

Principles and Values of Primary Health Care in India

I. Equitable Distribution

The first key principle in the primary health care strategy is equity or equitable distribution of health services, i.e., health services must be shared equally by all people irrespective of their ability to pay, and all (rich or poor, urban or rural) must have access to health services. A commitment to health equity focuses not only on ensuring program inputs such as services and personnel based on need but also reducing differences in health outcomes. An equitable health system ensures that the groups or individuals with most compromised health conditions receive more health services.

There is a clear urban-rural, rich-poor division in India. In the 42nd (1986-87), 52nd (1995-96), and 60th (2004 Jan-Jun) rounds of National sample Survey Organization (NSSO), the percentage of ailing persons who got their ailments treated is found to be higher in the urban areas than in rural areas. Affluent sections, urban populations and those working in the organized sector who are covered under some form of social security such as Employee State Insurance Scheme and Central Government Health scheme, have unlimited access to medical services. The rural population and those working in the unorganized sector have only the tax-based public facilities to depend upon for free or subsidized care, and private facilities depending on their ability to pay. It was observed in 60th round of NSSO that more reliance was to public care provider than private provider by the scheduled castes in both rural and urban areas. Both in rural areas and urban areas, it was observed in 42nd, 52nd and 60th rounds of NSSO, percentage of people citing

financial reason as an attribute for not attending to last spell of ailment has increased over time (In rural areas, 15% to 24% to 28% and in urban areas 10% to 20% to 28% from 42nd round, 52nd round to 60th round NSSO.)

This inequity, described as the "inverse care law" has been captured through numerous studies on health status differentials between various groups and regions. For instance, IMR in the lowest wealth index group (70 per 1,000 live births) is more than twice the IMR in the highest group (29 per 1,000 live births) according to 2005-06 National Family Health Survey 3 (NFHS-3). Similarly, IMR in states like Uttar Pradesh, Chhattisgarh, Bihar, and Jharkhand is much higher than the southern states. Only one in five women from the poorest quintile have deliveries assisted by a skilled provider¹ as compared to the national average of 47%. Visits to a public health facility or camp were also higher by women from the highest quintile (42 percent) as compared to women from the lowest quintile (29 percent). Peters et al (2002) and Mahal et al (2001) analyzed that in-patient days, outpatient usage and obstetric care favors the rich whereas immunization and ante/post natal care is more equitably distributed. The poor have cited poor quality of services and financial implications as primary reasons for underutilization of public health services. A survey by National Council of Applied Economic Research (NCAER) revealed that expenses towards medical needs are the second most important cause of indebtedness among the rural poor.

Indian health care plans and policies have stressed on making conscious and consistent efforts to deliver health services for "underprivileged" as a strategy for reaching "Health for all." While highlighting the continued health inequities across various groups and regions, NHP 2002 sought to craft a policy structure to allow for even access to public health services by

¹ Skilled provider includes doctor, ANM/nurse/midwife/LHV, and other health personnel.

disadvantaged groups. Suggested measures included the involvement of the private sector as well as the engagement of practitioners of the Indian System of Medicine and Homeopathy (AYUSH) in public health function and earmarking not less than 10% of the funds for utilizing the services of the NGOs and other civil society institutions in the delivery of health care.

In terms to access to health care, tribal areas in the country remain one disadvantaged and vulnerable group of population. The access and utilization of health care remain sub-optimal and health and nutrition indices in the tribal population continue to be poor (Figure 3.1). Number of experiments to reach this group have been attempted by NGO sector and few examples are cited in Box 3.1.

Figure 3.1 : Health Indices of various social groups in 2002

	IMR	U5MR	%Under nutrition
SC	83.0	19.3	53.5
ST	84.2	126.6	55.9
Other disadv	76.0	103.1	47.3
Others	61.8	82.6	41.1
India	70	94.9	47

Source : NHP, 2002

Box 3.1 : Experiments for improving access to primary health care among tribals:

- Andhra Pradesh - Committed government functionaries are running health facilities in tribal areas
- Orissa - Additional central assistance is provided for mobile health units with a fixed tour schedule.
- Karnataka, Maharashtra - NGO have 'adopted' and are running PHCs in tribal areas

The success of all these experiments is mainly due to the commitment of individuals and credibility of NGOs.

Source: Tenth Five-Year Plan (2002-2007), Government of India

NRHM and Equity

The NRHM addresses equity concerns in a number of forms. It seeks to gather data with dis-aggregation for gender and for SC and ST. The mission promotes the health of weaker sections of the society. ASHA being women is believed to improve access of health care by women and children. Making all peripheral health facilities to become fully functional is one of the most basic ways in which social protection for the poor is provided and the health sector reaches out to hitherto underserved areas. NRHM promotes delivering services to even more remote areas through the mobile medical units and holding outreach sessions. It also seeks to exempt below poverty line families from all charges ensuring access.

In Tripura, a helicopter service, to reach a particularly remote set of tribal hamlets has been sanctioned and is functional. In Andhra Pradesh, free bus passes to pregnant women for three visits for antenatal care has been attempted. In Tamil Nadu, in remote hilly and forested areas of Dharmapuri and Krishnagiri, a concept of birth resorts is introduced under the state plan- which provides for pregnant women in the last month to move to a temporary home nearer a site that can offer institutional delivery. Akha-ship of hope, is an innovative way of Assam state to provide primary health care services in riverine island through boat clinics (Box 3.2).

