Services (IHS) operates facilities open only to Native Americans from recognized tribes. These facilities, plus tribal facilities and privately contracted services funded by IHS to increase system capacity and capabilities, provide medical care to tribals beyond what can be paid for by any private insurance or other government programs. Hospitals provide some outpatient care in their emergency rooms and specialty clinics, but primarily exist to provide inpatient care. Hospital emergency departments and urgent care and centers are sources of sporadic problem-focused care. "Surgicenters" are examples of specialty clinics. Hospice services for the terminally ill who are expected to live six months or less are most commonly subsidized by charities and government. Prenatal, family planning, and "dysplasia" clinics are government-funded obstetric and gynecologic specialty clinics respectively, and are usually staffed by nurse practitioners.

Russia: Pre-1990s Soviet Russia had a totally socialist model of health care with a centralized, integrated, and hierarchically organized with the government providing free health care to all citizens. All health personnel were state employees. Control of communicable diseases had priority over noncommunicable ones. There was over provision of hospital beds, which contributed over time to an imbalance in the overall structure of the health care system. On the whole, the Soviet system tended to neglect primary care, and placed too much emphasis on specialist and hospital care.

Despite weaknesses, the integrated model achieved considerable success in dealing with infectious diseases such as tuberculosis, typhoid fever and typhus. The effectiveness of the model declined with underinvestment. Despite a doubling in the number of hospital beds and doctors per capita between 1950 and 1980, the quality of care began to decline by the early 1980s and medical care and health outcomes were below western standards. The lack of money that had been going into health was patently obvious. A 1989 survey found that 20% of Russian hospitals did not have piped hot water and 3% did not even have piped cold water. 17% lacked adequate sanitation facilities. Every seventh hospital and polyclinic needed basic reconstruction. Five years after the reforms per capital spending on health care was still a meager US$158 per year (about 8 times less than the average European social models in Spain, the UK and Finland, and 26 times that of the U.S. which spent US$4,187 at that time). There are many initiatives that have been undertaken by the Russian government recently and expecting better outcome in coming future.

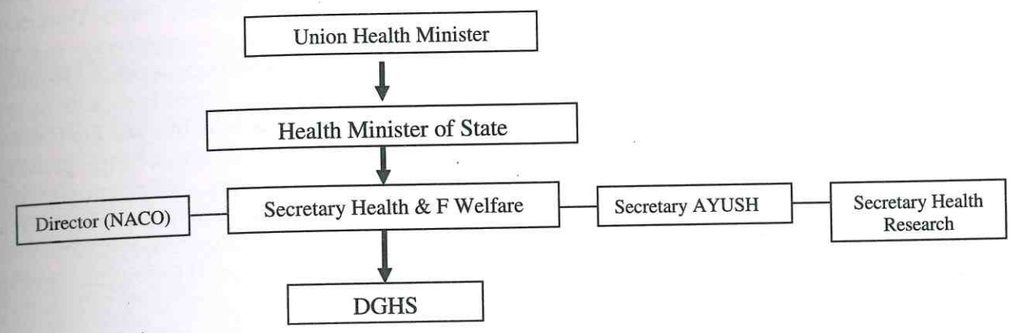
UK: The National Health Service (NHS) is free at the point of use for the patient though there are charges associated with eye tests, dental care, prescriptions, and many aspects of personal care. The NHS provides the majority of healthcare in England, including primary care, in-patient care, long term health care, ophthalmology and dentistry. The National Health Service Act 1946 came into effect on 5 July 1948. Private health care has continued parallel to the NHS, paid for largely by private insurance, but it is used by less than 8% of the population, and generally as a top-up to NHS services. Recently there have been some examples where unused private sector capacity has been used to increase NHS capacity and in some cases the NHS has commissioned the private sector to establish and run new facilities on a sub contracted basis. Some new capital programs have been financed through the private finance initiative. The involvement of the private sector remains relatively small yet, according to one survey by the BMA, a large proportion of the public oppose such involvement.

