7

Health

INTRODUCTION

7.1 The Eleventh Five Year Plan envisaged an inclusive approach towards healthcare that encompassed equitable and comprehensive individual healthcare, improved sanitation, clean drinking water, nutritious food, hygiene, good feeding practices, and development of delivery systems responsive to the needs of the people. It promised special attention to the health of marginalized groups, such as adolescent girls, women of all ages, children below the age of three, older persons, the differently-abled, tribals, and Schedules Castes (SCs). Gender equity was to be an overarching concern.

7.2 The Plan recognized that while total expenditure on health in India (public plus private) as a percentage of GDP was broadly in line with the level achieved in other countries at similar per capita income levels, it was skewed too much in favour of private expenditure. Public expenditure on health in India (Centre plus states combined) was less than 1 per cent of GDP indicating inadequacies in the public provision of critical health services. The Plan, therefore, explicitly envisaged an increase in public expenditure on health to at least 2 per cent of GDP.

7.3 While recognizing that health outcomes depend not just on the access to curative healthcare, but also on strengthening public health-related services, particularly access to clean drinking water, sanitation, and improved child-rearing practices, which in turn depend on education and empowerment of women, the Plan took some very important initiatives for increasing the outreach and quality of health services:

- The National Rural Health Mission (NRHM) is a major flagship programme of the government in the health sector, which aims at inclusive health and improved access to quality healthcare for those residing in rural areas, particularly women, children, and the poor by promoting integration, decentralization, and encouraging community participation in health programmes.
- The Rashtriya Swasthya Bima Yojana (RSBY) is an effort to provide protection to BPL households in the unorganized sector for financial liabilities arising out of health problems that involve hospitalization.
- Mainstreaming AYUSH into health services at all levels was also an important strategy for the Eleventh Plan.

ELEVENTH PLAN GOALS

7.4 The monitorable targets for the Eleventh Plan are the following:

- Reducing Infant Mortality Rate (IMR) to 28 per 1,000 live births
- Reducing Maternal Mortality Ratio (MMR) to 100 per 1,00,000 live births
- Reducing Total Fertility Rate (TFR) to 2.1

- Reducing malnutrition among children in the age group 0–3 years to half its present level
- Reducing anaemia among women and girls by 50 per cent
- Raising the sex ratio for the age group of 0–6 years to 935 by 2011–12 and 950 by 2016–17
- Providing clean drinking water for all by 2009 and ensuring no slip-backs

MID-TERM APPRAISAL: THE PROCESS

7.5 The Mid-Term Appraisal is based on an analysis of sectoral data, review of official documents and other independent reports,[1] consultations with experts in the field, discussions with nodal departments of the implementing ministries as well as the departments in state governments dealing with the subject. It also draws on five regional consultations held by the Planning Commission in Guwahati for the North-Eastern states, Jaipur for the western states, Bhubaneswar for the eastern states, Chandigarh for the northern states, and Bangalore for the southern states. Individuals concerned with healthcare and NGOs were invited to participate in the consultations to provide feedback on the performance so far.

7.6 The Mid-Term Appraisal with regard to the health schemes is, however, constrained by the fact that some of the programmes are too new to measure their impact in any specific manner. For instance, NRHM, which is the most important initiative in the health sector started only in 2005. Its expenditure started rolling out significantly in 2007–08 and, therefore, it is too early to judge its impact. Some of the relevant data, for example for MMR and IMR, are only available for 2006 and 2008 respectively, which cannot reflect the impact of recent interventions.

ASSESSMENT OF PROGRESS

7.7 Based on available data, this section presents an assessment of progress towards stated goals and monitorable targets of the Eleventh Plan.

PUBLIC EXPENDITURE ON HEALTH

7.8 Total public expenditure on health in the country as percentage of GDP now stands at around 1.1 per cent (2009–10). However, health related expenditure like clean drinking water, sanitation, and nutrition has a major bearing on health and if expenditure on these is counted the total public health spending reaches around 2 per cent of GDP. Even so, it is strongly felt that public expenditure on health needs to be increased.

7.9 Looking at the contributions of the Centre and the states (Table 7.1), the Centre's health expenditure as percentage of GDP increased from 0.29 in 2005–06 to 0.39 in 2009–10. This is much faster than the states, where the increase was from 0.67 to 0.70 over the same period. This pattern also holds good for health-related expenditure. States, therefore, have to substantially increase their health budgets.

MATERNAL MORTALITY RATIO

7.10 To reach the MMR target of 100 by 2012, the required rate of decline from 254 (SRS 2004–06) has to be, on an average, 22 per year. Unfortunately, no data are available on the progress of MMR during the Eleventh Plan period, that is, the period beginning

TABLE 7.1
Public Expenditure on Health as per cent of GDP

Year	Health			Health and Related Inputs**		
	Centre	State	Total	Centre	State	Total
2005–06	0.29	0.67	0.96	0.53	1.21	1.74
2006–07	0.29	0.67	0.96	0.53	1.21	1.74
2007–08	0.32	0.70	1.02	0.59	1.29	1.88
2008–09	0.35	0.71	1.06	0.63	1.28	1.91
2009–10*	0.39	0.70	1.09	0.66	1.30	1.96

Note: * Provisional.
** Besides expenditure by health and family welfare departments, this includes estimated expenditure on RSBY, water supply, sanitation, and nutrition.

[1] These include reports of the Comptroller and Auditor General, Common Review Mission, Centre for Health and Social Justice, Centre for Operations Research and Training, International Advisory Panel, Independent Commission on Development and Health, International Institute of Population Sciences, Institute of Economic Growth, Jan Swasthya Abhiyan, National Alliance for Women, National Institute of Health and Family Welfare, People's Mid-Term Appraisal, Planning Commission, Public Health Resource Society, Registrar General of India, and Voluntary Health Association of India.

2007–08. However, earlier data shows that MMR came down from 301 (SRS 2001–03) to 254 (SRS 2004–06), that is, an average decline of 16 per year. Achieving the Eleventh Plan target clearly requires much faster progress. State-wise decline during the pre-Eleventh Plan period varied from an average of 26 per year for Uttar Pradesh/Uttarakhand, 20 per year for Bihar/Jharkhand, 19 per year for Rajasthan, and 18 per year for Orissa/West Bengal to 15 per year for Madhya Pradesh/Chhattisgarh.

7.11 When 52.2 per cent of the deliveries are conducted at home (DLHS-3, 2007–08) and comprehensive obstetric care continues to be a problem in many states, the scope for expanding timely access to quality institutional care is limited, particularly for those living in remote and inaccessible areas. In such a scenario, the MMR goal of 100 is achievable only through appropriate area-specific interventions. These should include equipping the Traditional Birth Attendants (TBAs)/*dai*s for safe deliveries, especially in remote and inaccessible areas, universalizing access to skilled birth attendants over a period of time, and creating better access to emergency obstetric care (both public and private) in case of complications within two-hour travel time.

Infant Mortality Rate

7.12 Although the IMR is showing a downward trend, the rate of improvement here too has to be three times that in the past so as to attain the level expected by the end of the Eleventh Plan. All-India IMR was 57 in 2006 and 53 in 2008 (SRS), a decrease of 4 in two years. High focus states of NRHM have shown marginally better performance in rural areas, where IMR has decreased by 5 in two years. Tamil Nadu has also shown marginally better performance with a decline of 6 in two years. To achieve IMR of 28 by 2012, the required rate of decrease has to be an average of 6 per year. Intensive and urgent efforts are required to adopt home-based newborn care based on validated models, such as the Gadchiroli model (Eleventh Plan, Vol. II: 90) and make focused efforts to encourage breastfeeding and safe infant and child feeding practices. While emphasis on early breastfeeding is part of Accredited Social Health Activists' (ASHAs) training, special training on neonatal care for community and facility-level health functionaries will facilitate a faster reduction in IMR.