Box 3.2 : Akha-Ship of Hope

On the saporis or river islands of Assam that are inundated with floods every time the mighty Brahmaputra unleashes its fury, life is a constant struggle against disease and deprivation. Some 30 lakh people live in 2300 remote, floating villages on the Brahmaputra in Upper Assam. Here, there are no functional anganwadis, no health centres, no schools, no power, not even drinking water. Till recently, immunization, antenatal care, disease management, and treatment were all unheard of. In 2005 the Centre for North East Studies and Policy Research intervened. They partnered with NRHM, UNICEF, and the government of Assam, to start Akhs (meaning hope in Assamese)--a 22-metre long, four-metre wide ship that carries hope and health care to 10000 forgotten people in Tinsukhia, Dhemaji, and Dibrugarh districts of Upper Assam. The 120 hp powered Akha has an Out Patient Department room, cabins for medical staff and ship crew, medicine storage space, a kitchen, two toilet cum bathrooms, and a general store. A generator set and 200 litre water reservoir are also installed to ensure that the medical team that travels to the saporis has adequate power and water supply.

The idea behind Akha is simple - use the river to tackle the problems and challenges created by it. Doctors and ANMs who are unwilling and unable to survive on these remote islands, live on this ship stocked with medicine and other supplies and hold health camps on the saporis. They immunize, treat, provide medicines, and advise people on preventive measures. They even take critically ill patients to the nearest health centre in Dibrugarh.

In less than two years, Akha has provided succour to many. Upscaling this innovative intervention under NRHM, health care will no longer be a distant reality for the people living on this highly volatile river. It can be upscaled to include a hospital ship with diagnostic facilities, in patient ward and operation theatre.

Source: Eleventh Five-Year Plan (2007-2012), GOI



Side view of Boat Clinic, Assam
Photo Credit : NRHM Photo Gallery



Inside view of Boat Clinic, Assam
Photo Credit : NRHM Photo Gallery

II. Universal access to care and coverage on the basis of need

Accessibility and availability of health services reflect the reach and coverage of primary health care facilities. According to NFHS 3, private health facilities are favored for health care by a majority of the urban households (70%) as well as rural households (63%). However, the use of public health facilities by the lowest wealth quintile (39%) is comparatively more than the highest wealth quintile (34%). At the same time, a very negligible proportion of the sampled population (1.4%) access health care from the subcenter. Non-usage of public health facilities varies greatly across states, ranging from 8% in Sikkim to 93% in Bihar. Poor quality of care is cited as the most common reason (58%) for not using government facilities followed by lack of nearby facility (47%), long waiting period (25%), inconvenient timings (13%), and provider absenteeism (9%).

The role of grassroot health workers such as ANM, LHV, AWW, ASHA and MPW in providing health services at the community level is at the heart of the primary health care system employed by India. However, as per NFHS-3 only 17% of the women reported any contact with health workers in the three months preceding the NFHS-3 survey. Rural women reported higher contact (21%) with health workers compared to urban women (10%), and women from the lowest wealth quintile had the maximum exposure to health workers (22%). Pervasive absenteeism by health providers contributes to the ineffectiveness in delivery of primary health care services. A study by Chaudhury et al (2005) revealed that 40% of the health workers were absent from their facility in India at the time of a random unannounced spot check. Similar studies quote the lack of regularity in terms of the time of day or day of the week by absentee health providers, which further serves as a disincentive to seek health care.

The National Rural Health Mission aims to restructure the health delivery systems towards providing universal access to equitable, affordable, and quality health care responsive to the health needs of India's population. While on the one hand the existing extensive health care system falls short of the population needs, on the other hand, essential infrastructure and equipment are lacking in most facilities. A Facility Survey covering 370 districts in 26 states of India conducted by the Department of Family Welfare in 2003, revealed that essential inputs and infrastructure were far from satisfactory in the government facilities - 54% PHCs do not have a labour room and a laboratory, 80% and 77% PHCs do not have communication and transport facilities, only 58% PHCs conducted deliveries, 6% conducted MTPs, and 22% provided neonatal care. Training needs of medical and paramedical staff is acute, and only 20% of the PHCs are adequately staffed with trained personnel.

Human resource requirement under NRHM has stepped up drastically in view of renewed commitment to universal coverage. An additional 200,000 ANMs, 400,000 ASHAs, 84,000 Staff nurses, 7,200 Public Health Nurses, 15,400 Lab technicians, 4,000 Radiographers, 5,000 Gynecologists, 7,000 anesthetists, 7,800 physicians, and 8,445 public health managers are required to meet the manpower requirements. The challenges involved in training, recruitment, placement, and motivation of health workers across the country cannot be overemphasized if universal coverage is to be attained. Several alternatives are being explored to address the existing and anticipated shortfall of human resources. These include increasing retirement age to 65 years, decentralization of recruitment to district level, contractual employment of doctors on attractive salaries, incentives for rural postings, posting junior / post graduate studentes and doctors at PHCs / CHCs for a fixed period, incentives for financial and career advancement, enabling work environment and residential facilities/allowances, and educational incentives for children of doctors in rural areas, etc.

III. Community Participation

The Primary Health Care approach lays emphasis on health care provision by the people. It centers on peoples' participation in their own activities. Community involvement in health programmes has been tried through various approaches in India. Some of these include:

a. Community Health Volunteers

Health care delivery in the country has utilized community volunteers from time to time in different forms to link the community with the health care system. Table 3.1 provides an overview of select initiatives.

