REPORTS OF THE WORKING GROUP ON HEALTH

FOR

THE ELEVANTH FIVE YEAR PLAN (2007 – 2012)

VOLUME NO. 4

GOVERNMENT OF INDIA
PLANNING COMMISSION
2006

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Financial Requirement

Proposed Outlay for the XI Five Year Plan Period (2007-012)

In Respect of :

1. Scheme : Strengthen of Health Information and Monitoring Systems

2. Telemedicine (Scheme yet to be proposed by Union MOHFW/GOI)

2.7 **External Quality Assurance System :**

There is limited availability of institutions who have capacity and/or experience of conducting EQAS of laboratory services. It was decided to engage NICD, Delhi, NIV, Pune, NICED, Kolkata and CMC, Vellore to share the responsibility. CMC Vellore was given the responsibility to work out detailed proposal. This has been submitted and being examined.

2.8 **Monitoring of the Project through Regional Coordinators**

"Expression of Interest" was sought for Monitoring of Project through six Regional Coordinators to be posted at Chandigarh, Bhopal, Bangalore, Gandhinagar, Kolkata and Guwahati. 22 organisations had expressed interest. Six agencies were short-listed. After seeking clearance of the World Bank, RFP was issued to the six agencies. Proposals have been received on 21st March 2006 and evaluation of the proposals has been initiated. Report would be submitted by April 2006.

2.9 **Participation of Private Sector and Medical Colleges in IDSP**

A Workshop was organized in April 2005 in Bangalore to discuss strategies for involvement of private sector. A task force was constituted to develop scheme for involvement of private sector in disease surveillance. A scheme including MOU was prepared and forwarded to Indian Medical Association and Indian Academy of Pediatrics, who have agreed to facilitate participation in IDSP. Four Orientation Workshops of key members of these associations were planned of which two have been organized in Delhi and at Thiruvanthapuram. Third workshop is being organized in Mumbai on 16th April 2006. Scheme for participation of medical colleges has been prepared and forwarded to the States and other stakeholders.

2.10 **NCD Risk Factor Surveillance**

The Working Group was constituted for development of protocol for NCD Risk factor Surveillance. After several meetings, Study design and Sampling has been worked out. Questionnaire to be used during the surveys has been finalized and being pre-tested. Terms of reference for National Nodal Agency, Regional and State level Institutions have been forwarded to the World Bank for clearance. Surveys would be undertaken after awarding the contract.

2.11 **Satellite Communication** :

EDUSAT, a dedicated educational satellite launched by ISRO is being utilized to set up communication and information network throughout the country. Central studio at National Institute of Communicable Diseases with a sub-hub in Nirman Bhawan and 800 Satellite Interactive Terminals (SITs) located throughout the country would be set up connecting all the State and Districts Units, Medical Colleges and premier state and national public health institutions. Proposal has been submitted to the World Bank for clearance. This network will be utilized for distance training programmes, teleconferencing and data transmission. Funds have been sanctioned from IDSP Budget for 2005-06 to ISRO to cover 400 SITs by June 06. Remaining 400 SITs would be covered during 2006-07 and covered by December 2006. Satellite Linkage would be formally launched on 29th March 2006.

2.12 Information, Education & Communication

2.12.1 Guidelines, Operations Manuals and Reporting Formats

For an effective surveillance system, case definitions, operational procedures, reporting formats etc. have been standardized by publishing and disseminating following formats :

- Operations Manual for District Surveillance Units
- Operations Manual for Medical Officers and Private Practitioners
- Operations Manual for Health Workers
- Laboratory Manual on Disease Surveillance
- Training Manual for District Surveillance Teams (Rapid Response Teams)
- Manual on Financial Management
- Standard Reporting Formats and Guidelines for their use
- Guidelines on Utilization of grant-in-aid
- Brochure/Executive Summary on Integrated Diseases Surveillance Project
- National Project Implementation Plan

A manual on Laboratory Techniques has also been developed by National Institute of Communicable Diseases and would be used in the Project. Separate Manuals for Lab Technicians posted at PHCs/CHCs and Manual on Bio-safety have been drafted and would be published and disseminated.

2.12.2. Medical Agency

"Expression of Interest" was sought for selecting Media Agency at the central level. 18 organizations had expressed interest. EOI are being assessed and short-listing would be completed by 15th April 2006.

2.12.3. Alternate approaches of communication

A proposal to capture information through alternate means of communication has been prepared to capture information regarding focal out-breaks in the country through scanning of newspapers and tele-news and by supporting Toll Free telephone services. Details are given at **Annexure 4.**

2.13 PIP from Phase-II States

State PIPs have been received from all Phase-II States/UTs (Haryana, Goa, Gujarat, Chhattisgarh, Rajasthan, Nagaland, West Bengal, Manipur, Orissa, Tripura, Pondicherry, Meghalaya, Chandigarh and Delhi). MOU is awaited from Meghalaya. First instalment of GIA has been released to the states, who have submitted MOUs. Orientation workshops have been organized by Gujarat, Haryana, Chhattisgarh.

A Workshop was organized in October 2005 to orient Phase-III states about preparation of State PIP. It is expected to get PIPs from remaining states early during the year 2006-07.

2.14 Prevention & Control of Avian Influenza

Following the outbreak of Avian Influenza in chickens in Maharashtra and Gujarat, two meetings were held with the officials from the World Bank. A draft Project Implementation Plan on Surveillance Prevention and Control of Avian Influenza in India.

3. BUDGET ALLOCATED & UTILIZED

Since inception of the Project, Rs.810 million has been allocated for IDSP and additional Rs.1020 million is available during 2006-07 as indicated below:

(Rs. in million)

Year	BE	RE	Utilization
2004-05	300.00	260.00	250.10
2005-06	880.00	550.00	487.30
2006-07	1020.00		

3.1 Component wise utilization :

Funds allocated for the project are utilized under three main Heads

i. **Central level activities** : these include Training of Trainers, Surveys and Studies, Monitoring & Review, Consultancy services and Operational expenses by CSU.

ii. **Grant-in-aid to States** : Funds are released to State Surveillance Units through identified societies for utilization at the State level and distribution to District Surveillance Units. These funds are utilized on renovation & furnishing, procurement of minor equipment and consumables, training of personnel, IEC activities, personnel cost and operational expenses. A separate Head is meant for NE States of the country.

iii. **Commodity Assistance** : Major laboratory, office and IT equipment and some consumables are procured centrally through ICB/NCB and supplied to consignees identified by the States.

Funds utilized for the above three components during last two years are summarized below :

(Rs. in million)

Year	Component	Expenditure	Percent
2004-05	Central level activities	11.1	4.4
	Grant-in-aid to States	227.9	91.2
	Grant-in-aid to NE States	11.1	4.4
	Commodity Assistance	0.00	0
	Total 2004-05	**250.1**	
2005-06	Central level activities	39.8	8.2
	Grant-in-aid to States	299.7	61.2
	Grant-in-aid to NE States	41.5	8.5
	Commodity Assistance	106.3	21.8
	Total 2005-06	**487.3 ***	

* Expenditure incurred/committed upto 20th March 2006

3.2 Budget Allocation for 2006-07

Allocation for 2006-07 has been substantially raised to expedite implementation of the project. Provisional break-up of budget is given below :

Component	Amount (Rs. in million)
Central level Activities	
Salaries of Incremental Staff	3.500
Domestic Travel Expenses	2.000
Training at Central Level	2.500

Central Level IEC	5.000
Consultancy : Procurement, Software Development and Baseline Surveys	130.000
Operational Cost	7.000
Sub-total (Central Activities)	**150.000**
Assistance to States	
GIA to State Societies for various State/District Level activities	400.000
GIA to Societies for North-Eastern States for various activities	90.000
Commodity Assistance Lab/Office equipment, Computer hardware/software	380.000
Sub-total Assistance to States	**870.000**
Total Budget for 2005-06	1020.000

3.3. **Disbursement Status:**

Claims for reimbursement of expenses have been submitted to CAAA to the extent of Rs.13 million covering the period upto September 2005. Application for further claim of approximately Rs.11 million is under preparation and will be submitted to CAAA shortly.