Total Fertility Rate

7.13 The TFR came down from 2.9 in 2005 to 2.6 in 2008 (SRS), a decline of 0.1 per year. With some more effort, it should still be possible to reach the target of 2.1 by 2012. The situation varies across states. Out of the 20 states for which SRS data is available, nine have already reached the replacement level of 2.1 or less, while four have TFR greater than 2.1 and less than or equal to 2.5. The problem states are Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh, and Assam, which have TFR between 2.6 and 3.9. A concerted effort will have to be made by these lagging states, particularly Bihar and Uttar Pradesh, in order to achieve the target by the end of the Eleventh Plan. This involves measures, such as addressing the unmet needs for contraception besides reduction in child mortality, greater male involvement, women's empowerment, and delaying their age at marriage. For this, the departments of health at the Centre and in the states need to coordinate with other concerned departments.

Other Monitorable Goals of the Eleventh Plan

7.14 Regarding the sex ratio, information for the age group of 0–6 years during the Eleventh Plan period is not available to track achievements vis-à-vis goals. The latest available data on the sex ratio for the age group of 0–4 years shows some improvement from 908 in 2004–06 to 914 in 2005–07, and further to 915 in 2006–08, but clearly this is not satisfactory and much more needs to be done. Schemes for the welfare of the girl child, implementation of Pre-Conception and Pre-Natal Diagnostics Techniques (PC-PNDT), Act and Behavioural Change Communication (BCC) activities need to be intensified.

7.15 Regarding malnutrition and anaemia, there are reports about efforts being made by different states, though specific information is yet to be available.

7.16 On the goal related to clean drinking water, progress is slightly behind schedule. Out of the 55,067 habitations that did not have access to clean drinking

water at the beginning of the Bharat Nirman Programme (2005–06), only 478 remain to be covered (as on 1 January 2010). However, this effort continues to be undermined by slippage which has been a recurring feature of our rural drinking water programme. As uncovered habitations are covered, several that were covered earlier slip back due to increase in population, inadequate sources of water supply, or falling groundwater levels. There has to be constant effort to cover such habitations on a priority basis.

Health Infrastructure

7.17 Shortfall of Community Health Centres (CHCs) decreased from 49.4 per cent in 2005 to 36 per cent in 2008. However, the shortfall of Sub-Centres (SCs) and Primary Health Centres (PHCs) in 2008 was almost the same as in 2005 (Table 7.2). Four states of Bihar, Uttar Pradesh, West Bengal, and Madhya Pradesh alone contribute towards 74 per cent of the overall shortfall of SCs, 70 per cent shortfall of PHCs, and 61 per cent shortfall of CHCs. Though consolidation and optimal utilization of existing infrastructure has been the focus, much more needs to be done.

Health Human Resource

7.18 Shortage of human resources in health has been as pronounced as lack of infrastructure. Table 7.3 presents the extent of progress in reducing the shortfall between 2006 and 2008. The overall shortfall of female health workers and Auxiliary Nurse Midwives (ANMs) was relatively low at 10.93 per cent in 2006, but increased to 12.43 per cent of the total requirement for the available infrastructure in 2008. In case of male health workers, radiographers, lab technicians, and specialists at CHCs, the shortfalls were very large (54.3 per cent, 53.3 per cent, 50.9 per cent, and 64.5 per cent respectively). As for doctors at PHCs, there was a shortfall of 15.08 per cent. Of the sanctioned posts, a significant percentage (18.8 per cent) for doctors at PHCs, 48.6 per cent specialists at CHCs, and 28.3 per cent health workers (male) at SCs were vacant.

7.19 It has been reported that due to contractual recruitments with NRHM funds, states have added 42,633 ANMs, 12,485 MBBS doctors, and 2,474 specialists. In the last three years under NRHM, 26,253 staff nurses, 7,399 AYUSH doctors, and 3,110 AYUSH paramedics were appointed. Close to 1 lakh service providers and managers have been contracted into the system across the country. While the data in Table 7.3 (taken from Health Ministry sources) needs to be supplemented by data on contractual appointments to show the true picture regarding the human resources shortfall, prima facie, it can be said that the human resources available are not yet in line with the Indian Public Health Service Standards and the expansion that has been made in the health infrastructure.

ASSESSMENT OF MAJOR SCHEMES

7.20 The performance of the major schemes and programmes of the Ministry of Health and Family Welfare (MoHFW) (including RSBY implemented by Ministry of Labour and Employment [MoLE]) over the Eleventh Plan period is now discussed.

TABLE 7.2
Shortfall in Health Infrastructure*

S. No.	Health Facility	As on September 2005				As on March 2008			
		R	P	S	S in %	R	P	S	S in %
1	Sub-Centre	1,58,792	1,46,026	19,269	12.1	1,58,792	1,46,036	20,486	12.9
2	PHC	26,022	23,236	4,337	16.6	26,022	23,458	4,477	17.2
3	CHC	6,491	3,346	3,206	49.4	6,491	4,276	2,337	36.0

Source: *Bulletin on Rural Health Statistics* (RHS) (2006 and 2008).
Note: * Based on 2001 population.
R: Requirements; P: In Position; S: Shortfall; S in per cent; Shortage in per cent.
All-India shortfalls are derived by adding state-wise figures of shortfall ignoring the existing surplus in some of the states.

TABLE 7.3
Human Resources for Health—Shortages

Health Personnel	All India	Required (R)	Sanctioned (S)	In Position (P)	Vacant (S-P)	Shortfall (R-P)
Multipurpose workers (female)/ ANMs at SCs & PHCs	2006	1,67,657	1,62,772	1,49,695	13,126 (8.06%)	18,318 (10.93%)
	2008	1,69,494	1,43,269	1,53,568	8,800 (6.14%)	21,066 (12.43%)
Health workers (male)/MPWs (M) at SCs	2006	1,44,998	94,924	65,511	29,437 (31.01%)	74,721 (51.53%)
	2008	1,46,036	78,813	60,247	22,281 (28.27%)	79,322 (54.32%)
Health assistants (female)/LHVs at PHCs	2006	22,669	19,874	17,107	2,781 (13.99%)	5,941 (26.21%)
	2008	23,458	19,920	17,608	2,664 (13.37%)	6,481 (27.63%)
Health assistants (male) at PHCs	2006	22,669	24,207	18,223	5,984 (24.72%)	7,169 (31.62%)
	2008	23,458	23,705	17,976	6,534 (27.56%)	8,831 (37.65%)
Doctors at PHCs	2006	22,669	27,927	22,273	5,801 (20.77%)	1,793 (7.91%)
	2008	23,458	25,086	24,375	4,708 (18.77%)	3,537 (15.08%)
Specialists at CHCs	2006	15,640	9,071	3,979	4,681 (51.60%)	9,413 (60.19%)
	2008	17,104	8,376	4,279	4,068 (48.57%)	11,033 (64.51%)
Radiographers at CHCs	2006	3,910	2,400	1,782	620 (25.83%)	1,330 (34.02%)
	2008	4,276	2,124	1,695	661 (31.12%)	2,280 (53.32%)
Pharmacists at PHCs and CHCs	2006	26,579	22,816	18,419	4,445 (19.48%)	4,389 (16.51%)
	2008	27,734	24,088	20,956	4,282 (17.78%)	7,022 (25.32%)
Lab technicians at PHCs and CHCs	2006	26,579	15,143	12,351	2,792 (18.44%)	9,509 (35.78%)
	2008	27,734	15,223	12,886	3,308 (21.73%)	14,134 (50.96%)

Source: *Bulletin on Rural Health Statistics* (RHS) (2006 and 2008).
Note: All-India shortfalls are derived by adding state-wise figures of shortfall ignoring the existing surplus in some of the states.