Initiatives

Table 3.1 Community-Based Service providers in India: Select Initiatives

Name of community based worker	State of implementation	Year of Scheme	Services to be provided
Village Health Guide	Whole of country	1977	Health education, MCH and family welfare services, management of minor ailments, first aid
Mahila Swasthya Sangh	Whole of country	1990-91	Assisting ANM in educating and motivating community, obtain support from other women colleagues for MCH services
Community Based worker (SIFPSA, UP)	Uttar Pradesh, started in 6 districts now extended to 40 districts	1994	Assisting the work of ANM, community mobilization for MCH related activities
Bharatvaidya	Osmanabad, Andhra Pradesh 50 villages	1994	Conduct health survey in village, registration of births and deaths, daily home visits, creating awareness on STDs/ AIDS, treatment of mild illnesses
Jan Mangal Couple	Rajasthan	1995	Promotion of small family norm, motivating people to use spacing or terminal methods of contraception

Name of community based worker	State of implementation	Year of Scheme	Services to be provided
Community worker	Gadhchiroli, Maharashtra 39 villages	1995	Conduct safe deliveries, provide resuscitation to newborn, manage sick child, inject gentamicin
Traditional Birth Attendant	180 districts	2001	Conduct safe deliveries, identification of early complications, post natal care
Jan Swasthya Rakshak	Madhya Pradesh	2001 (Initiated in 1995)	Public health and curative service provision in the villages
Mitanin	Chhattisgarh	2002	Health Awareness, support for immunization, control of mosquito breeding, opposing irrational practices by private practitioners and opposition to domestic violence
Sanjeevani	Haryana, 5 districts	2003	Community Mobilization, formation of Jagriti Mandalis (awareness groups) to share knowledge on aspects related to health, social and legal issues.

Source: Background Papers, National Commission of Macroeconomics and Health, 2005

As part of NRHM, a cadre of Accredited Social Health Activists (ASHA) is being established at the village/large habitat level in 2.5 lakh villages of 18 priority states. The ASHA is an honorary volunteer who is accountable to the community; acts as an interface between the community and the public healthcare system; facilitates preparation and implementation of Village Health Plan along with Anganwadi worker², community workers and ANM under the

² Anganwadi workers engaged by the Government to work in the Integrated Child Development Services (ICDS) which cater to the health and pre school education needs of 0-6 year old children as also the health and nutrition needs of pregnant women, nursing mothers and adolescent girls. All 0-6 year old children, all pregnant women, nursing mothers and adolescent girls in India are entitled to access to this Service.



Photo Credit : NRHM Photo Gallery

leadership of the Panchayat Health Samiti³. She receives performance-based incentives for promoting construction of household toilets, universal immunization, referral and escort services for RCH, and other health care delivery programmes.

In Chhattisgarh, the existing Mitanins are declared ASHA equivalents and they have been performing well in this slight modification of their role and support systems. In Rajasthan the Sahyoginis of the Anganwadi centers were declared ASHAs - and re named ASHA Sahyoginis. Of the 42, 000 target some 37,000 have been selected and renamed (Box 3.3).

Box 3.3 : State Innovations in ASHA selection- Rajasthan Sahyaogini Scheme

The government of Rajasthan has executed ASHA scheme combining with their Sahyaogini scheme. To begin with, assistants in the Anganwadi centres under the Department of Women and Child Development (originally called Sahayoginis) have been renamed ASHA Sahayoginis. They are paid a monthly stipend of Rs. 500 (over and above which they receive incentives for different tasks); they are required to do 10 household visits daily; and they function out of the Anganwadi centre. This has led to better integration of Integrated Child Development Service and health; greater accountability (as the ASHA - Sahayogini is required to work half day) and greater coordination of ASHAs with Anganwadi workers.

Source: NRHM Common Review Mission, November 2007.

b. Village Health and Sanitation Committee

The Village Health and Sanitation Committees (VHSC) are another key strategy of communitisation planned under NRHM. The village committee is being given a small fund of Rs 10,000, to utilize for variety of local needs.

³ Panchayati Raj is a decentralized form of Government where each village is responsible for its own affairs, as the foundation of India's political system. It has three level: village, village, block and district. At the village level, it is called a Panchayat. It is a local body working for the good of the village. It can have its members ranging from 7 to 31. However, in exceptions, it can have members above 31 but not below 7. The block-level institution is called the panchayat samiti. The district-level institution is called the zilla parishad.

These committees could play multiple roles including IEC, household survey, preparation of health register, organization of meetings at the village level, promoting household toilet and school sanitation programme.

West Bengal has constituted 16,770 VHSCs out of its target of 44,175 and 12,000 will be formed in the current year. In Tamil Nadu, 12,169 VHSCs are functional and have use the Rs 10,000 largely for 'cleanliness purposes.'" Some PHCs have provided free food for mothers who came for delivery with self help groups paid to do this provisioning.



Village Health meeting in Progress
Photo Credit : NRHM Photo Gallery

c. Rogi Kalyan Samitis (Patient Welfare Society/ Hospital Development Committee)

The Rogi Kalyan Samitis (RKS) introduced in NRHM is a form of communitisation /public participation, adopted as part of a strategy to improve the quality of management and therefore facility outcomes and as a form of providing flexible funds for facility improvement. A success story of RKS is illustrated in the Box 3.4.

