, at least in the penultimate year of NRHM, with effective community involvement in planning, implementation and monitoring of activities, it is hard to translate the money spent on NRHM into tangible health outcomes.

#### *Locus of decentralized decision m: Link between PRIs and health care system*

Panchayat Raj Institutions (PRIs) and health care system are intertwined in almost all states, with its state-specific local governance structure. In general, PRIs can evaluate and monitor the progress of health sector functionaries. For instance, in the state of Karnataka, the gram panchayats is linked to the functionaries of Sub-centres and Primary Health Centres (PHCs) of its jurisdiction. On the other hand, the Taluk Panchayat has links with Primary Health Centres and Community Health Centres. Taluk Panchayats may have control over the Medical Officer and other health functionaries of PHC and CHC. Similarly, at the district level, the

District Health and Family Welfare officer is responsible for the management and supervision of the health care services. There is a direct link between district health office and the zilla panchayat. The district health officer (DHO) in consultation with the zilla panchayat implements most of the health, disease control and family welfare programmes. In Karnataka, all the health care institutions and hospitals except the District Hospitals are placed under the authority of DHO (for details, Sekher, 2003). Figure 6.3 shows the linkages between PRIs and functionaries of the health care system at the district level in Karnataka.

**Figure 6.3: Locus of decentralization and health decision units**

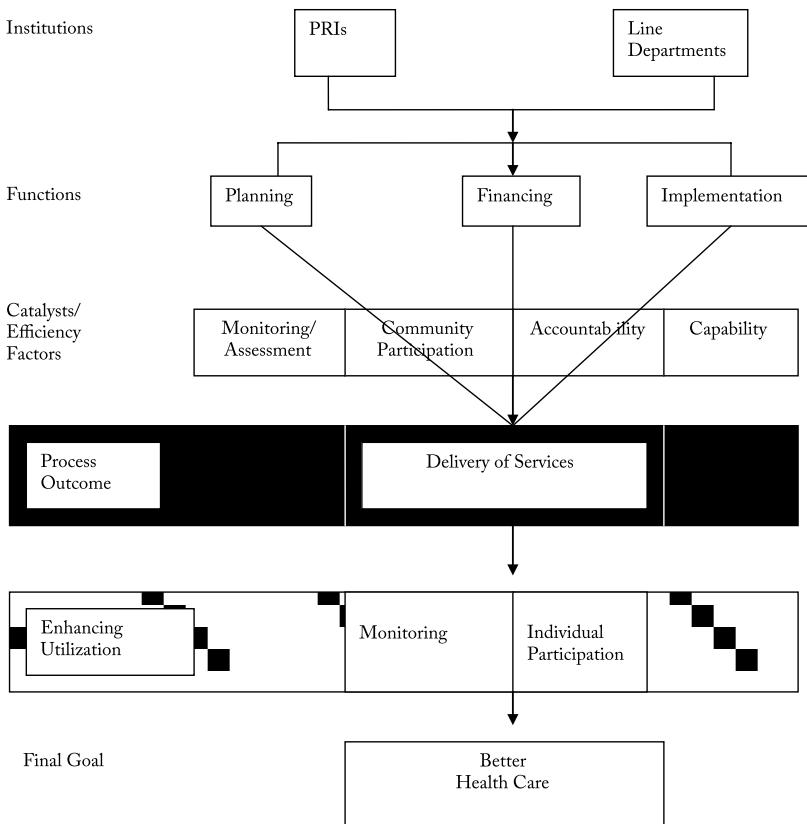


Source: Sekher et al. (2004).

The loci of decentralized decision-making units of health for delivery and monitoring of health services at local level is given in Figure 6.4. The linkages are through the institutional mechanisms of Panchayati Raj systems and line departments. These lead institutions should formulate strategies, prepare plans

and provide financial solutions for implementing the plans. The overall direction has to come from higher-level authority, in the present context, from the state-level policies (for details, Sekher et al., 2004).