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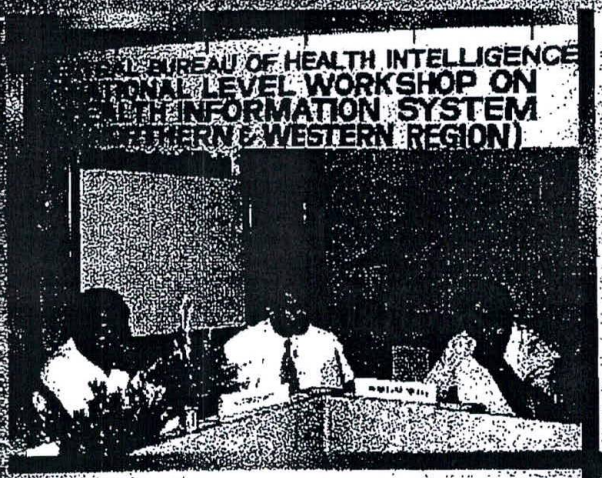
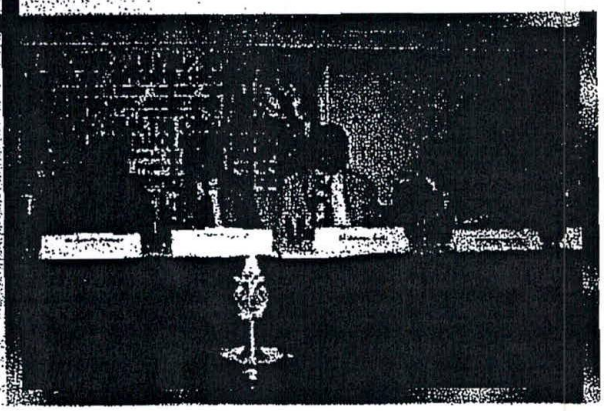
Annexure-II

Regional Workshops for Improving and Strengthening Health Information System



Combined Report and Recommendations



August 2004

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Regional Workshops for Improving and Strengthening Health Information System

Northern and Western Regions
New Delhi : 28-29 August, 2002

Southern and Central Regions
Bhopal : 8-9 May, 2003

Eastern and North Eastern Regions
Bhubaneswar : 22-23 January, 2004

Follow up Workshop
New Delhi : 7 April, 2004

COMBINED REPORT & RECOMMENDATIONS

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Dated 30th August, 2004

FOREWORD

The health data originate from the periphery levels and flow upward to District, State and Central levels. The Central Bureau of Health Intelligence (CBHI) is the national nodal institution for health statistics in the country. Similar nodal division is essential to be established by each State/UT in their respective Health & Family Welfare Directorates.

In order to facilitate national updated health database, CBHI regularly collects health information from the Directorate of Health & Family Welfare Services of States/ UTs and other source agencies. For improving and strengthening health data collection from the States/ UTs and electronic health data transmission through e-mail (dircbhi nb.nic.in), CBHI through four regional workshops had closely interacted with all States/UTs.

These workshops deliberated in detail on the issues and constraints influencing the health information system and through this report have come out with important recommendations towards its efficient functioning at all the levels of health care delivery. The sincere efforts on parts of all the States/UTs and various concerned organizations in prompt implementation of these recommendations will go a long way for achieving our National Health Goals.

(S.P. AGARWAL)

EXECUTIVE SUMMARY

Central Bureau of Health Intelligence (CBHI) is the national nodal Institution for Health Statistics in the country. The Directorates of Health Services of States/UTs are the primary source agencies for health data and responsible for its transmission to central level. In order to improve and strengthen health data collection & flow from States/UTs to CBHI, a series of regional workshops were conducted with the **objectives to suggest** :

(1) to improve & strengthen the timely flow of validated requisite health information from States/UTs to CBHI as well as to enhance the linkages.
(2) to improve & strengthen the infrastructure, both, physical and functional for efficient Health Information System from periphery through State/UT.
(3) for computerized Health Information System by the States/UTs and timely health data dispatch to CBHI through electronics means.
(4) for improving the annual CBHI publication "Health Information of India "in terms of need for including new data series, modifying present data series and presentation as well as requirement for new publication(s) on relevant health related aspects.
(5) for strengthening the use of ICD-10 for morbidity & mortality coding by all medical/health care facilities in the States /UTs, and
(6) enhanced efforts of States /UTs towards optimal utilization of CBHI's in-service training programs for better human resource development and capacity building for efficient health information system.

Four workshops were organized in order to cover all States/UTs viz (i) Northern & Western Region, 28-29 August 2002 at YMCA New Delhi, (ii) Central and Southern Region, 8-9 May 2003 at Academy of Administration, Bhopal, (iii) Eastern and North Eastern Region, 22-23 January 2004 at Bhubaneswar and (iv) Follow up workshop for all those states/UTs which could not attend earlier workshops, 7th April 2004 at Dte GHS, Nirman Bhawan, New Delhi.

Each Workshop programme included Registration and Inaugural Session, Plenary Technical Sessions wherein the problems in data receipt from States/UTs faced by CBHI, introduction to website of CBHI and presentations by States/UTs about their health information system & its functioning etc. were made and deliberated. Subsequently the groups discussions were held towards the workshop objectives and their reports were thoroughly discussed during the plenary session leading to finalisation of the recommendations.

Besides the representatives from the States/UTs, these workshops were attended by senior officers & experts from Dte GHS, Department of Family Welfare, the Registrar General of India, WHO, National Informatic Centre (Central & State), Central Statistical Organisation (CSO), Planning Commission, National Health Programmes, Institute for Research in Medical Statistics (ICMR), Medical Record Officers of state Hospitals and officers of CBHI.

Twenty one major recommendations as emerged on the six broad objectives of workshop are summarized in the next chapter. It could be seen that most of these recommendations are feasible to be implemented immediately while a few like establishment of an equipped State /UT & Distt. Health Statistic cells and computerization of Medical/Health Information system need to be initiated now so that they can be possibly implemented in due course with appropriate planning and resource mobilization.

Major Recommendations

I. To improve & strengthen the timely flow of validated requisite health Information from States/UTs to CBHI as well as to enhance the linkages

1. While prioritizing Efficient Health Information System (HIS), to begin with the existing State/UT health statistics unit in health directorate be strengthened with an identified nodal officers, trained personnel and computer so as to effectively coordinate for validated health data base & capacity building in State/UT & closely link with CBHI. Subsequently make efforts for establishing a dedicated State/UT Health Statistics Division, equipped with adequate infrastructure This Division be responsible for efficient HIS, validated health database of the State/UT, monitoring & evaluation as well as capacity building, while keeping close linkages with CBHI and various reporting unit within the State/UT.
(Action : States/UTs)

2. States/UTs to punctually and regularly send the consolidated and validated weekly, monthly, annual reports to CBHI on the prescribed formats. Even 'Nil' report is required timely.
(Action : States/UTs)

3. All the Regional Offices for Health & Family Welfare of GOI also need to further strengthen their supportive and coordinating roles with the State/UT Health Directorates for facilitating timely submission of validated data by States/UTs to CBHI as well as their capacity building for efficient health information system.
(Action : ROHFW/GOI and CBHI/DteGHS)

4. Central & State/UT Governments may bring an act for compulsory registration of all private / non govt. medical institutions and practitioners with the State/UT Government and mandatory for them to furnish medical/health reports to appropriate Govt. Health Facility in their vicinity. (Action: Centre and States/UTs)

5. For better linkages, communication & capacity building, CBHI may hold review-meetings and workshops with States/UTs at appropriate intervals. (Action : CBHI)

6. The existing CBHI formats for sending health information by States/UTs should be reviewed for their further simplification while avoiding duplication and redesign them as per present need, with definition of the key terminologies used. (Action : CBHI)

II. To improve & strengthen the infrastructure, both physical and functional, for efficient Health Information System from periphery through State/UT

7. At district level, Chief Medical & Health Officer is responsible for all health statistical activities under whom the existing Distt. Health Statistics cell be strengthened on priority basis and efforts be initiated to equip this cell with a dedicated trained officer as its incharge and a Group C staff oriented in computer operation and atleast one computer with accessories. This Distt. Health Information Unit can then coordinate for efficient health information system in the district, including on the spot supervision and related capacity building of PHCs & other Medical/Health units in the district.
(Action: States/UTs)

8. An expert group to review and suggest an appropriate Health Information System (HIS) from subcentre to district to state level with reference to the contents of records/registers, data recording, their validation, appropriate reporting and analysis for timely corrective measures at various levels. A manual to this effect needs to be prepared and shared for better understanding and uniformity of HIS at all levels and by all concerned authorities/ agencies.