Box 3.4 : Rajasthan Medical Relief Societies - RMRS (The RKS equivalent)

They were existing upto CHC level prior to NRHM. However, these societies were extended upto PHC after launch of NRHM. Started in the late 1990s, they now cover all 45 District and sub- District hospitals, 354 out of 352 CHCs and 1,489 out of 1,503 PHCs. These three sets of institutions have started receiving Rs. 5 lakhs, Rs. 1 lakh and Rs. 25,000 respectively every year as untied funds. A well thought out set of guidelines govern the functioning of the RMRS. Free medical care is provided to everyone below the poverty line, pensioners and senior citizens. The rest are required to pay a modest amount for services ranging from Rs. 5 for registration to Rs. 30 for ECG and blood tests and Rs. 60 for X-rays. The guidelines also prescribe how the moneys collected ought to be spent. These inflows combined with the direct transfer of untied funds from NRHM have led to the accumulation of reasonable sums of discretionary funds at each level.

Source: NRHM Common Review Mission, November 2007.

d. Decentralization: Involvement of Panchayati Raj Institutions-PRI (Local government bodies)

PRIs role with enhanced empowerment is planned at each level in NRHM. Involvement of local government representatives is envisaged in different local health committees to facilitate improved functioning at grass root level. Greater leadership, autonomy and accountability is accorded to the gram panchayat through a local committee with representation of VHSCs. Rogi Kalyan Samitis, with representation from panchayat members, will oversee the management of the PHCs. Community involvement for local action is also sought by the provision of untied funds at all levels. NRHM recommends organizing "Public Dialogues" (*Jan Samvad*) or "Public Hearings" (*Jan Sunwai*) at regular intervals (once or twice in a year depending on the initiative of the local organizations) at PHC, block and district level (Box 3.5).

Box 3.5 : Role of Panchayati Raj Institutions

Nearly three-fourths of the population of the country lives in villages. This rural population is spread over more than 10 lakh habitations of which 60% have a population of less than 1000. For the success of Sarva Swasthya Abhiyan, the reform process would have to touch every village and every health facility. This

would be possible only when the community is sufficiently empowered to take leadership in health matters.

PRIs right from the village to district level, would have to be given ownership of the public health delivery system in their respective jurisdictions. Some states like Kerala, West Bengal, Maharashtra, and Gujarat have already taken initiatives in this regard and their experiments have shown the positive gains of institutionalizing involvement of PRIs in the management of the health system.

The NRHM empowers the PRIs at each level that is, Gram Panchayat, Panchayat Samiti (Block), and Zilla Parishad (District) to take leadership to control and manage the public health infrastructure at district and sub district levels in the following ways.

- A VHSC in each village within the over all framework of Gram Sabha in which proportionate representation from all the hamlets would be ensured. Adequate representation is given to the disadvantaged categories like woman, SCs STs, OBCs, and Minorities.
- Sub Centre is accountable to the Gram Panchayat and shall have a local committee for its management, with adequate representatin of VHSCs.
- PHC, which is not at the block level, will be responsible to the elected representative of the Gram Panchayat where it is located. All other Gram Panchayats covered by the PHCs would be suitably represented on its management.
- The Block level PHC and CHC will have involvement of Panchayati Raj elected leaders in its management. *The Rogi Kalyan Samiti* would manage day-to-day affairs of the hospital.
- The Zilla Parished at the district level will be directly responsible for the budgets of the health societies and for planning for people's health needs.
- With the development of capacities and systems, the entire public health man agement at the district level would devolve to the District Health Society which would be under the effective leadership and control of the district Panchayat, with participation of the block Panchayats.

To empower and facilitate local action, the NRHM provides untied grants at all levels, namely, Village, SC, PHC, and CHC. Monitoring committees will be formed at various levels, with participation of PRI representatives, user groups, and CBO/ NGO/VO representatives to facilitate their inputs in the monitoring planning process. They will enable the community to be involved in broad-based review and suggestions for planning. A system of periodic *Jan Sunwai* or *Jan Samvad* at various levels has been built in to empower community members to engage in giving direct feedback and suggestions for improvement in public health.

Source: Eleventh Five-Year Plan, (2007-2012), Government of India

e. Community-led initiatives to promote Health for All

A number of efforts and coalitions, spearheaded by the Jan Swasthya Abhiyan or the People's Health Movement, are underway in India to synergize momentum towards operationalizing the right to health in India. The Jan Swasthya Abhiyan (JSA) is the India regional circle of the People's Health Movement, a growing coalition of people's organisations, civil society organisations, NGOs, social activists, health professionals, academics and researchers that endorse the Indian People's health Charter and the People's Charter for Health - consensus documents that arose out of the Jan Swasthya Sabha (National Health Assembly) and the People's Health Assembly held in December 2000 when concerned networks, organizations and individuals met to discuss the Health for All Challenge. There are 21 major national networks that constitute the Jan Swasthya Abhiyan. The movement is organised through state level and issue based circles. The National Secretariat facilitates communication between members through advocacy and campaigns, a website and discussion group, media releases and publications and through JSA participation in various conferences, policy dialogues and other events supported by

After the launch of NRHM, to monitor the progress of NRHM and whether NRHM is functioning as per desired objectives, Rural People's Health watch (PRHW) has been formed (Box 3.6).



Photo Credit : www.phm-india.org

Box 3.6 : People Rural Health Watch- Jan Swasthya Abhiyan Initiative

PRHW is an initiative to collect information on, assess and analyze the activities under the NRHM, both at the state and national levels; communicate and disseminate all such documentation and information through reports and other means; and provide feedback for improvement. The PRHW was viewed as a way of taking forward the 'Right to Health' campaign of JSA, launched in September 2003. Given the objectives of the NRHM to improve rural health services, PRHW would be an activity to assess whether or not the healthcare infrastructure was being strengthened in a pro-people direction, and to assess whether or not people were getting health services with the introduction and implementation of NRHM. It was decided that PRHW would collect information on, and assess and analyze the activities under the NRHM, both at the state and national levels; communicate and disseminate all such documentation and information through reports and other means; and provide feedback for improvement. It would also assist in people's monitoring of health services in districts and states where the Watch functioned, and sound alerts and facilitates communication regarding possible negative developments in the context of the Mission. While information on implementation at the state level was to be collected through field surveys, it was decided to also study policy relevant policy and planning documents, and look at financial allocations and funding sources vis-à-vis the NRHM.