National Rural Health Mission

7.21 Performance of NRHM as per the available time frame reveals progress in certain areas, but this falls short of the targets set. This is not surprising since the programme has been in operation for only a few years. Some important achievements as on 31 January 2010 are:

- 7.49 lakh ASHAs have been selected, though the total number of those who have completed all training modules is low. Against the target of 6 lakh fully trained ASHAs by 2008, there are 5.19 lakh ASHAs positioned with drug kits, but their training is still to be completed. Only about 1.99 lakh ASHAs have completed all five modules and 5.65 lakh have completed up to the fourth training module.
- 4.51 lakh Village Health and Sanitation Committees (VHSCs) have been set up against the target of 6 lakh VHSCs by 2008. The operational effectiveness

of the VHSCs, however, needs considerable improvement.

- 40,426 SCs have been provided two ANMs against the target of 1.05 lakh SCs by 2009; 8,745 SCs are without even a single ANM.
- 8,324 PHCs are functional on 24×7 basis and 5,907 of them have three staff nurses against the target of 18,000 PHCs by 2009.
- 3,966 CHCs are functional on a 24×7 basis. However, information regarding the target of strengthening 3,250 CHCs with seven specialists and nine staff nurses by 2009 is not available. In any case, the number of CHCs/sub-divisional hospitals or equivalent, which have been upgraded to First Referral Units (FRUs) has increased from 750 (as on 31 March 2005) to 1934 (as on 31 December 2009).
- 510 out of total 578 District Hospitals (DHs) have been strengthened to act as FRUs.
- 29,223 Rogi Kalyan Samitis (RKSs)/Hospital Development Committees have been constituted at PHC/CHC/DH levels against the target of 37,100 RKSs by 2009.
- State and District Societies are in place except at the state level in West Bengal. District Programme Managers and District Accounts Managers are in position in 581 and 579 districts, respectively.
- 356 districts have operational Mobile Medical Units (MMUs) against the target of 600 MMUs by 2009 (one for each district). In addition, boat clinics in Assam and West Bengal, emergency transport system in Andhra Pradesh, Gujarat, Karnataka, Goa, Uttarakhand, Assam, and Rajasthan, and GPS-enabled MMUs in Gujarat, Haryana, and Tamil Nadu are operational.

7.22 Even though a large number of MBBS doctors, AYUSH doctors, specialists, ANMs, and other paramedics have been appointed on a contractual basis under NRHM, a possible shortcoming is that as contractual appointments are facilitated, the states tend to decrease their sanctioned posts. It must, therefore, be ensured by the states that they will, in the long run, bear the expenditure for such contractual appointments.

7.23 To address the human resource challenge, besides short-term training in anaesthesia and emergency obstetric care, states are adopting innovative measures. These include incentives for working in difficult areas, mandatory rural service to qualify for post-graduation, walk-in interviews, three-year rural health practitioner course, selection of local women for ANM training, and district specific appointment of health personnel.

7.24 As a result of increased expenditure and interventions made under NRHM, some improvements have been reported in the form of increased service utilization at OPDs, increase in the number of institutional deliveries, and increased use of emergency transport and ambulances provided under the programme. Providing quality healthcare to remote, inaccessible areas is the most difficult task and all around enhanced efforts need to be made during the remaining period of the Eleventh Plan (see Box 7.1).

Disease Control Programmes under NRHM

7.25 Many disease control programmes have been subsumed under NRHM. Official statistics suggest commendable performance in some programmes but

Box 7.1
Major Eleventh Five Year Plan Recommendations: Yet to be Implemented

The following policy recommendations of the Eleventh Plan are yet to be implemented and need to be considered under NRHM:

- Adopting home-based newborn care like the Gadchiroli model for reducing IMR
- Adopting skilled attendance at birth for home deliveries and emergency obstetric care within two-hour travel time for reducing MMR
- Utilizing the services of RMPs available round the clock as Sahabhaagis in NRHM as an interim measure
- Use of indigenous low-cost technology, for example, water purifiers based on the Ganiyari model in Bilaspur, could be encouraged to kick-start health and sanitation interventions in an affordable way in the remotest areas

not in others. Achievements in terms of prevalence rate/cure rate/mortality are as follows:

Good Progress

- Tuberculosis (TB): Target of overall cure rate of 85 per cent has been achieved during the first two years of the Eleventh Plan.
- Blindness: In 2007–08, as against a target of 50 lakh cataract operations, 54.05 lakh operations were carried out. In the following year, 58.1 lakh cataract operations were conducted as against the target of 60 lakh.
- Leprosy: The overall target of reducing the leprosy prevalence rate from 1.8 per 10,000 in 2005 to less than 1 per 10,000 has been achieved. As many as 510 (81 per cent) districts have achieved the target during the first two years of the Eleventh Plan.
- Dengue: The overall reduction was 56.52 per cent during the first two years of the Eleventh Plan. The Plan had aimed at mortality reduction by 50 per cent by 2010, and sustaining that level until 2012.
- Malaria: Against the target of malaria mortality reduction by 50 per cent by 2010, and an additional 10 per cent by 2012, the overall reduction was 45.22 per cent during the first two years of the Eleventh Plan.

Poor Progress

- Kala-azar: Against the target of kala-azar mortality reduction by 100 per cent by 2010 and sustaining the elimination until 2012, the overall reduction was only 21.93 per cent during the first two years of the Eleventh Plan. A majority of the deaths due to kala-azar are from three high-focus states of Uttar Pradesh, Bihar, and Jharkhand. Their weak health infrastructure in these states is the likely cause of unsatisfactory performance.
- Filaria/Microfilaria: Against the target of filaria/microfilaria reduction by 70 per cent by 2010, 80 per cent by 2012, and elimination by 2015, the overall reduction was only 26.74 per cent during the first two years of the Eleventh Plan. For achieving better coverage of annual mass drug administration in the population at risk, it is important that before initiating the round, a good rapport is established with the community through BCC activities. In addition, states not covered in the earlier round (Bihar and Tamil Nadu) should also be included.

7.26 Immunization under NRHM is one of the key interventions to prevent six vaccine preventable diseases of tuberculosis, diphtheria, pertussis, tetanus, polio, and measles. The latest District Level Household Survey (DLHS-3, 2007–08) shows that the percentage of children in the age group of 12–23 months fully immunized (BCG, measles and three doses of DPT, and polio) increased from 45.9 per cent during 2002–04 (DLHS-2) to 54.1 per cent in 2007–08 (DLHS-3) (see Table 7.4). This represents an increase of over 8 per cent in 4–5 years.

TABLE 7.4
Immunization Status

	Per cent of Children Fully Immunized	
	DLHS-II (2002–04)	DLHS-III (2007–08)
Andhra Pradesh	62.0	67.1
Assam	16.0	50.9
Bihar	20.7	41.4
Chandigarh	53.5	73.0
Chhattisgarh	56.9	59.3
Dadar & Nagar Haveli	84.2	57.3
Daman & Diu	56.1	84.5
Delhi	59.2	67.6
Goa	76.9	89.8
Gujarat	54.0	54.9
Haryana	59.1	59.6
Himachal Pradesh	79.3	82.3
Jammu & Kashmir	31.7	62.5
Jharkhand	25.7	54.1
Karnataka	71.3	76.7
Kerala	78.5	79.5
Lakshadweep	61.0	86.1
Madhya Pradesh	30.4	36.2
Maharashtra	70.9	69.1
Meghalaya	13.5	33.7
Mizoram	32.6	54.5
Orissa	53.3	62.4
Puducherry	89.3	83.5
Punjab	72.9	79.9
Rajasthan	23.9	48.8
Sikkim	52.7	77.8
Tamil Nadu	91.4	81.8
Tripura	32.6	38.5
Uttar Pradesh	25.8	30.3
Uttarakhand	44.5	62.9
West Bengal	50.3	75.8
All-India	45.9	54.1

7.27 Assam has shown phenomenal improvement from 16.0 per cent immunization in 2002–04 to 50.9 per cent in 2007–08. Other states that have shown significant improvement are Jammu and Kashmir (from 31.7 per cent to 62.5 per cent), Jharkhand (from 25.7 per cent to 54.1 per cent), Rajasthan (from 23.9 per cent to 48.8 per cent), Sikkim (from 52.7 per cent to 77.8 per cent), West Bengal (from 50.3 per cent to 75.8 per cent), Mizoram (from 32.6 per cent to 54.5 per cent), Bihar (from 20.7 per cent to 41.4 per cent), and Uttarakhand (from 44.5 per cent to 62.9 per cent). Union territories of Daman and Diu, Chandigarh, and Lakshadweep also have shown commendable improvement. On the other hand, Tamil Nadu and Maharashtra, which had been performing well, registered a decline in coverage from 91.4 per cent to 81.8 per cent and from 70.9 per cent to 69.1 per cent, respectively.