Evolution of the health system in India

The evolution of India's health system can be categorized into three distinct phases:

- Phase I (1947-83)- when the health policy was based on two principles: (1) that none should be denied care for want of ability to pay, and (2) that it was the state's responsibility to provide health care to the people.
- Phase II (1983-2000)-when the first National Health Policy of 1983 articulated the need to encourage private initiative in health care service delivery, while at the same time expanding access to publicly funded comprehensive primary health care.
- Phase III (post 2000)-which is witnessing a further shift that has the potential to profoundly affect the health sector in three important ways: (1) the desire to utilize private sector resources for addressing public health goals; (2) liberalization of the insurance sector to provide new avenues for health financing; and (3) redefining the role of the state from being only a provider to a financier of health services as well.

Figure 5.2: Organizational structure of Ministry of health



HEALTH CARE PROVIDERS IN INDIA

Multiple agencies are working in India to provide health care including both government, semi-government and private. Majority of people are going to the private sector, however, government (state and central) infrastructure is very big (Table 5.1).

Public Health Care System in India

National Level

The organization at the national level consists of the Union Ministry of Health and Family Welfare. The Ministry has four departments namely-Health and Family Welfare, Health Research and AYUSH. These departments are headed by one or two secretaries who belong to the cadre of Indian Administrative Service (IAS). Department of health is supported by a technical wing which is headed by Director General of Health Services who is recruited from Central Health Service (CHS) (Figure 5.2).

Table 5.1: Healthcare Providers in India

Departments under State Government	Departments under Central Government	Non-Government
• Public health department (primary health centres, dispensaries, hospitals) • Medical educationdepartment (medical collegehospitals) • Municipal administration department (health care facilities under localgovernments) • Non-allopathic systems of medicine (Ayurveda, Homeopathy, etc.)	1 Under Ministry of Health and FamilyWelfare (MoHFW) • Central Health Services Medical Colleges • Corporate industries • Central Government Health Services CGHS 2. Ministry of AYUSH 3 Ministries besides MoHFW • Railway hospitals (Railway Ministry) • Employees' State Insurance (Labour Ministry) • Coal department (Ministry of Mines) • Port hospitals (Ministry of Shipping) • Steel plants (Ministry of Steel) • Armed forces hospitals (Ministry of Defence) • Refineries (Ministry of Petroleum & Natural gas) • Thermal plants (Ministry of Power)	• Private hospitals • Private practitioners • NGO health facilities • Non-allopathic practitioners • Traditional healers, etc.

Central Health Service: It provides medical professional manpower for the Directorate General of Health Services, Central Government Health Scheme, Government of NCT Delhi, Department of Labor, Department of Posts, and Assam Rifles. Central Health Service now consists of the following four sub-cadres as given:

I. General Duty Medical Office sub-cadre
II. Teaching Specialists sub-cadre
III. Non- Teaching specialists sub
IV. Public Health Specialists sub-cadre
There is the Higher Administrative Grade (HAG), which is common to all the four sub cadres.

State Level

State Department of Health and Family Welfare is headed by a Minister and with a Secretariat. This secretariat is headed by a secretary or commissioner (Health and Family Welfare). The state directorate is a technical wing headed by Director of Health Services. However, the organizational structure of the state Directorate of Health Services is not uniform and in some states Additional Director or Joint or Deputy Director may head the Directorate. Some states have created the posts of Director (Ayurveda) and Director (Homeopathy).

District Level

The district level structure of health services is a middle level management organization and it is a link between the state as well as regional structure on one side and the peripheral level structure as CHC, PHC as well as sub-center on the other side. It receives information from the state level and transmits the same to the periphery by suitable modifications to meet the local needs. The district officer with overall control is designated as the Chief Medical and Health Officer (CM & HO or CMO) or as the District Medical and Health Officer (DM &HO or DMO or CDMO). They are responsible for implementation of various policies and programs and report to their state.