(Action: CBHI and States/UTs)

9. At PHC/CHC/Dispensary level, the medical officers and health supervisors should be oriented to health data management through continued supportive supervision and wherever necessary through in service training program organized by State(s)/UT, CBHI and other Institutions. A close coordination with all the existing govt./non govt. health institutions in respective jurisdiction will ensure maximum coverage of health & medical data with requisite quality & timeliness.

(Action: States/UTs)

10. To strengthen Health Information System at Sub-centre/PHC/CHC Level, the State/UT may ensure the full compliment of Multipurpose H.W. (Male & Female), Health Supervisor, Doctors and other supportive staff as per GOI norms with their specified responsibilities and continued supportive supervision

(Action: States/UTs)

11. At the Sub centre level the non-availability of formats/registers needs be taken seriously and the State/UT may ensure their adequate supply & timely replenishment.

(Action: States/UTs)

III. For Computerized Health Information System by the States/UTs and timely health data dispatch to CBHI through electronics means.

12. Validated and authenticated health data should be transmitted by States/UTs to CBHI through electronic media (**e-mail:** dircbhi@nb.nic.in) with immediate effect as all the States/UTs have been sensitized to this effect by CBHI during 2003-04 and computerised data entry formats of CBHI are already available in CBHI **website** (cbhidghs.nic.in) for this purpose.

(Action: States/UTs)

13. The data collection for CBHI may be done through computerized formats to be made available on the Internet. Necessary on-line and off-line systems may be designed in order to automate this process and NIC's expertise may be used for designing appropriate systems including databases. NIC's connectivity in districts and states can enable on-line updation as well as transmission of data electronically.

(Action: CBHI & NIC)

14. Like CBHI has developed a central website for health information, the States/UTs may also initiate efforts to develop similar websites along with district specific health information, while utilizing the available expertise of state & districts NIC units.

(Action: States/UTs and State/Distt. NIC)

15. States/UTs may initiate steps towards computerizing the Hospital Information System in a phased manner to begin with state/regional level hospitals. This will facilitate efficient hospital database on morbidity & mortality based on ICD-10, essential for District/State/National Statistics on morbidity & mortality.

(Action: States/UTs)

IV. For improving the annual CBHI publication "Health Information of India" in context of need for including new data series, modifying present data series and Presentation as well as requirement for new publication(s) on relevant health related aspects.

(Action: CBHI)

16. The Annual Publication "Health Information of India (HII)" with latest/updated information be brought out within six months of the following calendar year and for this purpose all the States/UTs and other reporting units should furnish requisite updated information to CBHI positively within three months following the calendar year. The presentation of HII may be improved in context of well-designed cover/back pages, quality of inner pages, their printing and contents with relevant analysis wherever necessary.

17. Following new health data series are suggested to be included in CBHI publication "HII":

(i) Morbidity and Mortality due to trauma/road traffic accidents, disaster/natural calamities.

(ii) Incidence/prevalence as well as estimation of important non-communicable diseases such as diabetes and hypertension, based on sample survey through NSSO &/or other such agencies.

(iii) Data on age, sex & disease specific mortality rates.

(iv) State/UT specific innovative schemes for the welfare of people like in Madhya Pradesh "Rogy Kalyan Samiti, Jan Swasthya Rakshak Samiti and State Illness Fund".

18. CBHI may bring out publication on; (i) Information on hospitals for specialised treatment including facilities available, cost thereon etc., and (ii) Directory of Health Research Organisations, including National Surveys in health and related subjects, along with brief on their contributions.

V. For strengthening the use of ICD-10 for morbidity & mortality coding by all medical/health care facilities in the States /UTs.

19. ICD-10 coding system be implemented throughout the country for comparison at both, national and international levels and the use of ICD-10 be concurrently monitored by hospital administration for timely corrective measures at various levels, including meeting the ICD-10 trained manpower needs

(Action: States/UTs)

20. Both, CBHI and States/UTs should design and initiate appropriate training course on ICD-10 for human resource development/capacity building at all levels, instead of presently run long (5 weeks) course on Medical Coding. WHO may support CBHI for training of master trainees on ICD-10 from all States/UTs. Only trained personnel should be kept for efficiently handling the medical & health records.

(Action: CBHI, States/UTs and WHO)

VI. **Enhanced efforts of States /UTs towards optional utilization of CBHI 'In-Service Training programs for better human resource development and capacity building for efficient Health Information System.**

21. States/UTs may ensue all measures to fully utilize the in-service training programs of CBHI on Health Statistics and Medical Coding (ICD-10) as well as Medical Record Management, being organized for various categories of medical/non-medical staff involved in handling medical/health data, for which purpose CBHI communicates its annual training calendar well in advance to all States/UTs. For this purpose, every State/UT should prepare district wise inventory of such training needs, people trained and remaining to be trained and utilize this inventory for promptly recommending the names of untrained personnel to various CBHI in-service training courses.

(Action: States/UTs and other agencies requiring training of their staff)

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Annexure - III

Government of India

Improving and Strengthening the use of ICD 10 and Medical Record System in India

A Case Study (2004 & 2005)

Report and Recommendations

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FOREWORD

The International Statistical Classification of Diseases and Related Health Problems 10th version **(ICD 10)** is the international standard prescribed by World Health Organisation. Countries need to adopt and implement this classification so that the morbidity & mortality databases are comparable within the various region/states of the country and between countries of region/world. Such reliable information are essential for meaningful conclusion on the health status of the population and for planning the development of facilities for medical and health care and their efficient functioning. ICD 10 coding was introduced by WHO in the year 1993 and India adopted the same in the year 2000. India is to move alongwith the other countries of world. **CBHI's** continuing efforts to promote use of ICD 10 will yield results only if all the medical & health authorities decide to implement ICD 10 and work towards it.

A case study on ICD 10 involving 20 Delhi & Rohtak hospitals belonging to various management categories, as undertaken by Central Bureau of Health Intelligence (CBHI) with the WHO Biennium 2004-2005 support is an appropriate effort in this direction. This case study involved the Medical Record Officers, heads of Medical Record Departments, Medical Superintendents of the hospitals and other administrative authorities. These officials and authorities who were oriented on the importance of implementing ICD 10, committed to provide the requisite support and logistics to the Medical Record Departments for efficient use of ICD 10 coding system. Through workshops, review meetings and visits to the medical establishments during this case study; the issues and constraints influencing the use of ICD 10 were identified and deliberated in detail on their feasible solutions. This study has come out with valuable **recommendations** for improved use of ICD 10 as well as strengthening the Medical Record Departments in the country.

Implementation of ICD 10 system necessitates continued sincere efforts in the form of orientation training programmes and computerized Medical Record System Departments in all medical & health institution. From 2005 onwards, CBHI has taken the important initiatives of conducting short term national level Orientation Training Courses on ICD 10. CBHI has also developed a Module and Workbook for Orientation Training on ICD 10 which serves as a handy self learning material for all concerned medical, nursing & paramedical personnels.

I hope that all the concerned medical & health authorities of various states/UTs as well as medical/health institutions will make every effort to efficiently implement the recommendations of this case study.

(Dr. R.K.Srivastava)

EXECUTIVE SUMMARY

Hospital records coded uniformly using ICD 10 form a vast data base and conclusions drawn on the processed data are extremely important for understanding the public health situation of the country. World Health Organisation (WHO) brought out the 10th version of International Statistical Classification of Diseases and Related Health Problems (ICD 10) in 1993 for systematic coding of morbidity and mortality causes in the medical records of medical/health institutions. India adopted this classification in the year 2000. Five years have gone by since the adoption of ICD 10 in India and evaluation of the implementation and use of ICD 10 by the Medical and Health Institutions needed to be done, in order to examine the extent of use of ICD 10, various problems, constraints and bottlenecks experienced and to come out with a model for improving and strengthening the use of ICD 10 and Medical Record System in the country and to assess the practical training needs and identify the processes which need to be initiated / speeded up to gear up the proper use of ICD 10. For this purpose, CBHI undertook a case study of 20 hospitals in Delhi and Rohtak under the ageis of WHO/GOI Biennium 2004 and 2005.