7.28 As per NRHM's Delivery Monitoring Unit (DMU) report, 70.3 per cent children were fully immunized till 31 December 2009. However, the gaps in immunization coverage, particularly in NRHM's high focus states, need to be addressed along with the issue of a cold chain for improving the effectiveness of immunization programmes.

7.29 Whereas the Eleventh Plan aimed at eradicating polio, new polio cases in 2006, 2007, 2008, and 2009 numbered 676, 874, 559, and 752 respectively. A majority of these were from Uttar Pradesh and Bihar. Hence, total sanitation needs to be intensified in the affected districts, along with planned rounds under the Pulse Polio Immunization Programme. Impact of such special immunization programmes on routine immunization also needs to be evaluated.

Qualitative Feedback of NRHM: Voices from the Field

7.30 The deficiencies noticed during field visits as well as those pointed out during regional consultations, need to be rectified. Feedback on some of the fundamental issues regarding healthcare is now discussed.

Basic Health Services

7.31 Despite the intent to improve health infrastructure, particularly at the primary level, gaps persist in terms of human resources, drugs, and equipment. While there has been a substantial improvement in the appearance of health facilities due to availability of flexi-funds under NRHM, the improvement in services has not been uniformly commensurate. People still incur substantial out-of-pocket expenses for purchasing medicines from the market and there is need for providing generic drugs which cost less. Health centres labelled as 24×7, generally provide facilities only for deliveries. People spend large amounts of money on travelling long distances to access basic health services. Though MMUs are becoming operational, their number and outreach is limited. Local Rural Medical Practitioners (RMPs), who are available round the clock close to peoples' homes, continue to provide their services as usual.

Disease Programmes

7.32 Disease control programmes have received varied degrees of attention and have differed in performance. TB has been receiving attention but multi-drug resistant TB has become a public health challenge. Malaria remains largely unreported and is underestimated. In a large number of cases, reports of the diagnostic tests are not provided or are made available after a considerable time lag (Box 7.2). Medicine supply is not regular and people have no choice but to buy medicines from the market. Technically, HIV/AIDS control is not an integral component of NRHM. However, there is a felt need for better awareness, counselling services,

Box 7.2
The Road Not Taken: Practice in the Hinterlands

The Eleventh Five Year Plan document highlighted a good practice of reducing turnaround time for test results, which could be replicated throughout the country. Jan Swasthya Sahyog (JSS) has trained village health workers in tribal areas of Bilaspur (Chhattisgarh) for taking blood smears. These are labelled and neatly packed in small soap cases, which are handed over through school children to bus drivers. On their way, the drivers drop the smears at the Ganiyari hospital run by JSS. Here they are immediately tested and the reports are sent back through the same buses on their return trip. This courier system has been operational in 21 villages in the area for several years and has saved many lives.

and testing facilities. It was also suggested that the HIV/AIDS control programme be integrated with NRHM facilities at the block/community level.

Decentralization

7.33 NRHM's implementation has initiated measures for decentralization (such as district level programme implementation plans and village level health and sanitation committees) but progress has been varied across states. Paucity of local capacity for decentralized planning and decision making, based on an informed prioritization of needs and effective interventions, is hindering this process. In the absence of such capacity, interventions are largely designed on the basis of a general framework and priority matrix. This is provided by the Centre or the state without adequately taking into account district-specific features, such as geographic diversity, remoteness, disease profile, cultural differences, availability of health services, and potential for involving local partners. There has not been sufficient effort to prepare the community for its involvement.

Accredited Social Health Activists

7.34 The appointment of locally recruited women as ASHAs who would link potential beneficiaries with the health service system is an important element of NRHM. The good part is that 7.49 lakh ASHAs have been appointed; but several issues still need to be resolved. Not only is there a lack of transparency in the selection, ASHAs are often inadequately trained. Besides, their focus seems to be on facilitating institutional deliveries. The ASHA who accompanies the expectant mother faces considerable hardships because she has nowhere to stay for the duration of confinement as institutional accommodation facilities are non-existent. They also often experience long delays in payment of incentives.

Village Health and Nutrition Day

7.35 An important activity of NRHM, Village Health and Nutrition Day (VHND) is to promote regular community-oriented health and nutrition activities. The event is held on a fixed day every month to sensitize the community and is popularly known as 'Tika Karan Divas'. However, implementation is ad hoc in most villages of the high focus states. Surveys revealed that only a few pockets in some states like Tamil Nadu, Andhra Pradesh, West Bengal, and Assam were aware of VHND. The other drawback of the programme is that it often restricted itself to immunization and ante-natal check-ups on the day. There is no nutrition education. To have the desired impact, VHNDs need to be implemented with the full intended content of activities and with regularity. This can be achieved through more active involvement of NGOs and community-based organizations.

Janani Suraksha Yojana

7.36 Launched to promote institutional deliveries, the Janani Suraksha Yojana (JSY) provides cash incentives to expectant mothers who opt for institutional deliveries. Poor women from remote districts in Bihar, Orissa, and other states are reportedly visiting institutions to avail JSY benefits. However, except for parts of the southern states, most public health institutions are not well-equipped for conducting deliveries at the community or even at the block levels. The beneficiaries are often asked to purchase gloves, syringes, and medicines from the market. The general view, endorsed by visits to the field, is that the health centres and sub-divisional hospitals remain understaffed and are poorly run and maintained. A very large number are unhygienic and incapable of catering to patient loads. Women who deliver at the health facilities are discharged a few hours after the delivery. Sometimes, deliveries take place on the way to the health facility or even outside the locked labour rooms. Lack of coordination and mutual understanding between the ANMs and ASHAs results in the suffering of pregnant women.

7.37 The scheme is also facing operational problems in the payment of incentives to the beneficiaries as well as to ASHAs. The payments are delayed by three to four months (at times even a year in some states) and are often made only after repeated visits by the claimants. There are complaints of unauthorized deduction by the disbursing functionaries. While cheque payments reduce leakages, they delay the process further. Due to lack of identity cards or proof of address, many women are unable to open bank accounts and therefore cannot avail of the benefits. Recognizing these shortcomings, most states have initiated steps to undertake systemic corrections and streamline the processes.

Committees/Societies under NRHM

7.38 Although committees and societies have been set up at the state and district health facilities, these do not ensure substantive involvement of the community or Panchayati Raj members. Rarely is there any record of the Rogi Kalyan Samiti meetings. VHSCs are virtually unknown, even most of the sarpanchs are unaware of them. Besides, many states have still to constitute VHSCs and fund them.

Mainstreaming AYUSH

7.39 NRHM has mainstreamed AYUSH into rural health services by co-locating AYUSH personnel in primary healthcare facilities resulting in increase in utilization of AYUSH treatment. AYUSH practitioners are also used to fill in the position of allopaths in PHCs, particularly in states which have a substantial shortage of MBBS doctors. While this is a positive development, efforts have to be made for training AYUSH practitioners in public health.