URBAN AREAS

Central Government Health Scheme (CGHS)

The central government health scheme was started in 1954 with the objective of providing comprehensive medical care facilities to the central government employees and their family members. Beside them, this scheme also provides services to members and ex-members of Parliament, judges of Supreme Court and High Court, Freedom fighters, Central Government pensioners, Employees of semiautonomous bodies/ semi-government organizations, accredited journalists, and ex-Governors and ex-Vice Presidents of India. The scheme which was initially started in Delhi was extended to Ahmedabad, Allahbad, Bangalore, Bhopal, Bhubaneswar, Chandigarh, Chennai, Guwahati, Hyderabad, Jabalpur, Jaipur, Kanpur, Kolkata, Lucknow, Meerut, Mumbai, Nagpur, Patna, Pune, Ranchi, Shillong, Thiruvananthapuram, and Dehradun.

There are allopathic dispensaries for cardholders of CGHS. There are dispensaries of Indian System of Medicine and Homeopathy, polyclinics, maternity hospital and maternity centers, laboratories, dental units, and allopathic first aid posts.

Facilities provided by CGHS are emergency services, free supply of drugs, lab and radiological investigations, domiciliary visits, specialists consultations at hospital level and family welfare center level.

Government Hospitals: WHO defined hospital as an integral part of a social and medical organization and the functions of which is to provide for the population complete health care - both curative and preventive and whose out patient services out to the family and its home environment; the hospital is also center for training of health workers and for biosocial research. In each states there are hospitals run by state governments.

Urban Health Services

The Government of India has identified "Urban Health" as one of the thrust area in the Tenth five Year plan, National population policy, 2000, National Health Policy 2002, and the 2nd phase of the Reproductive Child Health Program.

Under the on going RCH program, Urban Health has been included and sought to be effectively addressed under one component thereof viz. "Vulnerable Communities RCH". Vulnerable Communities have been defined to include those groups, which are underserved due to problems of geographical access (even in better off states) and those who suffer social and economic disadvantage such as the scheduled castes/ scheduled tribes and the urban poor. The overall goal of the vulnerable communities RCH component is to improve the health states of the vulnerable population by ensuring accessibility and available of quality primary health care and family welfare services to them. The overall objective in this regard is to: (i) Improve accessibility, availability and acceptability of health services, including RCH services by strengthening infrastructure including training and skill development of service providers, improving supply of equipment, drugs etc. in an integrated and participatory manner and (ii) to bring them at par with rest of the population and thus improving the aggregate indicators achieving the expected results set under RCH program.

Table 5.2: Health Manpower in Rural Areas State wise distribution

Health workers	*No.*
ASHAs	849331
ASHAs with Drug Kits	*690221*
Subcenters	147069
Subcenter with ANMs	148366
Subcenters without ANMs	*6127*
Subcenter with second ANMs	59068
Primary Health Center (PHC)	24049
PHC without doctors	*753*
Community Health Center (CHC)	4833
Specialists Required	18140
Specialists in Position	*6781*
District Hospital FRU	574
Sub District Hospital FRU	826
Staff Nurses required	18733
Staff Nurses in Position	6414
State Program Management Unit	35
District Program Management Unit	637
Managers at DMU	583
Accountants	575
MIS specialists	565

(Source: NRHM MOHFW Govt. of India 2011)

The government of India constitutes a Task Force to advise the National Rural Health Mission (NRHM) on 'strategies for urban health care".

Urban Family Welfare Centers

These centers were launched during the first Five Year Plan. At present, 1083 centers are functioning and providing outreach services, primary health care, MCH services and distribution of contraceptives.

Urban Health Posts

URBAN REVAMPING SCHEME

This Scheme was introduced following the recommendation of the Krishnan Committee in 1983. The main focus was to provide services through setting up of Health Posts mainly in slum areas. The services provided are mainly outreach of RCH services, preventive services, first aid and referral services including distribution of contraceptives. Four types of health posts were set up depending on the allotted population in the catchment's area of the centre covered. For Type A, the criterion is less than 5000 population. For Type B it varies between 5-10 thousands whereas for Type C it is 10-25 thousands. For Type D the limit is 25-50 thousands population. Only Type D Health Posts have a post of Medical officer. These also provide outreach of RCH services, first aid, referral services and distribution of contraceptives.