This case study of 20 hospitals in cities of Delhi and Rohtak spanning over the various management categories such as Central Government, State Government, Local Bodies and Private Sector consisted of the following well thought of initiatives :

1. Workshop of key trainers on ICD 10 from cities of Delhi and Rohtak (New Delhi : 21-23 July 2004)
2. First Review Meeting of key trainers on the action plan and efforts made to improve and strengthen the use of ICD 10 and identification of the major constraints and technologistic requirements (New Delhi : 03 September 2004)
3. Visit of experts to the study hospitals for on the spot assessment on the status as well as techno-operational and administrative constraints in the use of ICD 10 (11-14 October 2004)
4. Second Review meeting of Key Trainers on ICD 10 and the Incharges of Medical Record Department to review the implementation of the action plan for improving the use of ICD 10 and strengthening the medical record system (New Delhi : 17 November 2004)
5. Review Workshop of key trainers on the major actions undertaken in order to improve the regular use of ICD 10 as well as to strengthen the MRD in the hospital (New Delhi : 25 January 2005)

The workshop of key trainers on ICD 10 was conducted during 21-23 July 2004 *at conference room of YMCA New Delhi. In this workshop,* **Medical Record Officers/Officials of 20 study hospitals from Delhi and Rohtak (Post Graduate Institute)** participated. These hospitals belong to various management categories such as Centre, State, Local Bodies and Private Institutions. During this workshop, the participants were introduced to - ICD 10 rules for morbidity and mortality coding and experiences of ICD 10 use in South East Asia Region. Through group work and self work sessions, the measures for improving and strengthening the use of ICD 10 in each hospital were discussed and the participants drafted the hospital specific action plan, logistics and support requirements for efficient use of ICD 10. Resource persons were

drawn from World Health Organisation Country Office, South East Asian Regional Office of World Health Organisation (SEARO), Ministry of Statistics and Programme Implementation, All India Institute of Medical Sciences, Office of Registrar General of India (RGI), Maulana Azad Medical College (MAMC) and State Bureau of Health Intelligence (SBHI), New Delhi.

The follow up first review meeting of all those **representatives from 20 study hospitals who participated in the July 2004 workshop,** was held on 3rd Sept. 2004 at Resource Centre, Dte.GHS/GOI, Nirman Bhawan, New Delhi wherein the participants made presentations on the efforts made towards the use of ICD 10 and/or its further improvement in the Hospitals, major problems and constraints experienced (with feasible solutions) to operationalise and/or improving use of ICD 10 and further support and logistics required from Hospital Administration and CBHI for ensuring better use of ICD 10 in the hospitals. During the afternoon session, the participants were taken to Indraprastha Apollo Hospital, New Delhi for demonstration of computerized system of coding and maintaining medical records. The ICD 10 (3 volumes) were provided to all those hospitals which did not have the same in their Medical Record Departments (MRD). Also, a self work in three groups on "Action plan, logistics and support requirements for efficient use of ICD 10 in their hospital and suggestion in workbook on ICD 10 training were done. Experts and resource persons were from MAMC and office of RGI.

Subsequently the **6 hospitals of the case study** where no coding system of Medical Records was being used were visited by CBHI officers during 11-14 October 2004 for on the spot assessment and discussions with hospital authorities and MRD officials. The very purpose of this visit was to recognise the constraints and problems which were preventing the Medical Record Department of the hospitals from effectively using ICD 10 coding in the Medical Records/System. Also, the current status on the use of ICD 10 and their further plans on its implementation were discussed. Suggestions were given by visiting CBHI officer to the Medical Record Department officials for effective use of ICD 10 in the hospital.

The **2nd review meeting on implementation of ICD 10 of** these 20 hospitals was held on 17th November 2004 (1000-1800 hrs) in Conference Room of NIHFW, New Delhi. During this 2nd review meeting, **the medical officer/authority incharge of Medical Record Deptt. from 20 study hospitals** were also invited alongwith the Medical Record Officials who participated in the earlier workshop and review meeting. The efforts made by the hospital authorities for implementing ICD 10 and action taken to handle major problems and constraints and further support and logistics required from hospital authorities and CBHI for ensuring continued use of ICD 10 were discussed, which was followed by self work session in which each hospital identified specific issues requiring further attention for coding the morbidity and mortality records according to ICD 10 and prepared hospital specific action plan to address these issues. The "ICD 10 (3 volumes)" on CD-ROM were provided to all the Govt. hospitals for facilitating the use of ICD 10.

As already planned, in the final stage of this case study on ICD 10 , review and concretization of the actions undertaken by the hospitals was done in order to come out with a model to improve and strengthen the use of ICD 10 in the country. The review

workshop was organized on 25th January 2005 (0930-1730 hrs) at India Habitat Centre, New Delhi, wherein the (i) **hospital authorities viz. Medical Superintendents and Medical Officer Incharges of Medical Record Departments of the 20 study hospitals from Delhi and Rohtak, (ii) administrative authorities of Govt. under which these hospitals function viz.** DHS of NCT of Delhi, Medical Officer of Health from MCD and NDMC, (iii) Director Medical and Health Services of Railways and ESI, (iv) Director CGHS/Dte.GHS, as well as (v) experts from WHO and various partners i.e. RGI, Ministry of Statistics and Programme Implementation, Medical College(s), concerned authorities for MOHFW and Dte.GHS/GOI, deliberated and made far reaching recommendations for improved use of ICD 10 in future.

The Proceedings of the individual workshops and review meetings are attached as Annexure I, II, III, IV and V respectively. The copies of Technical Presentations are also annexed. Major recommendations as emerged during the deliberations of the different activities of the case study are summarized in the next few pages. The implementation of these recommendations will definitely result in improved use of ICD 10 in the medical/health institutions across the country.

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MAJOR RECOMMENDATIONS

A. Essential use of ICD 10

1. All Government and Private health and medical institutions in the country should essentially use ICD 10 in their records and reports and the same should be ensured by all concerned authorities through well designed guidelines, directives and continued monitoring.

[Action : Centre and States/UTs]

2. All medical and health institutions, including hospitals of any size, in the country should equip themselves with WHO publication on ICD 10 (3 volumes) as a reference and ICD 10 codes relevant to each medical specialty be prominently made available in concerned wards in the hospitals. No medical record should remain without ICD 10 code for the diagnosed disease.

[Action : Centre, States/UTs and Respective Medical and Health Authorities]

3. CBHI should be appropriately further strengthened and equipped to efficiently function as National Nodal Institute on ICD 10 with the objective of further strengthening use of ICD 10, its continuous monitoring, evaluation and capacity building including creation of Master Trainers.

[Action : CBHI]

4. WHO may consider setting up of WHO Collaborating Centre on Family of International Classification of Diseases and Related Health Problems for SE Asia Region, on priority basis, at CBHI, Dte. General of Health Services, Govt. of India, New Delhi

[Action : WHO and CBHI]

B. Manpower Capacity Building for ICD 10 Use

5. All State/UT authorities should formulate a plan for regular orientation training on the use of ICD 10 and every medical and health institution should make efforts to keep their medical/nursing/paramedical staff duly oriented on ICD 10 through well drawn and regularly conducted Orientation Programs in their institutions.

[Action : States/UTs and Respective Medical & Health Authorities]

6. The syllabi and curricula of undergraduate and postgraduate medical as well as paramedical courses in India should appropriately cover the teaching on ICD 10 and its appropriate use.

[Action : All concerned Councils]

C. Operational Plan for implementation of ICD 10, its Monitoring and Evaluation

7. States/UTs should set up a task force for time-bound implementation and monitoring of ICD 10 use. They should maintain a database of various medical and health institutions using/not using ICD 10 and ensure that all these institutions use ICD 10.

[Action : States/UTs]

8. WHO may develop offline software package for ICD 10 coding of disease nomenclatures and provide it for its use in various medical/health institutions in India. Computerised user manual/self learning module for ICD 10 may be prepared and circulated through website of CBHI. Further, online help and a newsletter on ICD 10 aspects may be established through CBHI website. CBHI should make an inventory of all such vendors which are involved in designing the health information system using ICD 10 and share the list with States/UTs for getting the institution specific hospital information system designed through a suitable agency.

[Action : CBHI and WHO]

9. Directives need to be issued from heads of the medical/health institutions to all concerned Medical/Nursing/Paramedical personnel of all departments in the medical/health institutions for ensuring completion of medical records of both outpatient and inpatient departments, and for clearly writing diagnosis using standard medical terminology, while avoiding the abbreviations.

[Action : States/UTs and Respective Medical and Health Authorities]

10. Data on morbidity/mortality based on Medical Records should be regularly compiled, analysed and should form the part of various documents/reports of the medical/health institutions including their annual report.