Photo Credit : www.phm-india.org

Source: People's Health Movement India (Jan Swasthya Abhiyan)

IV. Inter-Sectoral coordination and convergence of programmes

Simply expanding and developing the health services cannot achieve improvements in the health status of a population. The linkage between health and development has been amply demonstrated globally. Health development is increasingly becoming part of a strategy aiming at satisfying the basic needs of population by giving the poor access to resources and economic opportunities, raising educational levels, ensuring availability and distribution of food, improving the status of women, providing the basic infrastructure of

transportation, improving the nutritional status and sanitation. GOI is committed to achieve inter - sectoral coordination and convergence at multiple levels in following ways.

a. Convergence with different health related sectors

Common District Health Society is created under NRHM to promote the convergence within the health department of various different disease related activities. The indicators of health depend as much on drinking water, female literacy, nutrition, early childhood development, sanitation, women's empowerment etc. as they do on hospitals and functional health systems. Realizing the importance of wider determinants of health, NRHM sought to adopt a convergent approach for interventions under the umbrella of the district plan. The Anganwadi Centre under the ICDS and Village Health and Sanitation Committees at the village level would be the principal hub for health action. Panchayati Raj institutions would be fully involved in this convergent approach so that the gains of integrated action can be reflected in District Plans. While substantial spending in each of these sectors would be by the concerned Department, the Village Health Plan/District Plan would provide an opportunity for some catalytic resources for convergent action. Convergence with the Department of Women and Child Development and with AYUSH (Indian System of Medicine) is also well articulated.

b. Convergence with Indian System of Medicine (AYUSH)

India enjoys the distinction of having medical pluralism with traditional medical systems contributing to a large extent in providing health care to the rural population. Both codified and non-codified forms of traditional medical knowledge are equally popular in the country. The officially recognized codified traditional medical systems are Ayurveda, Yoga, Naturopathy, Siddha and Unani. Homeopathy though not a traditional medical system but enjoys

equal status and is assimilated in the country's health delivery network. AYUSH is the Government approved acronym used to represent these systems. Non-codified medical knowledge is practiced in the form of grandma remedies, folklore, tribal medicine and local health practices. The country has huge network of traditional medicine institutions for educational, health care and research programmes and the codified systems are properly regulated. There has been constant policy support to these systems since India became independent in 1947. Central Government has full-fledged policy for traditional medical systems. An independent department is set up in the Ministry of Health & Family Welfare since 1995 to oversee and facilitate the growth & development of indigenous health systems on their own genius and for global utilization. National Institutes and Research Councils have been developed for each traditional medical system to evolve benchmark standards of education, health care and research. Pharmacopoeia Laboratories and Medicinal Plants Board have been established for quality testing of ASU&H drugs and sustained availability of herbal raw materials respectively.

There has been phenomenal growth of traditional medicine sector over the years. Starting from an unregulated sector at the time of country's independence a large number of steps have been taken and many more are underway to support and strengthen the programmes that could facilitate tapping the potential of traditional medical systems for the benefit of masses and global health care. The atmosphere of policy support, regulatory laws & statutory bodies in place, huge private investment in the sector and government's constant support has paved the way for increased use of traditional Indian medicine at national and global levels. As per latest available information the summary of traditional medicine & Homeopathy infrastructure in the country is reflected in Table 3.2.

Table 3.2 : Traditional Medicine & Homeopathy (AYUSH) infrastructure in India

Particulars	Ayurveda	Unani	Siddha	Homo- eopathy	Yoga	Natur- opathy
Registered Practitioners	453661	46558	6381	217850	---	888
Dispensaries	13914	1010	464	5836	71	56
Hospitals	2398	268	281	230	8	18
Hospital beds	42963	4489	2401	10851	135	722
Colleges	242	40	8	185	10	10
Postgraduate colleges	62	7	3	33	---	---
Admission capacity for undergraduate course	11225	1750	350	13425	---	385
Admission capacity for undergraduate course	991	67	110	1084	---	---
Drug manufacturing Units	7621	321	325	628	---	---

Source: www.indianmedicine.nic.in

Mainstreaming and integration of indigenous medicines & therapies in to the national health delivery system is one of the strategies that is being implemented under National Rural Health Mission since April 2005. The NRHM, which aims at vertical and horizontal strengthening of the health delivery system with increased public health spending, envisages provisioning of traditional medicine facilities in the primary health network. To do so, financial support is provided to the States to create AYUSH treatment facilities at PHC, CHC and District Hospital levels. Till 2007-08 203 District Hospitals, 1459 CHCs and 3520 PHCs were reported to have set up AYUSH treatment facilities. Drugs belonging to AYUSH have been included under list of essential medicines to be made available at different health facilities. A section on AYUSH has been incorporated in training module of ASHA. Synergy of AYUSH interventions with NRHM is illustrated in the Box 3.7.