RURAL AREAS

In rural areas, primary health care services are provided through a network of 148366 sub-centers, 24049 Primary Health Center and 4833 community Health. There is augmentation of staff at all levels but gaps are present as far as specialists and staff nurse is concerend (Table 5.2).

Community Health Center

For a successful primary health care program, effective referral support is to be provided. For this purpose one community health center (CHC) has been established for every 80,000 to 120,000 population, and this center provides the basic speciality services in general medicine, pediatrics, surgery and obstetrics and gynecology. Under Indian Public Health Standards, there is provision of one anesthetist and one eye specialist supported by 24 paramedical and other staff with inclusion of two nurse midwives in present system of 7 nurse midwives. The CHC are established by upgrading the subdistrict /taluka hospitals or some of the block level primary health centers (PHCs), or by creating a new center wherever absolutely needed.

Primary Health Center

At present there is one Primary Health Center (PHC) covering about 30,000 (20,000 in hilly, desert and

difficult terrains) or more population. Many rural dispensaries have been upgraded to create these PHCs. Each PHC has staff of 15-17 including one medical officer, one nurse midwife, two staff nurse on contract, two health assistants (Male & Female), and one pharmacist, one extension educator, one laboratory technician, two health workers (one male & one female each), one Upper Divisional Clerk (UDC) and one Lower Divisional Clerk (LDC), four class IV and one driver. For strengthening preventive and promotive aspects of health care there should be a post of community health officer. Primary function is preventive, promotive and curative health services delivery to the community. Medical officer is team leader of all staff posted under one PHC jurisdiction, i.e., 5-6 sub-centers, 25-30 village health guides and dais, and 25-30 anganwadis. At the PHC there should be at least 4-6 beds for patients.

One female health assistant has to supervise the work of six sub-centers in the rural areas. She provides technical guidance and supervision to the ANMs. Similarly one male health assistant supervises the work of 5-6 health workers (male).

A majority of PHCs do not have the full complement staff. In addition, shortages and misuse of transport funds preclude the ability of the MO to travel to the field and back up the ANM with the requisite service delivery and supervisory support. The women physicians are few in number at PHCs, which causes difficulty in delivery of RCH services. That could be one of the reasons of why less than 25% of women utilized RCH services at PHC. MOs prefer more to remain at their PHC of posting and hardly travel for supervisory visits to the villages.

Sub-Center

The most peripheral health institutional facility is the sub-center, which is run by one female (Auxiliary Nurse Midwife) and one male multipurpose worker. At present, in most places there is one sub-center for about 5000 populations (3000 in hilly and desert areas and in difficult terrain). Subcenters are assigned tasks related to maternal and child health, family welfare, nutrition, immunization, diarrhea control and control of communicable diseases programs and provided with basic drugs for minor ailments needed for taking care for essential health need for women and children.

Government of India bears the salary of ANM and LHV besides rent liability and contingency whereas, the salary of the male health workers is borne by the state governments.

NRHM seeks to strengthen sub-centers by provision of untied funds of Rs. 10,000 per year which would be operated by the ANM and the *Sarpunch*, supply of allopathic and indigenous medicines and provision of additional workers (Male MPW or additional ANM).

Auxiliary Nurse Midwife /Multipurpose Worker Female

The ANM is a worker who is most directly in touch with the community. The ANM is expected to implement a range of programs and her duties range from conducting the community needs assessment to conducting delivery at the subcenter or at home. Community or field level outreach is the responsibility of the ANM. She also provides preventive, promotive, and selected curative services for safe motherhood, child health, immunization and family planning. Her duties include education, motivation, counseling and service provision.

ANMs receive an initial 18-month training then subsequently supplemented by in-service training, often focussed on additional duties. Over the years, the training program of ANMs has moved from being knowledge-based to a hands-on, skill-building approach.