[Action : States/UTs & Respective Medical and Health Authorities]

11. There should be regular visits / interaction by CBHI to facilitate the speedy implementation of ICD 10 in the States/UTs.

[Action : CBHI & States/UTs]

D. Strengthening Medical Record Unit/Department and Computerised Medical Record System

12. The medical record system in each medical/health institution should be computerized with appropriately designed software for both outpatient and inpatient records, while using meticulously designed formats, local area network as well as internet facility in all the departments/wards of the medical/health institution.

[Action : States/UTs and Respective Medical and Health Authorities]

13. The medical record department in each medical/health institution should be given highest priority and be headed by a senior level expert/officer of the same rank as in other existing technical departments in the same institution. The medical record department should be equipped with requisite number of trained personnel of different categories like medical record officer, Dy. Medical Record Officer, Assistant Medical Record Officer, Sr. Medical Record Technician, Medical Record Technician and other support staff in order to efficiently handle and manage the medical record system of the institution. The standardized staffing pattern of medical record department, keeping in view the bed strength in an institution be worked out by the concerned State/UT authorities and medical record departments in various medical and health institutions be equipped accordingly.

[Action : States/UTs and Respective Medical and Health Authorities]

14. All the technical functionaries in the medical record department be trained through the prescribed training programmes and such training personnel should not be diverted to other departments. The contribution of medical record department functionaries in any of the research papers be duly acknowledged.

[Action : States/UTs and Respective Medical and Health Authorities]

15. There should be clear guidelines for period of retention of medical records for both outpatient and inpatient departments and after the said period, they must be destroyed. This will provide adequate space for the records.

[Action : States/UTs and Respective Medical & Health Authorities]

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Govt. of India
Min. of Health & FW
Dte. General of
Health Services

Health Sector Policy Reform Options Database (HS-PROD)

"Sharing innovative solutions to common health management problems"

Central Bureau of Health Intelligence (CBHI)

What is HS-PROD?

HS-PROD is a user friendly, state-of-the-art website which shares information about Indian good practice and innovations in health services management. An instantly accessible library of reform materials, it provides a summary of each option/scheme and links to more details source documents. The aim is to share reform know how to tackle common management problems in the health sector. HS-PROD currently contains carefully researched entries, in respect of 16 major Health Sector Areas as given below and the database is expanding rapidly:

(1) **Infrastructure and equipment**
(2) **Logistics**
(3) **Financial management systems**
(4) **Monitoring, evaluation and quality control**
(5) **Public/private partnership**
(6) **Management structures and systems**
(7) **Social marketing and franchising**
(8) **Health information systems**
(9) **Intersectoral links**
(10) **Access to service and coverage**
(11) **Health Financing**
(12) **Human Resources**
(13) **Community Participation**
(14) **Urban Health**
(15) **Behavioral Change Communication**
(16) **First Referral Units**
(17) **Others**

Who owns HS-PROD?

Developed as a collaborative initiative between the Government of India (GOI) and the European Union, HS-PROD now resides with the Central Bureau of Health Intelligence (CBHI), Directorate General of Health Services in the Union Ministry of Health & Family Welfare and is being further developed with technical support from the National Institute of Medical Statistics, Indian Council for Medical Research, New Delhi.

Who manages HS-PROD?

HS-PROD is managed by the CBHI through a broad-based management group with representatives from Government, development partners, NGO/Private Sector and experts from the fields of Public Health, Economics, Bio Statistics, IT etc. The group meets every quarter but approves each new entry added to the database concurrently.

Why was HS-PROD developed?

Many States face similar problems in the health sector but have no way of sharing their experiences or ideas with each other. They may have heard of successful schemes in other parts of the country but do not know how to get more detailed information about them.

The internet is an excellent way of promoting Indian reforms, and especially partnerships with the private sector and NGOs, both within India and worldwide.

It is an efficient and low cost means of sustaining and replicating reforms instigated by GOI, development partners and other organizations.

It has valuable potential as a learning resource for health sector reform training events and courses (HS-PROD already forms part of the professional development course in Public Health, Management and Health Sector Reform)

It fits well with the revised role of the Ministry of Health & Family Welfare in a more decentralized context.

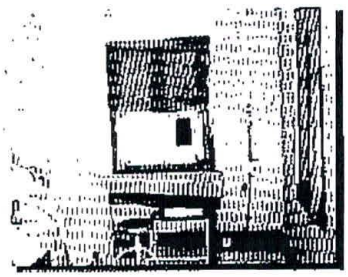
It encourages and supports convergence between sectors.

It represents an ideal tool for communicating good practices under the National Rural Health Mission (NRHM) and Reproductive and Child Health (RCH2) Programme.

It meets a need for information that is continually expressed. Feedback at State level has been extremely positive. During field visits, the HS-PROD team has been repeatedly told that this is a tool that people want and need

What information does HS-PROD contain?

Each HS-PROD entry is described in terms of concise summary, location, duration, advantages, challenges, prerequisites for implementation elsewhere (such as consultation); implementer etc. The aim is to provide up-to-date and accurate information about options or interventions, using a standard format and to organize such options systematically.

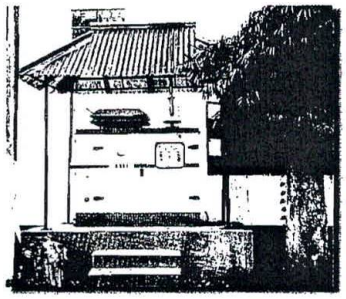


Few examples of HS-PROD entries:

Sahiya movement (community health workers), Jharkhand : more than 1000 sahiyas providing quality health care services to the needy in marginalized sections of the community, particularly women and children in remote, unreachable areas.

Corporate policy on HIV/AIDS, Larsen & Turbo, Powai, Maharashtra: orientation on HIV/AIDS awareness to over 10,000 employees, 4500 family members and 1600 local children.

Primary health care and RCH services in urban slums, Uttar Pradesh : A public-private partnership



providing primary health care and reproductive and child health services in eight identified slums of Varanasi City.

Providing round-the-clock comprehensive emergency obstetric and new born care centers, Tamil Nadu leading to a drop in maternal mortality rate by 36 percent between 2001 and 2005.

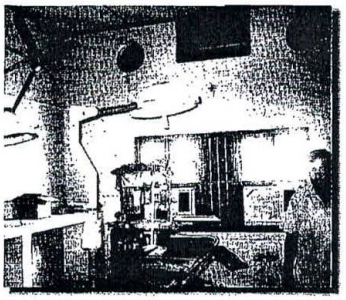
Provision of essential maternal and child health services in Tribal Areas, Rajasthan in each village a tribal woman working as a health volunteers or Swasthya Sakhis who carry out community based education & distribution and accompany women & children to health centers.

What kind of source documents can I access through HS-PROD ?

Each entry provides a basic summary of 'good practice' or innovation plus the ability to access a range of source material for those interested in more detail. The material includes Government Orders, powerpoint presentations, evaluation reports, photographs, video clips, newspaper articles and links to relevant websites. Where the source item is too big for immediate access through a hyperlink, a request can be e-mailed directly to the HS-PROD team at CBHI. The HS-PROD reference library is already a valuable and extensive resource freely available to all users.

HS-PROD Users & Beneficiaries

HS-PROD users include Central/State/UT/ District health and other related authorities including NRHM (Central /State),Governmental/Non governmental organisations in health and related fields, including Research, Education & Training, Regional offices of MOHFW & CBHI, ICMR Institutes, CBHI Field Survey Units to undertake visits for collecting on the spot information on HS-PROD, ECTA state facilitators, Developmental partners (WHO, EC, UNICEF, WB, USAID, etc.), Media, internet and Individuals



How do I access HS-PROD ?

At www.prod-india.com or you can request the CD from CBHI. **This website is being shortly moved to www.hsprodindia.nic.in.**

How do I find what I am looking for in HS-PROD ?

HS-PROD entries are listed by the subject areas (16) as explained above. There is also a search facility which allows you to search by keywords or by HS-PROD reference number. Facility for searching entries by States has also been incorporated.

Can I add an entry to HS-PROD ?

Yes. You can enter your information online through the website (help screens are available) or by sending a Word document by email to dircbhi@nb.nic.in. The HS-PROD team will then contact you to verify the entry.

Is HS-PROD limited to Indian best practices and innovations ?

The database itself focuses exclusively on the huge number of excellent initiatives in India but details of related international experience are also included.

Does HS-PROD provide links to related websites ?