Maternal and Child Health

7.40 Despite positive feedback, there are a number of shortcomings in the system that inhibits pregnant women from seeking institutional care. For instance, there is no privacy for the examination of pregnant women either at the anganwadi centres or the health camps, and the ANMs rarely pay household visits. Despite the incentive for institutional deliveries under JSY, women prefer local dais. Sometimes, even many of those living near a public health facility, prefer dais because of the bad experiences at these facilities that they know from hearsay. It must be emphasized, however, that for every one of these observations, there are an equal number of reports of women receiving good quality institutional care and prompt treatment for complications.

7.41 NRHM has been able to provide an extensive network of transport facilities in states that have established emergency transport systems. On the other hand, there is very little awareness about the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) strategy. In the event of illness of either the mother or the neonate, RMPs (some times even local quacks) are consulted. Home-based newborn care based on the Gadchiroli model and other community-based innovations have yet to be made an integral part of the child health strategy.

Family Planning

7.42 Government programmes on family planning are known all over the country. However, very few are aware of the monetary compensation that is due in the event of failure of sterilization or the side effects of the Intra-Uterine Device (IUD). Women find it difficult to get compensation and if they do, it is only through interventions of an active NGO or the court. In many places where condoms are available, there are no oral contraceptives. Supply of oral contraceptive Mala-D, which is one of the most popular forms of contraception, is irregular. With no coordination amongst various agencies, the huge demand for contraception remains unmet. This necessitates a forward effort on improving the supply of contraceptives and related services. Nine states have already achieved a TFR of 2.1 or less but in seven it remains higher than the national average. Much greater effort needs to be made in these seven states.

Safe Abortion/Medical Termination of Pregnancy

7.43 It is of concern that provision of safe abortion facilities has not received much attention and even the ASHAs are unaware of facilities which the rural poor could have accessed. This calls for immediate attention.

Rashtriya Swasthya Bima Yojana

7.44 Launch of the RSBY by the MoLE in 2007 has been an important step in supplementing the efforts being made to provide quality healthcare to the poor and underprivileged population. It provides cashless health insurance cover up to Rs 30,000 per annum per family. The premium is paid by the Centre and state governments on a 75:25 sharing basis with the beneficiary paying only a registration fee.

7.45 Twenty-five states are in the process of implementing RSBY and till February 2010, more than 1.25 crore biometric enabled smart cards have been issued for providing health insurance cover to more than 4 crore people, from any empanelled hospital

throughout the country. Around 4.5 lakh persons have already availed hospitalization facility. The scheme is now being gradually extended to the non-BPL category of workers as well. Linkages with RSBY in public sector hospitals need to be strengthened.

National AIDS Control Programme (NACP)

7.46 The NACP's goal was to halt and reverse the epidemic in India over the five-year period of the Eleventh Plan. This was to be done by integrating programmes for prevention, care, support, and treatment as well as addressing the human rights issues specific to people living with HIV/AIDS (PLWHA).

7.47 Although the achievement of physical targets under the programme is satisfactory, the MoHFW has yet to introduce a HIV/AIDS bill to protect the rights of children, women, and HIV infected persons and avoid discrimination at the work place. A National Blood Transfusion Authority is to be established during the remaining period of the Plan. Voluntary blood donation has to be encouraged further to bridge the gap in demand and supply of blood.

7.48 The objective of reducing new infections by 60 per cent in high prevalence states so as to obtain a reversal of the epidemic, and by 40 per cent in the vulnerable states in order to stabilize the epidemic, can only be substantiated through independent evaluation studies. These need to be undertaken.

7.49 Expenditure under the NACP, including STD control during 2007–08 and 2008–09, was 112.60 per cent and 91.91 per cent of the approved outlays respectively. During 2009–10, the anticipated expenditure based on RE is 89.10 per cent of the approved outlay.

National Cancer Control Programme (NCCP)

7.50 In view of the high cost of treatment of cancer, the 'Health Minister's Cancer Patient Fund' with a corpus of Rs 100 crore was set up in 2008–09. The revised strategy has since been prepared, which aims at early diagnosis and treatment by decentralizing such function to districts. Currently, NCCP continues on the pattern of the Tenth Plan.

7.51 The overall expenditure in NCCP is very low, 33 per cent and 28 per cent respectively of the approved outlays for 2007–08 and 2008–09. The anticipated expenditure based on RE is 50 per cent of the approved outlay for 2009–10. During the rest of the Plan period, the restructured programme will have to be implemented to meet the commitments for the Eleventh Plan.

Tobacco Control Programme

7.52 The Tobacco Control Programme initiated in the Eleventh Plan aims to help implement the provisions of the Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003, and also to bring about greater awareness about the harmful effects of tobacco consumption. All provisions of the Act have been implemented, including ban on smoking in public places, health warnings on unit packs of cigarettes and other tobacco products including pictorial warnings, except regulation of nicotine and tar contents in tobacco products. The district level programme, however, is yet to be implemented in most of the districts. Compliance with provisions of the Act is still a major challenge as the personnel in different parts of the state and district administration lack sensitization to the significance of this programme. Cessation services to encourage quitting tobacco are inadequate. Expenditure under the programme registered an improvement during 2008–09 with 112.87 per cent expenditure as against 34.95 per cent during 2007–08. The anticipated expenditure in 2009–10 has again fallen; based on RE it is 56.67 per cent of the approved outlay.

National Mental Health Programme (NMHP)

7.53 Despite enhanced allocations for the implementation of NMHP as per commitments made in the Eleventh Plan, the programme has lagged behind. The programme was divided into two parts.

7.54 Part I of NMHP relates to human resource development, spillover schemes and continuing 123 District Mental Health Programmes (DMHPs). At least 11 Centres of Excellence (CoEs) of mental health and neurosciences are expected to be established

within the Plan period by upgrading existing mental health institutions plus strengthening a number of institutions for human resource development.

7.55 Part II of NMHP, which is yet to be launched relates to comprehensive expansion of DMHPs from the existing 123 districts to 325 underserved districts. This has to be done based on the findings of an evaluation study conducted by the Indian Council of Market Research.

7.56 Expenditure under the programme is very low, 20.81 per cent and 33.26 per cent respectively of the approved outlays for 2007–08 and 2008–09. During 2009–10, the expenditure is likely to be 78.57 per cent of the approved outlay (as per RE figures). During the remaining period of the Eleventh Plan, NMHP will need to be expanded to provide the much-needed basic mental health services to people and to integrate these with NRHM.

Human Resources for Health

7.57 A key objective of the Eleventh Plan was addressing the problem of shortage of basic education infrastructure and human resources for health. The process of establishing ANM and nursing schools/colleges and para-medical institutions has started. There is a shortage of 1.93 lakh ANMs in the government sector alone. Of the 633 districts in the country, 246 districts do not have any ANM school. During the remaining period of the Plan, 132 Auxiliary Nursing Midwifery schools are being set up in the high focus states of Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu and Kashmir, Madhya Pradesh, the North-Eastern states, Orissa, Rajasthan, Uttarakhand, and Uttar Pradesh and other districts in the country which do not have ANM schools.

7.58 The shortfall of nurses is mainly in the northern and North-Eastern states. There is no general nursing and midwifery school in 292 districts of the country. In order to meet the shortage of general nursing and midwifery in the country, 137 general nursing and midwifery schools are being set up predominantly in the high focus states. Further, Regional Institutes of Para-medical Sciences (RIPS) are to be set up during the Plan followed by pharmacy schools/colleges.

7.59 Various measures undertaken to tackle the shortage and adequate training of human resources have yet to show results. The approval of the Medical Council of India for short-term rural healthcare course is expected to expand the pool of medical practitioners. The existing gaps in human resources and inequalities regarding facilities for medical, nursing, and para-medical education in the deficit states should be analysed further to initiate remedial action during the remaining Plan period.