In an observational study of ANMs conducted across the country, where services were graded-excellent (>75% of subtasks performed well), satisfactory (50% -75% of tasks well done) and poor (50% of tasks well done)-none of the ANMs performed excellent in any of the major services (ANC, delivery, prenatal care, immunization and contraception) (Rangarao 2003). The stress on achieving sterilizing targets left them with little time to attend to their other duties. Outreach services are uneven and often only to houses close to the road, or in the vicinity of subcenter or anganwadi center. The ANM has to maintain thirteen registers and submit seven reports to the PHC. Supervision is focused on the reports and little other support is provided. The Lady health Visitor (LHV)/health assistant female is expected to support the ANM. However, her own lack of professional competence and the high priority accorded to records and

achievement of family planning targets have rendered her more on an administrative supervisor than a clinically competent paramedical provider who can support the ANM in her day-to-day clinical duties.

Overburdening of the ANM has been a consistent finding in several studies. Lack of physical infrastructure, equipment and basic amenities at the subcenter are major reasons for the low motivation and absenteeism among ANMs. The majority of subcenters do not have the facility for storing vaccines. Unless the ANM has a vehicle or suitable trasnport facility, she spends the better part of the day in going to the PHC, obtaining a supply of vaccines and then travelling to the habitation/ village. Even assuming that the distance from the subcenter to the PHC is about 5 kilometers, lack of adequate transport and weight of the supplies (estimated to be about 15 kg for the essential equipment required to conduct ANC and immunization) make the task difficult. It is clear that there is no time to conduct village-level education sessions or house to house visits for newborn and postnatal care.

ANM shoulders more than a fair share of her burden since the workload has not decreased. Now DOTS and Leprosy MDT and many other work also imposed on them because of integration of various health programs under NRHM.

Multi-Purpose Worker (Male)

As per the norms, each sub-center is required to be manned by a trained female and a trained male health worker. This scheme was started in 1978 in which uni-purpose workers were trained to do multiple works. The candidates who had passed 10th standard were recruited and trained for one year. This scheme was 100% centrally sponsored.

Village level

One village health guide and one trained dai or traditional birth attendant (TBA), selected from the community are voluntary workers. These two village level functionaries are not regular government employees. The Village Health Guides initially worked under the Community Health Workers Scheme launched in 1977 which was renamed as Village Health Guide (VHG) Scheme in 1981. It is 100% centrally sponsored scheme under Family Welfare Program. He/she provides health education and creates awareness on MCH and family welfare services. He/she also provide track of communicable diseases and treat minor ailments and provide first aid to the patients. Dai and VHG receive technical support and continuing education from the multipurpose health workers posted at the sub-center. At present at the village level Accredited Social Health Activist (ASHA) has been posted under the National Health Mission who acts as the link between people and subcenter staff. From the center village health guide and trained dai schemes are abolished. Anganwadi Worker is not the part of health department and comes under Ministry of Women and Child Development however, she also play a significant role in healthcare delivery.

Health Human Resource in India

There is a wide range of health workers in India's health workforce which includes formal and informal medical practitioners. In 2013 India has 918303 allopathic doctors and 686319 AYUSH (Ayurveda, Yoga and naturopathy, Unani, Siddha and Homoeopathy) practitioners. This gives the average of 1331.43 population served by allopathic doctor and 1782.8 by AYUSh doctor. If we combined then it is 762.53 population served by either of allopathic or AYUSH doctor. There are 643301 pharmacists, and 231827 dentists. There are 726557 ANM, 1562186 Registered Nurses and 55498 LHV. More than 70% allopathic doctors are working in private sector.

Recent data from Rural Health Statistics Report (2015) indicates that 8.1% of the PHCs were without a doctor, 38.1% were without a lab technician and 21.9% were without a pharmacist. The position of CHC with respect to human resources is even poorer as out of the sanctioned posts, 74.6% of surgeons, 65.4% of obstetricians & gynaecologists, 68.1% of physicians and 62.8% of pediatricians were vacant. Overall 67.6% of the sanctioned posts of specialists at CHCs were vacant (Health Statistics of India 2015). Workforce Indicators and Staffing Need (WISN) approach that calculates the expected demand a package of services should generate, found significant gap in supply of health workers across all categories in Ganjam district of Orissa and estimated a need of additional 43 physicians, 15 nurses and 80 nurse midwives (Hagopian A 2012).