Yes. HS-PROD has a module devoted to links with other national and international websites. The team seeks to maximize such connections while maintaining the focus on India in the database to avoid duplication of content.

Does HS-PROD include clinical good practices ?

No, the emphasis is rather on management and organizational matters in health.

Where does the information come from ?

The HS-PROD team carries out regular field visits to States/UTs to meet various health authorities & national health programme manager and learn about initiatives at first hand. In addition, they hear about reforms through the media, the Internet and the regional offices of the CBHI, NIMS and EU. They then contact those involved in the project for more information. However the HS-PROD team does not carry out an independent evaluation of each reform. It demands proof of results (such as evaluation reports) but it is up to the HS-PROD user to make their own judgment as to whether the reform is useful or not.

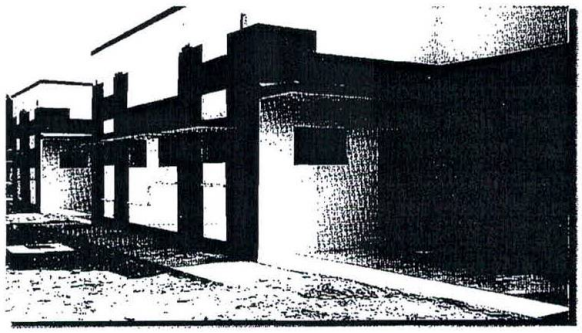
How often are the entries updated ?

The HS-PROD team aims to update each entry as and when required. However each option is dated so that user can see when the information was last revised.

What are the plans for HS-PROD in the future ?

While HS-PROD has been developed as an operational information tool, it also has great potential as a learning resource for training events and courses in health sector reform and capacity development. This learning aspect of HS-PROD will form a major part of the on-going development programmes under the National Rural Health Mission (NRHM). In addition, a discussion group facility is being developed so that users can discuss projects online. The number of entries increases every month and regional workshops have been organized in order to sensitize & encourage the use of the website and to generate new entries.

A Few Examples of HS-PROD entries

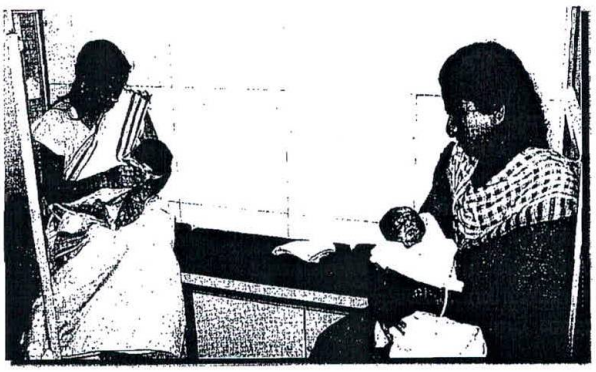


Devolution of financial and administrative powers to districts, Haryana (35)

Haryana State Government has sought to improve the efficiency of management at various levels of the health service through greater decentralisation, in keeping with national policy. State Government Orders were issued to devolve powers according to rank. Medical Superintendents, for example, are now able to buy drugs and equipments upto the value of INR 50,000 per purchase, while Senior Medical Officers can spend INR 10,000 and Medical Officers INR 5,000.

Mitanin programme, Chattisgarh (49)

A "Mitanin" is a Community Health Volunteer (CHV) trained and deployed under a State-wide programme in Chattisgarh, where levels of disease are high and use of health services low. The mitanin is a married local women whose main role is to organize and empower women, provide health education, facilitate access to health care and provide referral advice. A State Health Resource Centre, set up under a Memorandum of Understanding between the State Government and Action Aid India, was formed to guide the programme which effectively extends outreach of all existing projects.



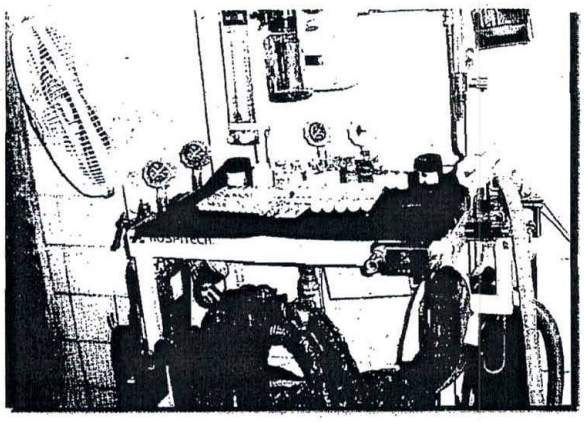
Public Private Partnership for delivering of reproductive and child health services to the slum population of Guwahati city, Assam (51)

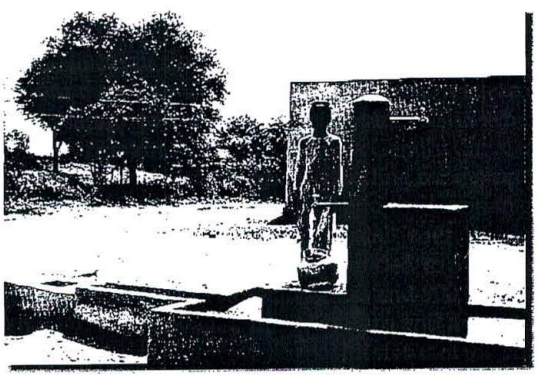
Urban health services in Guwahati have improved since the State Government contracted a trust hospital (Marwari Maternity Hospital) to provide services in eight low-income wards of the city. In addition to State funds, vaccines and contraceptives are provided free of charge to the hospital which now covers 17 outreach sites in slum areas providing Reproductive and Child Health services. Sterlisation, spacing and termination services are free to patients; deliveries, operations and diagnostic tests are charged at concessionary rates.

Operationalisation of First Referral Units, Maharashtra (103)

In 2002 Washi rural hospital was upgraded to First Referral Unit and provided with a dedicated EMOC team consisting of three specialists; a gynaecologist, an anaesthetist and a paediatrician besides other staff.

Facilities at FRU Washi, include an operating theatre, blood transfusions, laboratory services, x-ray facilities, ambulance services and medico-legal works including post-mortems. As a result between 2000-2005 obstetric admissions have risen from 562 in 2000 to 971 in 2004; deliveries have more than doubled from 328 to 700; live births have risen from 325 to 685; obstetric complications treated have gone from nil to 164 and there have been no maternal deaths at the hospital since July 2002.

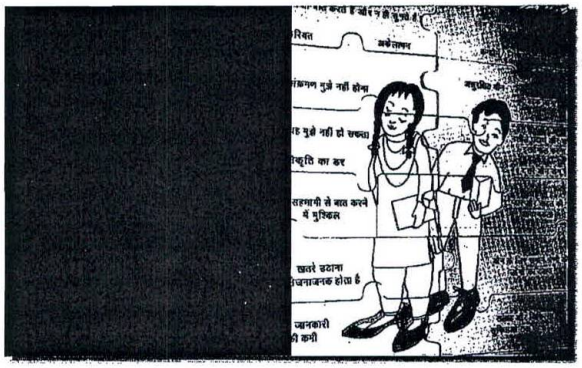




Aapni-Yojana-Safe drinking water in the villages of Rajasthan (124)

Availability of safe drinking water is a pre-requisite for good health. To tackle the water shortage in the districts of Churu, Hanumangarh and Jhunjhunu of Rajasthan, the Aapni Yojana scheme was designed to supply drinking water from Indira Gandhi Canal to 1000 villages and 11 towns at an affordable price. Funding for the project was provided by the Government of India (GOI) and the German government, through its development bank, Kreditanstalt fuer Wiederaufbau (KfW). By March 2006, the project had expanded to 370 villages and two towns, covering, 20,000 square kilometers and 900,000 people. It is benefiting mainly those engaged in agriculture and animal rearing. The overall objective was to improve the health status of the population.