Pradhan Mantri Swasthya Suraksha Yojana

7.60 The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) envisages substantial expansion of central and state government medical institutions. Phase I of PMSSY envisages establishment of six new AIIMS-like institutions in Patna (Bihar), Bhopal (Madhya Pradesh), Bhubaneswar (Orissa), Jodhpur (Rajasthan), Raipur (Chhattisgarh), and Rishikesh (Uttarakhand). The original estimate for each institute was Rs 332 crore and the latest estimate is about Rs 820 crore. For these new 'AIIMS-like institutions', construction of medical colleges and hospital complexes and construction of residential complexes have been taken up as separate activities. Construction of housing complexes at all the six sites has commenced and work for the medical colleges and hospital complexes is likely to start in the second quarter of 2010–11.

7.61 The second component of PMSSY Phase I includes upgradation of 13 state government medical college institutions. These are Government Medical College, Jammu (Jammu and Kashmir); Government Medical College, Srinagar (Jammu and Kashmir); Kolkata Medical College, Kolkata (West Bengal); Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (Uttar Pradesh); Institute of Medical Sciences, BHU, Varanasi (Uttar Pradesh); Nizam Institute of Medical Sciences, Hyderabad (Andhra Pradesh); Sri Venkateshwara Institute of Medical Sciences, Tirupati (Andhra Pradesh); Government Medical College, Salem (Tamil Nadu); Rajendra Institute of Medical Sciences, Ranchi (Jharkhand); B.J. Medical College, Ahmedabad (Gujarat); Bangalore Medical College, Bangalore (Karnataka); Grants Medical College and Sir J.J. Group of Hospitals, Mumbai (Maharashtra), and Medical College,

Thiruvananthapuram (Kerala). The outlay provided is Rs 120 crore per institution, of which Rs 100 crore would be borne by the Central Government (for SVIMS, Tirupati, it is Rs 60 crore) and the remaining amount will be contributed by the respective states. The state governments will also provide the resources (human resources and recurring expenditure) for running the upgraded facilities. Upgrading of two state government medical college institutions is over. Another four are expected to be upgraded by July 2010, two by December 2010, and the remaining in 2011.

7.62 Phase II of PMSSY, which was approved recently, provides for the establishment of two new AIIMS-like institutions in Uttar Pradesh and West Bengal and upgrading of six state government medical college institutions: Government Medical College, Amritsar (Punjab); Government Medical College, Tanda (Himachal Pradesh); Government Medical College, Nagpur (Maharashtra); Jawaharlal Nehru College of Aligarh Muslim University, Aligarh (Uttar Pradesh); Government Medical College, Madurai (Tamil Nadu), and Pandit B.D. Sharma Post-graduate Institute of Medical Sciences, Rohtak (Haryana).

7.63 Overall expenditure under PMSSY had shown an improvement in 2008–09 with an expenditure of 92.86 per cent as against 58.33 per cent in 2007–08. However, the anticipated expenditure based on RE figures in 2009–10 is only 47.21 per cent of the approved outlay for 2009–10.

Redevelopment of Hospitals /Institutions

7.64 The process of redevelopment of hospitals/institutions (Box 7.3) under the central sector is at different stages of completion. Redevelopment of the All India Institute of Medical Sciences is yet to be taken up in a comprehensive manner. The overall expenditure under the scheme has been over 100 per cent of the approved outlay for 2007–08, 2008–09 and the same is expected during 2009–10 as well.

District Hospitals

7.65 During the Eleventh Plan, upgradation of district hospitals is envisaged as a key intermediate strategy,

Box 7.3
Redevelopment of Hospitals/Institutions

Lady Hardinge Medical College & Smt. S.K. Hospital and Kalawati Saran Children (KSC) Hospital, New Delhi: Comprehensive Redevelopment Projects comprise of 3–4 phases. Phase I during the Plan, involves increasing existing bed strength of Smt. S.K. Hospital from 877 to 1,397 (an additional 520 beds) and increasing bed strength of KSC Hospital from 370 to 420 (an additional bed strength of 50).

Regional Institute of Medical Sciences (RIMS), Imphal, Manipur: Upgradation involves repair/renovation of hospital building, construction of academic complex, new OPD building, nursing and dental wings, and hostel accommodation.

Lokapriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur, Assam: Upgradation involves construction for the main hospital building, residential quarters, hostels, mortuary, incinerator building, sewerage treatment plant, renovation of the existing building, procurement of equipments and machinery, and additional human resources.

Regional Institute of Paramedical & Nursing Sciences, Aizwal, Mizoram: Upgradation involves construction of a new academic building, library-cum-examination hall, hostel, purchase of laboratory instruments, and computerization.

Safdarjang Hospital & College, New Delhi: The redevelopment plan includes upgradation of specialties and super-specialty departments and increasing the bed strength from 1,531 to 3,000.

Postgraduate Institute of Medical Education and Research, Chandigarh: Upgradation involves modernization of Nehru Hospital, modernization of the research block, advanced cardiac centre, advanced trauma centre, advanced eye centre, advanced mother centre, Institute of Paramedical Sciences, renovation of hostels for doctors and nurses, and augmentation of equipment.

Jawaharlal Institute of Postgraduate Medical Education and Research, (JIPMER), Puducherry: Comprehensive Redevelopment project comprises of the construction of a teaching block, a 400-bedded women and children hospital, upgradation of existing departments, construction of a new hostel complex, and procurement of equipment.

All India Institute of Medical Sciences (AIIMS), New Delhi: Comprehensive proposal yet to be submitted by the MoHFW.

till the vision of healthcare through PHCs and CHCs is fully realized.

7.66 The scheme has two components—strengthening of maternal health and child health wing/hospital and other wings in district hospitals (this component has since been subsumed under NRHM) and up-gradation of district hospitals into teaching hospitals in underserved areas. The latter component has since been bifurcated into two: (i) upgradation of state medical colleges with an outlay of Rs 1,350 crore for the Plan period for meeting the shortage of specialists, which is soon expected to be initiated as a new scheme and (ii) upgradation of district hospitals into teaching hospitals in underserved areas through PPP with an initial outlay of Rs 150 crore, for which the proposals have yet to be formulated by MoHFW. This must be expedited.

Assistance to States for Capacity Building in Trauma Care

7.67 Under this scheme, trauma care facilities of 140 identified state government hospitals located along the golden quadrangle/north–south corridor and east–west corridor are under different stages of upgradation. The network for trauma care and emergency management is expected to be fully operational by the end of the Eleventh Plan. The National Programme on Burn Injuries is also to be launched within the existing budgetary provisions for the Department of Health and Family Welfare. During 2007–08 and 2008–09, the expenditure was 90.10 per cent and 91.95 per cent of the approved outlay respectively. For 2009–10, the anticipated expenditure based on RE is lower at 66.12 per cent.

AYUSH

7.68 Though AYUSH personnel are being co-located and co-posted at health facilities under NRHM for mainstreaming, yet the infrastructure status of AYUSH rural dispensaries and hospitals is generally deplorable. Major campaigns have been launched through mass media for creating public awareness about the strengths of AYUSH. However, these still need to be complemented by the services under the system.

7.69 There has been steady and systematic progress for conservation and cultivation of medicinal plants. During the remaining Plan period, support will have to be given to farmer clusters. A start has been made to support common quality control facilities in eight AYUSH industry clusters in different regions. To ensure internationally acceptable standards for AYUSH, a Pharmacopeial Commission is being established as envisaged in the Plan. Steps have also been taken to establish a Council for International Cooperation to promote AYUSH in foreign countries. However, the progress has been slow on projects related to reforms in AYUSH undergraduate and postgraduate education, AYUSH and public health, revitalization of local health traditions, cataloguing and digitization of manuscripts, and the AYUSH IT network. Overall expenditure of the Department of AYUSH has been gradually picking up during the Plan period (see Table 7.5).