Box 3.7 : AYUSH Interventions under NRHM

- Co-location of AYUSH dispensaries in 3528 PHCs in different States.
- Appointment of 452 AYUSH doctors and paramedics (pharmacists) on contractual basis in the primary health care system.
- Inclusion of AYUSH modules in training of ASHA.
- Inclusion of *Punamavdi Mandoor* in the ASHA Kit for management of anaemia during pregnancy.
- Inclusion of seven Ayurvedic and five Unani medicines in the RCH programme.
- Establishment of specialty clinics, specialized therapy centres, and AYUSH wings in district hospitals supported through CSS.

Source: www.mohfw.nic.in/nrhm/htm.

c. Coordination with Rural Medical Practitioners

There is a large pool of formally or informally qualified Rural Health Practitioners (RHPs) who meet the day-to-day health care needs of people in 6 lakh villages, on round the clock basis. In the Eleventh Five Year Plan, it is proposed to enlist their services for many tasks including the delivery of non-clinical methods of contraception and referring the clinical cases to the PHCs or FRUs. **Janani**, in Bihar is a Social Franchising Model that establishes sets of "*Titli-Butterfly*" clinics and "*Surya-Sun*" clinics promoting the involvement of RHPs and enhancing the utilization of family planning services by rural masses. The details of this successful experiment by a voluntary organization is presented in the Box 3.8.

Box 3.8 : Janani-Using RHPs

An NGO, Janani, set up a network of more than 21,000 *Titli* (Butterfly) centres and more than 500 *Surya* (Sun) clinics in the states of Bihar, Jharkhand, and Madhya Pradesh. *Surya* clinics are referral clinics run in towns by formally qualified, state-registered doctors. *Titli* centres are situated in villages and run by RHPs who have been trained to provide family planning counselling and sell non-clinical contraceptives. Since RHPs are male, they work with a Woman Health Partner who is generally a member of their family (in most cases, wife). RHPs and their female counterparts hold a two-day training programme of family planning counselling. Female partners help reach out to the village woman who are hesitant to approach male health providers on reproductive health matter.

Source: Eleventh Five-Year Plan (2007-2012), Government of India.

Registered Medical Practitioners (RMPs) also can be trained in variety of interventions and their services can be utilized as part of NRHM. They being key people with whom generally local people make their first contact in case of illness, their services in the mission would play a very pertinent role to enhance service delivery. Currently the process of devising a structured training program for RMPs is under development. The possible interventions in which RMPs can deliver their role is illustrated in Box 3.9.

Box 3.9 : Role of RMPs as Sahabhaagis in NRHM

- Running social awareness programmes in schools to cover topics like : ill effects of tobacco and alcohol, advantages of good sanitation, hygiene, nutrition, and safe drinking water
- Running free camps for: vision tests, health check-ups, immunization
- Training rural people in association with SHGs about: hygiene, sanitation, nutrition, safe drinking water, needs of pregnant women. Protection against unsafe sex, awareness about locally prevalent communicable and non communicable diseases
- Providing non clinical contraceptives and referring for clinical cases
- Acting as drug distribution depots and fever treatment centres
- Supervising spray activities, water treatment, sanitary landfill, and sanitary latrines
- Providing emergency primary health services and referrals

Source: Eleventh Five-Year Plan (2007-2012), Government of India.

d. Coordination with Non-Governmental and Civil Organizations

The Government of India envisages collaboration with NGOs and civil organizations particularly to supplement the role to that of the government health care delivery. NGOs are involved in ASHA's training, national disease control programmes and service delivery in addition to health education and awareness programmes. NRHM encourages non-governmental partnerships that improve service guarantees in the health sector for the poor households. Two main schemes are under operation in context to NGO involvement by

Government of India Mother NGO and Service NGO Scheme, are presented in the Box 3.10.

Box 3.10 : Major NGO Schemes Run by Government of India

Mother NGO (MNGO) Scheme: The Objectives of the MNGO Scheme are to improve Reproductive Child Health indicators in the under served and unserved areas, with special focus on maternal and child health, family planning, immunization, institutional delivery, RTI/STI and adolescent reproductive health care. Gender concerns and male involvement to be addressed across all the interventions. Each MNGO to work with 3-4 Field NGOs (FNGOs) from each district, encouraging each MNGO to identify the un-served and under served pockets within the district, identification of FNGOs from the same pockets to serve population covering 1-2 sub centers in the provision of RCH service delivery. Currently there are 317 MNGOs working in 429 districts in the country.

Service NGO (SNGO) Scheme: SNGOs are those NGOs, which provide clinical service and other specialized aspects such as birth attendant training, Medical termination of Pregnancy, male involvement covering a population of 100,000 populations and contributing to achieving the RCH objectives.

Source: Annual Report, 2007-08, Ministry of Health and Family Welfare, Government of India.

e. Public-Private Partnerships (PPP)

Currently private sector health services range from those provided by large corporate hospitals, smaller hospitals/nursing homes to clinics/dispensaries run by qualified personnel and services provided by unqualified practitioners. A majority of the private sector hospitals are small establishments with 85 per cent of them having less than 25 beds with average bed strength of 10 beds. Private tertiary care institutions providing specialty and super specialty care account for only 1 to 2 per cent of the total number of institutions while corporate hospitals constitute less than 1 percent. There are wide inter-state differences in the distribution of private sector hospitals and beds. The Private Sector prefers to set up facilities in the more prosperous districts/ states It reveals that a large proportion of total ailments were treated from the private sources - 78 per cent in the rural areas and 81 per cent in the urban areas, while the overall proportion of treated

(spells of) ailments to all ailments was 82 per cent in the rural and 89 per cent in the urban areas in 2004. Reasons for preference to the private sector for treatment as compared to the government one are presented in Figure 3.2.