A Few Examples of HS-PROD entries

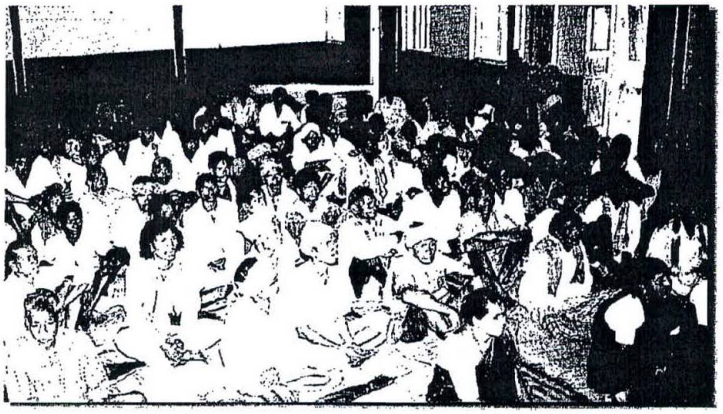


Promoting change in reproductive behaviour of youth, Bihar (178)

Change in reproductive behaviour of adolescents and youth in Bihar is being promoted by PRACHAR Project of Pathfinder International through the support of 30 Non Governmental Organisations. The program is widely accepted in the 552 villages where it was implemented. The project has reached more than 90,000 adolescents and young adults with information on key issues in Reproductive Health and Family Planning. More than 100,000 parents and other community adults received similar messages aimed at building wide social acceptance for the ideas of delaying and spacing children.

The Hamara Project, Rajasthan (177)

The Hamara Project is a replicable programme model for HIV prevention and care for migrant men and their sexual partners from two sates-Rajasthan and Karnataka. India Canada Collaborative HIV/AIDS Project (ICHAP) with collaboration from Rajasthan State Aids Control Society is running the programme and Candian International Development Agency (CIDA) is providing assistance to the program. The project has covered 30,000 Migrants, 24,000 migrants' wives and 6,000 "potential" migrants.



Traditional healers provide health care in tribal pocket, Chattisgarh (168)

A suitable strategy was evolved by the district Collector and Chief Medical Health Officer (CMHO), Bastar whereby traditional healers known as Sirha Gunia-Baigas were made partners in promotion of modern health care services among the tribal population. Currently, Bastar district has 1500 Sirha-Gunias-Baigas as depot holders. This initiative has helped service providers in their work. According to the CMHO of Dantewada, the initiative has led to fewer causalities and deaths in the district.

Medicine bag provided to Mitanins

For more details, please contact : –

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Nirman Bhawan, New Delhi-110011
Tel./Fax : 91-11-23063175 and 23062695
E-mail : dircbhi@nb.nic.in
CBHI Website : www.cbhidghs.nic.in
HS PROD Website : www.hsprodindia.nic.in (www.prod-india.com)

Annexure - V

Concept Paper
On
Telemedicine in India

Submitted to
First Meeting of
National Task Force on Telemedicine

on

20th October, 2005

Ministry of Health, Govt. of India, New Delhi

Background Paper in Telemedicine in India

1. Introduction:

With its huge area of 32,87,268 Sq km, population of 1.4 billion, urban-rural divide, inaccessible hilly regions, islands and many tribal areas, India is an ideal setting for telemedicine assisted health care delivery. Growing number of medical, paramedical colleges and schools with lack of adequate infrastructure, learning materials and teachers needs is a matter of grave concern. E health technology has the potential to create a national level GRID which can form the backbone to be shared by healthcare providers, trainers and beneficiaries. A strong fiber backbone and indigenous satellite communication technology in place with large mass of human potential trained in IT and local presence of telepathy industry, e health application and implementation should not be a problem technically. Further a number of pilot projects over last five years with successful outcome stand to its testimony. Groundwork on telemedicine in the country has already been laid with the efforts of ISRO and Information Technology department partnering with many State Government and specialty Institutes/hospitals. Policy standardization and infrastructural issues have already been researched. Professional societies on telemedicine/e health have been active. Print and electronic media are participating in awareness campaign.

However, a country level plan is long due to steer the Telepathy ship by the Captain (M/o Health & Family Welfare/GOI) with its crew (technology and healthcare providers/educators) and passengers (citizen) in right direction (policy, implementation, application, security, social and legal issues) to reach at the destination (Quality healthcare & wellness).

As has been happening globally, the technical agencies like ITU, NASA have taken a lead in the technical issues and the health agencies like WHO had been watching these technical developments closely over the years and now has taken over the mandate under its own arena as "strategy 2004-2007 e-health for Health-care Delivery" (www.who.int/eht/ehealthHCD/), the Ministry of Health, Govt. of India has been watching the development in the country and is now following the same strategy as a member state of WHO.

We have collated data on telemedicine/ e health obtained from different sources and tried to summaries in the following presentation.

2. Telemedicine in India- Current Scenario

2.1.1 Initiatives taken by different Govt./Public sector & Private Agencies

Different government/public sector/ and private agencies are venturing into Tale-healthcare by providing hardware and software solution for tele-health care. Efforts are directed towards setting up 'standards' and IT enabled healthcare infrastructure in the country. Some of those activities are summarized below:

Indian Space research Organization (ISRO) Initiatives

ISRO telemedicine pilot project was started in the year 2001 as a part of proof-of-concept demonstration programme. Telemedicine system consists of customized medical software integrated with computer hardware along with medical diagnostic instruments connected to the commercial VSAT at each location. The medical record/history of the patient is sent to specialist doctors, who study and provide diagnosis and treatment during videoconference with patient's end.

During the year, telemedicine network has been further expanded and it now covers 100 hospitals- 78 remote/rural/district hospitals/ health centre connected to 22 super specialty hospitals located in the major cities as follows:

- Nine hospitals in Jammu and Kashmir, six district hospitals including Leh and Kargil and three medical college hospitals connected to All Indian Institute of Medical Sciences, Delhi, Apollo Hospitals, Delhi and Amrita Institute of Medical Sciences, Kochi.
- Five islands ok Lakshdweep (Kavaratti, Amini, Agatti, Andrott and Minicoy) connected to Amritha Institute of Medical Sciences, Kochi.
- Five remote /field/base hospital of Indian Army connected to research and refferal (R&R) Hospital at New Delhi. INHS, Dharvantri under the naval Command at Port Blair, Andmans connected to R&R Hospital, New Delhi.
- Eleven hospitals of North Eastern States (STNM Hospital Gangtok, Sikkim regional Institute of Medical Sciences, Imphal, Manipur Medical College Hospital, Guwahati and District Hospital at Udaipur, Tripura) connected to Asia Heart Foundation, Kolkata.
- Tata Memorial Cancer Centre, Mumbai connected to B B barua Cancer Centre, Guwahati and Wal Waker Rural Cancer Centre at Chiplun, Maharashtra.
- Three Medical College Hospital of Orissa connected To SGPGI, Lucknow.
- Operational telemedicine network in Karnataka –11 district / taluk hospitals connected to five super speciality hospitals in Bangalore and Mysore.

Besides the above, a temporary telemedicine facility was set up for two months at Pamba at the foothills of Sabrimala shrine for, the benefits of visiting pilgrims. A mobile teleopthalmology facility has been provided to Shankara Netryalaya, Chennai and Arvinda Eye Hospitals, Madurai to extend services to rural population of Tamilnadu.

Operational telemedicine network is being established at Chhatisgarh connecting 14 district hospitals/health centers to Raipur Medical College Hospitals.

More than 25000 patients have so far been provided with teleconsultation and treatment. An impact study conducted on thousand patients has revealed that there is a significant cost saving in the system since the patients has revealed that there is a significant cost at the hospitals in the cities.The Andman Telemedicine Network consisting of telemedicine Centres at G B Pant Hospital, Port Blair, Bishop Richardson Hospital, Car Nicobar and INHS, Dhanvanthri Naval Hospital at Port Blair alongwith the Andmans Gramsat Network was extensivelyused for tele-consultation and tratment in the aftermath of the tsunami that hit the island.

Source: http:/ww.isro.org/rep2005/SpaceApplications.htm accessed on 23rd Sept 2005.

2.1.2 Department of Information Technology (DIT), Initaitives

M/o Information and Communication & Technology, Government of India:

Department of Information Technology (DIT), as a facilitator, has taken initiatives for development of technology, initiation of pilot schemes and standardization of Telemedicine in country. The pilot schemes take into account the diverse issues related to currently available telecommunication infrastructure, specialist availability, geographical considerations, etc. Some of these initiatives are:

DEVELOPMENT OF TELEMEDICINE

As a part of promotion of Telemedicine in India, Department of Information Technology has supported development of technology at different premier institutions in India. The major consideration to develop a Telemedicine platform included its cost effectiveness and conformity to standards so that interoperability between different systems could be a possibility. Efforts have been made to ensure that these systems are compatible with most of the available communication infrastructure in India like PSTN, ISDN, Leased lines and V-SAT. During the development, clinical specialist from major institution like SGPGIMS, Lucknow, PGIMER Chandigarh, AIIMS, New Delhi were also associated to benchmark the technology for its user friendliness and acceptance. A number of Telemedicine software systems including Mercury & Sanjivani by CDAC and Telemedik by IIT Kharagpur have been developed and are in use.