Health Research

7.70 The Department of Health Research (DHR) was established in MoHFW on 18 September 2007. Activities of Indian Council of Medical Research (ICMR), a component under the ongoing scheme of Medical Education, Training and Research are now subsumed under DHR. Against the agenda set during the Eleventh Plan, ICMR has 1,346 extramural projects (645 new) under the extramural research programme through funding to medical colleges, research institutes, and universities. As many as 98 extramural projects, including 24 new ones, are under progress or have been initiated in the North-East region. Under the programmes for development of indigenous diagnostic reagents, raw materials and vaccines for H1N1, three molecular assays have been developed. A study on climate change and vector-borne diseases has found that vector distribution has been changing leading to transmission in new areas. A study to develop the capacity building of primitive tribes for healthcare has been operational in 15 districts in seven states in the country. Under the study, link persons (one tribal welfare volunteer and one dai volunteer) have been identified for every 500 population and trained for treatment of minor ailments and safe delivery respectively. As part of the project evaluation, these

TABLE 7.5
Department-wise Allocation of Funds and Actual Expenditure*

(Rs crore)

S. No.	Departments	2007–08	2008–09	2009–10@	2010–11
1	D/O Health & Family Welfare				
	a. NRHM				
	Funds allocated	10,890.00	11,930.00	13,930.00	15,440.00
	Actual expenditure	10,380.25	11,260.18	13,377.75	–
	% utilization	95.32	94.39	96.04	–
	b. Health (non-NRHM)				
	Funds allocated	2,985.00	3,650.00	4,450.00	5,560.00
	Actual expenditure	2,183.71	3,008.22	3,825.25	–
	% utilization	73.16	82.42	85.96	–
	c. Total				
	Funds allocated	13,875.00	15,580.00	18,380.00	21,000.00
	Actual expenditure	12,563.96	14,268.40	17,203.00	–
	% utilization	90.55	91.58	93.60	–
2	D/O AYUSH				
	Funds allocated**	488.00	534.00	734.00	800.00
	Actual expenditure	382.54	471.12	680.00	–
	% utilization	78.39	88.22	92.64	–
3	D/O Health Research (new department)				
	Funds allocated	–	420.00	420.00	500.00
	Actual expenditure	–	390.56	400.00	–
	% utilization		92.99	95.24	–
4	D/O AIDS Control (new department)				
	Funds allocated	–	–	***	***
	Actual expenditure	–	–		
	% utilization				

Source: MoHFW.
Note: @ Actual expenditure figures for 2009–10 are the Revised Estimates (RE) figures.
* Including releases to states.
** Including AYUSH's contribution towards NRHM as Rs 120 crore each for 2007–08 as well as 2008–09, Rs 197 crore for 2009–10 and Rs 232 crore for 2010–11.
*** Provision of Rs 1,100 crore for 2009–10 and Rs 1,435 crore for 2010–11 for National AIDS Control, including STD control under the Department of Health and Family Welfare available for the new department.

have been found to be potentially useful for future healthcare interventions.

7.71 The department has proposed nine schemes for the remaining period of the Eleventh Plan for which detailed proposals are to be submitted. ICMR is an ongoing scheme while the other eight are new. These are as follows:

- Promotion, coordination, and development of basic, applied, and clinical research
- Promotion and guidance on research governance issues
- Inter-sectoral coordination in medical, bio-medical, and health research
- Advanced training in research in medicine and health
- International cooperation in medical and health research
- Matters relating to epidemics, natural calamities and development of tools to prevent outbreaks
- Matters relating to scientific societies and associations and charitable and religious endowments in medicine and health research areas
- Coordination in the field of health research with governments, organizations, and institutes

7.72 While these are important, health systems research, particularly operations research, needs both national attention and funding support. Zoonotic diseases must also be prioritized among emerging infections, with appropriate linkages to veterinary, agricultural, forestry (wildlife), and environmental research systems.

7.73 With the development of sophisticated tools of modern biology, a better understanding of the complex interplay between the host, agent and the environment is emerging. This is resulting in a new generation of knowledge where bio-markers and the immunological as well as the genetic basis of a disease assume great significance. This scientific knowledge is to be used further by the department along with other departments like the Department of Biotechnology and the Council for Scientific and Industrial Research to develop drugs, diagnostics, devices, and vaccines that could find a place in the health system of the country. A vibrant interface is required to be developed between the research community, the industry, and the delivery systems for healthcare.

7.74 Since the DHR was created after the commencement of the Eleventh Plan, there was no separate plan allocation for the department, apart from the allocation for ICMR, which was transferred to the new department. The Plan allocation for ICMR was Rs 4,306 crore. The expenditure against the allocations made to DHR has been good till now (Table 7.5). Based on the progress, allocations for the remaining period of the Eleventh Plan will be made for the department.

Others

7.75 The Eleventh Plan is committed to initiating certain other schemes for which budgetary provisions have been made. The schemes which have not picked up after initiation during this Plan are e-Health (including Telemedicine) (see Box 7.4) as well as the National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases (CVDs), and Strokes. There is a need to integrate this programme with the National Cancer Control Programme and the Tobacco Control Programme, because of the common determinants and convergent pathways for prevention.

Box 7.4
Telemedicine

The country already has the advantage of a strong IT fibre backbone and indigenous satellite communication technology with trained human resources. With enhanced efforts, telemedicine could help bring specialized healthcare to the remotest corners of the country. Telemedicine is likely to provide the advantages of tele-diagnosis, especially in the areas of cardiology, pathology, dermatology, and radiology besides Continuing Medical Education (CME). It will also be of immense use for diagnostic and consultative purposes for patients getting treatment from the secondary-level healthcare facilities and below. Models for empowering frontline workers with IT enabled connectivity should also be evaluated and modified appropriately.

7.76 The schemes which are yet to be properly designed and launched by MoHFW are the National Centre for Disease Control, Advisory Board for Standards, Programme for Blood and Blood Products and Health-care of Older Persons. Models should be evaluated and developed for delivery of urban healthcare, especially focusing on establishing an efficient primary health system and providing adequate coverage to the urban poor. Since rural and urban healthcare converges at the secondary and tertiary levels, and both are part of the same supervisory and management structure at the state government level, the ministry could contemplate establishing an Integrated National Health Mission.

7.77 Provision has also been made in the Eleventh Plan to initiate certain pilot projects (Box 7.5).

7.78 Details of schemes addressing the nutrition status and health related issues are given in other chapters of this report.

FINANCING AND EXPENDITURE OF THE HEALTH AND FAMILY WELFARE PLAN SCHEMES

7.79 The Gross Budgetary Support (GBS) envisaged for the Eleventh Plan for the Department of Health and Family Welfare and AYUSH was Rs 1,36,147 crore and Rs 3,988 crore, respectively, making a total of

Box 7.5
Pilot Projects

Sports Medicine: Construction work at Safdarjung Hospital, New Delhi is under progress and is expected to be completed by May 2010 for establishing a Sports Injury Centre in a time bound manner keeping in view the ensuing Common Wealth Games, 2010.

Deafness: The pilot programme comprising of capacity building of PHCs, CHCs, and district hospitals, IEC as well as provision of supplies for treatment and rehabilitation of hearing disorders launched in 25 districts of 10 states and one UT, will be expanded to 203 districts covering all the states/UTs by 2012 in a phased manner by including about 45 new districts each year.

Leptospirosis: Pilot project is under implementation in identified districts of Gujarat (four), Kerala (two), and Tamil Nadu (two) to strengthen diagnostic laboratories and patient management facilities, training human resources, and creating awareness regarding timely detection and appropriate treatment of patients.

Human Rabies: The project to prevent human deaths due to rabies and reducing the transmission of disease in animals has been launched in the five cities of Ahmedabad, Bangalore, Pune, Madurai, and Delhi. Training is being provided to health personnel and labs are being strengthened for diagnosis of rabies. To be effective, the programme must also engage animal husbandry and veterinary agencies for providing technical support to municipal and district authorities, to prevent animal to animal, and animal to human transmission as well for strengthening surveillance systems.