Figure 3.2 : Reasons for preference of private sector for treatment of ailments

Sector	Share of Non-Govt. sources per 1000 treated spells	Spells of ailment receiving treatment from Non-Govt sources by reasons for not using Govt sources			
		Govt doctor/ facilities too	Not satisfied with far medical treatment by govt doctor/ facilities	Long waiting	Others including non availability of services
Rural	777	210	407	83	300
Urban	808	135	447	161	257

Source : NSSO 60th Round

The private institutions dominate the field in treating the inpatients and in 2004 (60th Round of NSSO), with about 58 and 62 per cent of the hospitalized cases in the rural and urban areas respectively, were treated by the non-government institutions. The role of government and non-government institutions has reversed between the periods 1986-87 and 2004; about 60 per cent of the hospitalized cases were treated by the government institutions in 1986- 87 in both rural and urban areas. Trends in hospitalization from 1986 to 2004 is shown in Figure 3.3.

Figure 3.3 : Trends in Hospitalization- Government/ Private

Rounds	Rural		Urban	
	Govt	Private	Govt	Private
42nd	597	403	603	397
52nd	438	562	431	569
60th	417	583	382	618

Source: Select Health Parameters: a comparative analysis across the NSSO 42nd, 52nd, and 60th rounds.

It is thus pertinent to utilize huge resource available in private sector for achieving public health goals. PPP is operating in different forms in India and an illustration of few examples is depicted in Box 3.11.

Box 3.11 : PPP in India : Select Examples

- Rajasthan:
Partners: Medicare Relief Society, SMS Hospital, Jaipur, and Vardhman Scanning and Imaging Private Ltd.
Services: Contracting in Radiological diagnostic services in the public hospitals.
Provision of quality drugs and supplies cheaper than market rate. All this free for BPL patients above 70 years of age and freedom fighter; pre-negotiated rates for other.
- West Bengal:
Partners: Government of West Bengal, Mediclue, District Health & FW Societies, Private partners, M/S Doctors Laboratory and Non Profit NGOs.
Services: CT Scan in seven medical colleges, MRI in one medical college hospital, diagnostic facilities in 30 rural hospitals, and running of 133 ambulances for emergency transport under management of NGOs/ CBOs at the level of Block PHCs.
- Uttarakhand:
Partners: Government of Uttarakhand, DST, Gol and Uttaranchal Institute of Scientific Research, Bhimtal (NGO).
Services: Mobile Health Services-- Diagnostic, Laboratory, and Clinical Services through mobile vans. Dedicated health camps in 6 districts of western part of Uttarakhand.
- Karnataka:
Partners: Government of Karnataka and Apollo Hospitals Enterprises Ltd, Hyderabad Rajiv Gandhi Super Specialty Hospital, Raichur handed to Apollo Hospital under management contract.
Services: 350 bedded hospital. Fee services to BPL Patients, 40% beds for BPL (government reimburses the charges) and remaining patients treated under special rates.
Partners: Government of Karnataka & Karuna Trust.
Services: Contracting out adoption and management of PHCs and affiliated SCs in remote, rural, and tribal areas in the State. 24 hrs health services -- OPD, emergency services, electrocardiogram (ECG), X-ray, laboratory, immunization, national health programmes, RCH programme, 20 bed patient ward, and ambulance.

- Gujarat:
Partners: Government of Gujarat and Privat Doctors (Obstetricians and Gynecologists).
Services: Chiranjeevi Yojana: Private Doctors (Obstetricians) are contracted for deliveries both normal and caesarian of BPL women at their facilities.
- Arunachal Pradesh:
Partners: Government of Arunachal Pradesh & VHAI, Karuna Trust, Future Generations, and Prayas.
Services: Management of selected PHCs.
- Andhra Pradesh:
Partners: Government of Andhra Pradesh and Social Action for Integrated Development Services, Adilabad (NGO)
Services: Urban Slum health care project. Contracting in (performance contract but without any public premises being handed over to the private partner.)
Partners: Government of Andhra Pradesh & New India Assurance Company.
Services: Arogya Raksha Scheme based on vouchers.
 Funded by the government, operational management by the public sector company, and service delivery by private health service providers.
- Tamil Nadu:
Partners: Government of Tamil Nadu & the Seva Nilayam Society in association with Ryder-Cheshire Foundation (NGOs).
Services: Performance contract for the provision of emergency ambulance services in the region. Ambulances are owned by the government.

Source: Eleventh Five-Year Plan (2007-2012), Government of India

V. Appropriate Health Technology

Appropriate technology has been defined as "technology that is scientifically sound, adaptable to local needs, and acceptable to those who apply it and those for whom it is used, and that can be maintained by the people themselves keeping with the principle of self reliance with the resources the community and country can afford" (WHO). Health care initiatives in the country have utilized the technology to bring significant reforms and improvements in primary health care scenario. Eleventh Five Plan (2007-12)

stresses the need for developing low cost and indigenous technology methods. It accords prime importance to find technological solutions for making crucial equipment affordable, for example, anesthesia machine, surgical equipment and lighting, sterilization equipment, defibrillator, ventilator, electrocardiogram (ECG), blood pressure monitoring equipment, pulse oxymeter. Benefits of reduced cost of such technologies should reach village health care providers. The plan urges to use public health related technologies and public health related practices at all levels of health care as illustrated in Box 3.12.