**Figure 6.4: Locus of decentralized decision-making units of health at monitoring and delivery of public health services at the local level**



### *State-specific decentralization and health sector inequities: More examples*

It is interesting to examine the state-specific examples of decentralized health delivery mechanisms. Apart from Karnataka, we take the case of Kerala where the public policy led development in education and health for several years.

Despite Kerala being the pioneer of the models of public provision of health services, the studies have shown that there are inequities in the state of health even

in the state of Kerala, in the context of recent apprehensions regarding fairness and distribution. The historic Kerala model in health lies in its distinction of good health at low cost, which is indicative of universal availability and accessibility. However, the recent challenges confronting this model relate to the mismatch between greater demands for health care under a different epidemiological regime twined with reduction in public health spending. The consequence has been a rise in out-of-pocket expenditures in health. Mishra (2005) highlighted that Kerala, well known for its achievements in the health front, has started showing signs of a crisis summarized in terms of the decay of public health system, the uncontrolled/least regulated growth of private sector, escalation of health costs as well as marginalization of the poor.

In order to monitor inequity in health and health care in the state, the study has compared pre- and post-decentralization situation in Kerala using information from the two rounds of National Family Health Surveys between the period 1992–93 and 1998–99. This study was an effort in the direction of evaluating whether recent policy shifts have contributed to worsening/bettering the inequities in health. Even though this study was not a systematic impact analysis of policy shifts, changes over the nineties and comparison of pre- and post-decentralization situation indicate reduction in inequity over selected indicators with regard to infrastructure, utilization and outcomes of health.

The dimensions considered in the studies for examining inequities include infrastructure, utilization and outcomes. There was also an attempt to address regional inequities within the available data. The inequity measured account for understanding disparities in relation to four broad parameters of segregation, namely rural–urban, between social groups, standard of living as well as religious and caste groups. The measures of inequities reflected the quantum of inequities on a unit scale against the overall aggregate being unity. Such measurements could compare the extent of inequities according to different parameters of segregation and address them in order of priority. Secondly, intergroup inequity measures were used in the study to show the degree of advantage/disadvantage of one group against the other. The results indicated the declining inequity in health outcomes along with a greater public–private divide in utilization of health care. The widest of disparities continued to be between the social groups and categories of living standard in Kerala. However, this may not be entirely attributed to decentralization per se, but the growth of infrastructure in otherwise revealed backward regions were in a definite positive reflection of decentralized local governments. Also, improved efficiency in service provision in the public sector could be the reason for the relative better access and utilization of health care by lower socio-economic strata in Kerala.

## Policy suggestions

- (i) Decentralization, conceptually, is neither good nor bad for effective health service delivery. The country-specific determinants of what could be successful and what not needs to be identified. There is no single pill for all countries; one size fits all homogenous policy cannot be an effective solution.
- (ii) The country-specific policy context and the sequence of the process are significant. The sequential reforms in health care financing are an important prerequisite for effectiveness of decentralization on health sector delivery.
- (iii) It remains a debate whether shifting away from strengthening public health care system towards pre-payment through insurance is an appropriate policy step. National Health Accounts across countries revealed that OOP (out of pocket) spending is the single most significant constituent of national health accounts.
- (iv) A judicious mix of health sector financing reforms simultaneously with decentralization could be an effective solution to improve the health sector delivery.
- (v) Empirical evidence suggests that giving incentives to local governments to invest in health leads to better outputs and outcomes. Mapping resources to public expenditure is a significant tool for this but not the only one. Unconditional fiscal transfers are critical to boost poorer regions' fiscal capacity. Simultaneously, responsibilities at the various levels of government and health institutions must be clearly defined and enforced.
- (vi) Decentralization is a long-term process, so institutionalizing an evidence-based process for continuous feedback is essential. Establishment of a high-quality data collection system as well as a monitoring and evaluation system is a prerequisite to make the process sustainable and effective.