Medical Rehabilitation: Eleven medical colleges were identified during 2007–08 to 2009–10 for setting up of Departments of Physical Medicine and Rehabilitation for meeting the needs of persons suffering from various disabilities. The project will provide training in medical rehabilitation services at various levels.

Oral Health: AIIMS, New Delhi has conducted a study on the assessment of the safety profile for dental procedures. The components of the project will include oral health education by involving health workers, school children, teachers, and mass media.

Fluorosis: The project launched in six districts of Nellore (Andhra Pradesh); Jamnagar (Gujarat); Nagaur (Rajasthan); Nayagarh (Orissa), Ujjain (Madhya Pradesh); and Dharmapuri (Tamil Nadu) is for assessing the intake of fluoride and imparting training to medical doctors and paramedics for early diagnosis of fluorosis.

Organ Transplant: Yet to be initiated.

Rs 1,40,135 crore for MoHFW. Two new departments, namely, Health Research and AIDS Control have been created during this period.

7.80 The expenditure by the Department of Health and Family Welfare in the first three years of the Plan under NRHM was 95.32 per cent, 94.39 per cent, and 96.04 per cent respectively of the funds allocated, whereas under non-NRHM it was lower at 73.16 per cent, 82.42 per cent, and 85.96 per cent respectively (Table 7.5). Overall expenditure for the department was 90.55 per cent, 91.58 per cent, and 93.60 per cent in 2007–08, 2008–09, and 2009–10 respectively. The Department of AYUSH was able to spend 78.39 per cent, 88.22 per cent, and 92.64 per cent of the funds allocated for the respective years. As newer initiatives take time to become operational the initial fund utilization is low.

7.81 Under NRHM, utilization of funds by the states has shown improvement, but the situation is still not satisfactory. As per calculations based on MoHFW's data, utilization of funds by all the states increased from 59.03 per cent (2005–06), to 64.97 per cent (2008–09). In case of high focus states, the utilization level increased from 56.35 per cent (2005–06), to 62.11 per cent (2008–09). In the non-high focus states the increase was from 62.62 per cent to 69.23 per cent during the same period, indicating relatively higher utilization than in the high focus states.

7.82 There is a large amount of unspent balance with the states under NRHM. An unspent amount of Rs 8,639.12 crore is lying with states against an amount of Rs 40,820.46 crore released during 2005–06 to 2009–10 (MoHFW's Data Sheets on NRHM as on 31 January 2010). This could be due to poor budget

planning, further release by the states to the districts for which the expenditure has not been reported, poor absorptive capacity of the system, and delays in execution of civil work. All such lacunae need to be examined in order to take corrective measures.

THE ROAD AHEAD

7.83 A determined effort needs to be made in the last two years of the Eleventh Plan to meet Plan targets. Most of the institutional arrangements under NRHM are in place but the processes required to achieve the outcomes need to be strengthened. Special efforts need to be made for the excluded/vulnerable areas and groups. Rather than mechanically establishing health facilities on the basis of population norms, there is need to re-visit these as most of the neglected groups reside in far-flung areas or are difficult to reach. The area covered by a sub-centre should be co-terminus with the jurisdiction of the gram panchayat. Besides, CHCs should be located at block headquarters so that there is convergence of services and also an environment for health personnel to stay there.

7.84 An effective healthcare delivery system can only be achieved if the programmes are administered judiciously and implemented in a transparent and efficient manner. The role of governance is crucial as are technical and social audits. If all available resources are properly utilized and quality governance is provided by the local leadership, we may be able to achieve many of the health targets of the Eleventh Five Year Plan.

7.85 Issues related to human resources for health as envisaged in the Eleventh Plan have still not been adequately addressed. Besides improving governance and accountability, the existing measures being taken to meet the shortage of ANMs/nurses, other paramedics, doctors, and specialists etc., need to be supplemented with measures, such as opening of new training institutions and PPPs. The need for expanding para-medical human resources, particularly the non-physician health providers, has to be both explicitly recognized and acted upon. The health system needs public health specialists at all levels. In the long run, every state could have a public health cadre, like Tamil Nadu, which is integrated with the health department hierarchy at all levels.

7.86 The policy of integrating AYUSH into NRHM has at least four implications. The first is training AYUSH personnel in public health and epidemiological perspectives on which their exposure is negligible. The second is developing an informed code of conduct for cross-referrals based on an understanding of the strengths and limitations of modern medicine and AYUSH respectively. Third is to draw up the scope and limitations of rational cross-medical practices and training medical personnel accordingly. The fourth is introducing integrative medicine modules both as part of Continuing Medical Education (CME) for doctors working in NRHM and in the professional medical education curriculum of all systems of medicine. All these four implications need to be operational for the integration to become fruitful.

7.87 As there are large unspent balances with the states under NRHM, MIS of MoHFW should go beyond allocations and capture the situation and expenditure at the grassroots level. For this, it is necessary to institute an online monitoring system.

7.88 There is equal need to upscale community monitoring for accountability and improving access for the poor and deprived (Box 7.6).

7.89 Appropriate matching contribution towards NRHM by all states and UTs during the Eleventh

Box 7.6
Upscale Community Monitoring

The first phase of community monitoring under NRHM was implemented in partnership with NGOs. It covered 1,600 villages in 35 districts of nine states. During this process, Village Health and Sanitation Committees were trained by NGOs to prepare village health report cards and PHC report cards using traffic lights (red, yellow, and green) to assess the services that they have been receiving. These report cards were shared at public events (Jan Sunwais). Follow-up has shown improvement in service delivery through changes in colour of traffic lights reflected by them.

Plan must be ensured and a path should be paved for higher contribution by the states during the Twelfth Plan.

7.90 The Integrated Disease Surveillance Programme (IDSP) should form the backbone of information systems for providing rapid response to infections and must be the basis for monitoring and evaluation of all disease control programmes. Besides, IDSP has to be developed through the PPP mode to act as a platform for integrating disease and risk factor relevant information. This will contribute to building a comprehensive health information system to inform policymakers and concerned programme managers.

7.91 There is a need to exploit new opportunities in healthcare delivery offered by telemedicine and rural telephony. The programmes should be 'consumer based' and not 'provider based'. It is essential that health programmes are structured on the basis of feedback from household surveys, which better indicate the extent of community satisfaction as compared to purely departmental statistics.

7.92 An independent national data collection process for mapping of health and nutritional status at frequent intervals is needed to identify states and districts with greater public health problems. This will facilitate planning and execution of area-specific strategies. Besides the Annual Health Survey being initiated, the National Nutritional Monitoring Bureau (NNMB) could be expanded to all the states as suggested in the Eleventh Plan.

7.93 NRHM has set in motion a fairly comprehensive process of reforms. However, the deficiencies pointed out in this chapter need to be corrected. The government is committed to curtailing out-of-pocket expenses of the poor to keep their health expenditures under control. In this regard it is pertinent to mention that the time is ripe for a paradigm shift from being a 'pure provider of services' to 'providing a choice of services' by creating a regulated quasi-market for healthcare through carefully tailored PPPs. This will ensure that the poor, as much as the rich, can exercise a degree of choice in the utilization of healthcare services. Towards this end, RSBY and other health insurance schemes initiated by a few states need a closer look so that appropriate models can be evolved and implemented nation-wide.

7.94 A shift in approach is required towards 'area-specific interventions' rather than 'universalization of programmes/schemes' to achieve the desired goals.

7.95 Finally, the total allocation of plan and non-plan resources for health for the Centre and the states combined remains low compared to the target of taking it to 2–3 per cent of GDP. A very strong effort will be needed in the last year of the Eleventh Plan, and mainly in the Twelfth Plan to achieve this goal.