Box 3.12 : Making health care Affordable: the expericne of Jan Swasthya Sahyog (JSS)

For the last seven years, a group of dedicated young doctors from institutes like CMC, Vellore and AIIMS have been working to make health in the hinterlands, availbale, accessible, and affordable. The JSS team has given up lucrative jobs, sparkling city lights, and hefty pay packets to develop cheap, accurate and easy-to use technology that can be used for prevention, diagnosis, and treatment of diseases n remote, tribal areas of Bilaspur and Chhattisgarh. So, the JSS method for early detection of UTIs costs less than Rs.2 per test, anaemia Rs.1, diabetes Rs.2, pregnancy Rs.3. They have also developed low cost mosquito repellent creams, breath counters for detection of pneumonia among children, easy-to-read BP instruments to prevent preeclampsia, and a simple water purification mehtod whereby one can cycle for 15 minutes and get a bucket of potable water treated by UV light. Low cost delivery kits with everything needed for the mother and child in the first 24 hours--gloves, large plastic sheets, soap, disinfectant, blade, gauze, sterilized threads, cotton cloth to wrap the baby, thick sanitary pads for woman--are available for just Rs.40. These simple techniques are so designed that they can be used by illiterate and semi-literate village women and school students. Then there are the more complicated tests like sputum concentration system for increasing the sensitivity of microscopic diagnosis of tuberculosis and elelectrophoresis for detection of sickle cell anaemia, a common malady in the area. While electrophoresis costs Rs.300 in the market, using JSS technology it costs just Rs.20.

The most innovative strategy put in place by JSS, however, is the malaria detection system. They have trained village health workers in 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 to school, 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 the last 5 years and has saved many lives. It is now being extended for tuberculosis detection. These simple, innovative technologies developed by JSS can be used by all health workers to make diagnosis in peripheral, remote areas more rational and decrease misuse of drugs.

Source : Eleventh Five-Year Plan (2007-2012), Government of India

Another successful experiment illustrating appropriate technology is of *LOCOST*, (Low Cost Standard Therapeutics) is a public, non-profit charitable



Photo Credit : www.locostindia.org

trust, registered in Baroda, India. It was founded in 1983, has been serving the urban and rural poor by making only rational, essential, quality drugs at the lowest possible prices. This was needed in response to the difficulty faced by those working in remote areas to access good quality medicines at affordable

prices. *LOCOST* exemplifies an innovative experiment to show that good

quality medicines can be made and marketed at viable, low prices. It makes more than 60 essential medicines in 80 formulations (liquids, capsules and tablets). The production is done in a small factory of its own. The unit also has its own education cell that focuses on issues related to education and training of prescribers and end users for rational use of medicines. The awareness generation efforts include a Gujarati monthly, "*Apnu Swasthya*", for the general public. It has also produced the Gujarati



Photo Credit : www.locostindia.org

Version of famous book, "*Where there is No Doctor, and A lay Person's Guide to Medicine*", a guide on the economical and rational use of medicines.

E-Health is a novel concept that has been introduced in recent years. The challenge is to make this advancing technology affordable such that it benefits poor. Two main Information technological advancements have been proven to immensely offer support to health systems ultimately enhancing service delivery- Health Management Information System and TeleMedicine that are discussed below.

Health Management Information System (HMIS) is an important new initiative utilizing developments in the field of Information Technology. Government of Gujarat has taken up the computerization of 6 Major (Teaching) and 24 District Hospitals. The Scope of HMIS included: 28 modules; MIS reports at hospital and state level; reports at state level for 14 Programs like AIDS, Malaria, TB, Leprosy, RCH etc.; integration with Central Medical Stores Org. (CMSO) for inventory management; Integration with Graphical Information System (GIS) and Employee Transfer & Patient Transfer functionalities. HMIS utilization in patient care services, clinical and ancillary services and hospital administration has been done.

Another IT application to benefit people is, Telemedicine. It could help to bring specialized health care to the remotest corners of the country. Telemedicine is likely to provide the advantages of teleradiology, especially in the areas of cardiology, pathology, dermatology, and radiology besides continuing medical education (CME). It will be of immense use for diagnostic and consultative purposes for patients getting treatment from the secondary level health care facilities. The efficacy of telemedicine has already been shown through the network established by the Indian Space Research Organization (ISRO) that has connected 42 super-specialty hospitals with 8 mobile telemedicine vans and 200 rural and remote hospitals across the country through its geostationary satellites. So far about 3 lakh people have benefited from this programme.

VI. Monitoring and Evaluation

Monitoring and Evaluation (M & E) is an essential and integral part of the programme development and implementation process. M & E of primary health care in India is performed by collecting information at multiple levels. National health programmes presently running in the country have inbuilt M & E mechanisms to review the performance of the programmes. Data is generated through routine health management information system, periodic facility surveys, national and international external evaluations the programme. Government of India regularly brings about two publications- National Health Profile and Bulletin on Rural Health Statistics to track serial progress on different components of primary health care.

The NRHM proposes an intensive M & E through a three pronged process of community based monitoring, external surveys and internal M & E. The community and patient welfare committee will monitor the performance of the health facilities on certain select parameters. NRHM envisages the formation of health monitoring and planning committees at PHC, block, district and state levels to ensure regular community based monitoring of activities at respective levels. The periodic external, household, and facility surveys will aid in tracking the effectiveness of various activities under NRHM for providing quality health services. Besides this, supervision missions are planned to conduct evaluation process twice in every state to track outcomes. The NRHM Common review mission was performed in 2007 in 14 states to monitor the performance of implementing states. The report of this review highlighted the success stories and pointed out the weak areas in the states for future improvement.