TELEMEDICINE PILOT SCHEMES

Some of the pilot projects initiated by Department of Information Technology are presented below:

- Tele-medicine for diagnosis & Monitoring of tropical diseases in West Bengal using low speed WAN, developed by Webel (Kolkata), IIT, Kharagpur has been installed in School of Tropical Medicine Kolkata and two district hospitals. More than a thousand consultations have already taken place over this network. Another two projects on setting up of telemedicine facilities at five referral hospitals and nine district hospitals using the above technology are also under implementation. Part of this network is already under effective utilization. The system uses the high speed leased lines and West Bengal State Wide Area Network (WBSWAN) as the communication backbone.

- The above technology is also being employed to set up a telemedicine network in the state of Tripura where two referral hospitals in the capital Agartala are being connected with four sub-divisional hospitals. Govinda Ballav Panth Hospital at Agartala has already been connected with the 4 Nodal hospitals and more than 175 consultations have taken place since the inauguration of the network in June 2005.

- An Oncology Network for providing Telemedicine services in cancer detection, treatment, pain relief, patient follow-up and continuity of care in peripheral hospitals (nodal centers) of Regional Cancer Centre (RCC) has been established. The project is implemented by C-DAC, Trivandrum and RCC. More than 4000 patient consultations have been done till date using the network. A cost benefit analysis has shown major economic benefits to the patients. The project is now being upgraded to include high bandwidth VSAT connectivity and other advanced features in Tele-consultation.

  In another project Telemedicine & Telehealth Education facilities are being set up of in Kerala using the Technology developed by CDAC Pune in which three speciality medical hospitals are being linked up with 4 District/Rural Hospitals. Continuing Medical Education (CME) will also be part of this project.

- Another pilot scheme of setting up telemedicine centers has been undertaken connecting Apollo Hospital, Delhi with district hospitals in the states of Mizoram and Sikkim with technology developed by CDAC. District hospital at Namchi in south Sikkim and Civil Hospital, Aizwal, in Mizoram have been connected with Apollo Hospital and regular consultations have started.

- Department of IT earlier facilitated setting up Telemedicine system at Naga Hospital, Kohima that is connected with Indraprastha Apollo Hospital, New Delhi. The project was commissioned in partnership with M/s. Marubeni India Private Limited with financial assistance from Govt. of Japan. The network is effectively used for continuing medical education of the doctors and paramedical staff of Naga Hospital.

- A Telemedicine network connecting 14 remote hospitals with Indira Gandhi Medical College Shimla is being set in Himachal Pradesh to provide quality healthcare consultations to population in those areas. Fibre Optic communication backbone of the state is being utilized in this project. CDAC is providing the technology and implementing the project.

STANDARDIZATION ACTIVITY IN TELEMEDICINE

To streamline establishment of telemedicine centers and standardize services available from different Telemedicine centers need to define a set of standards and guidelines for practice of telemedicine is felt. The document, "Recommended Guidelines & Standards for Practice of Telemedicine in India", has been prepared by Department of IT through deliberations of Technical Working Group and is aimed at enhancing interoperability among the various Telemedicine systems being set up in the country. In addition to suggesting standards for various equipment needed for setting up Telemedicine centers, it also provides guidelines for conducting Telemedicine interactions.

BUILDING FRAMEWORK FOR IT INFRASTRUCTURE FOR HEALTH (ITIH)

An exercise has been carried out to suggest a framework for ITIH to efficiently address all information needs of different stakeholders (government, hospitals, insurance companies, patients, vendors and others) in the healthcare industry. The framework addresses to the key elements of Standards, Legal framework and Medical Informatics Education. ITIH framework prescribes appropriate standards for each stakeholder across diverse healthcare settings towards build an Integrated Healthcare Information Infrastructure for India. A document titled "The Framework for Information Technology Infrastructure for Health in India" has been prepared and is being widely disseminated through DIT website for feedback and comments from the different stakeholders and public infrastructure for Health in India.

2.1.3. State Govt. initiatives in partnership

Jammu & Kashmir

The Telemedicine Pilot Project in Jammu & Kashmir, undertaken by ISRO is extended to cover district hospitals of Kargil, Kupwara, Poonch, and Doda. These hospitals will soon have telemedicine connectivity with the Shere-Kashmir Institute of Medical Sciences, Srinagar, the Government Medical College, Srinagar and the Government Medical college, Jammu. Further, they will also have connectivity with super speciality hospitals in Delhi and Kochi.

Source : http://jammukashmir.nic.in/gov/SNL aprilmay.pdf

Himachal Pradesh (Under Implementation)

To provide specialized medical care and treatment to the patients in the remote and inaccessible areas from the speciality hospital, the community and primary health centers of Himachal Pradesh will be connected to General Hospitals and IGMC Shimla which in turn will be connected to PGIMER, Chandigarh, a super speciality hospital, by CDAC under DIT, Govt. of India. Twenty four locations have been identified for the deployment of the project – 14 centres are to be taken in the Phase I and rest of the centers would be connected in the Phase II.

Uttaranchal Telemedicine Project

In April 2004, Uttaranchal Government started this project with the support of Online Telemedicine Research Institute, Ahmedabad to provide speciality consultation and distance learning to the doctors of the district hospitals of Uttaranchal region. In the first phase two district hospitals of Srinagar and Almore got connected to SGPGIMS, Lucknow, a tertiary level referral hospital

Punjab Telemedicine Project

Aimed to provide modern health facilities at affordable prices in remote areas, Punjab Government in April 2005 launched a Telemedicine project linking PGIMER, Chandigarh with three hospitals i.e Mata Kaushalya Hospital at Patiala, the sub-divisional government hospitals at Dasuya and Ajnala in Hoshiarpur and Amritsar districts respectively.

Source : http://www.hindu.com/2005/04/14/stories/2005041405310500.htm

West Bengal Telemedicine Projects

A "Non Profitable" project sponsored by Rabindranath Tagore International Institute of Cardiac Sciences (RTIICS), Kolkata, Narayana Hrudayalaya (NH) Bangalore, Hewlett Packard, Indian Space Research Organisation (ISRO) and state Governments of the seven North Eastern states of India. The Rabindranath Institute at Kolkata and Narayana Hrudayalaya at Bangalore will be the main hub for Telemedicine linking the seven states.

Orissa Telemedicine Project

This project is sponsored by Indian Space Research Organisation and Govt. of Orissa, in 2003, to support the distant medical education programme. Three Medical colleges of Orissa i.e. SCB Medical College, Cuttack, MKCG Medical College, Behrampur and VSS Medical College, Burla are connected to SGPGIMS via VSAT at 384 kbps bandwidth.

Maharashtra Telemedicine Project

The Pune district administration in partnership with global health portal and Tata Council for Community Initiatives has launched a telemedicine service to connect all the primary health centers in the district for speciality consultation. In the first phase, three PHCs in Wagholi, Chakan & Paud regions would be linked with the district administration and specialist.

Source : http://www.itforchange.net/resources/20_initiatives.html

Karnataka telemedicine Network Project

In the first phase of Karnataka telemedicine project Narayana Hrudayalaya at Bangalore linked to Distrit Hospital, Chamarajanagar in Mysore district and Vivekananda Memorial Hospital, Saragur and in the second phase of this project smaller hospitals in all the 25 districts in North Kanara and the Western Ghats, including NGO and trust hospitals will link with the super speciality hospital Narayana Hrudayalaya and Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata.

Source : http://www.expresshealthcaremgmt.com/20030228/tech2.shtml

Kerala Telemedicine Project

In August 2004 with collaboration of ISRO and C-DAC, Kerala Government launched a telemedicine project to provide Telemedicine facilities in five medical colleges, 14 district hospitals and two taluk hospitals in Kerala. These hospitals would be in turn linked with AIIMS, New Delhi, AIMS, Kochi, and Sri Chithira Tirunal Institute of Medical Science and Technology, Thiruvananthapuram. Currently the project is getting expanded and getting integrated with Kerala Onconet (Cancer Network) with the support of ISRO and Department of IT, GOI.

Source : http://www/cdacindia.com/html/press/3q04/spot434.asp

In August 2004 with collaboration of ISRO and C-DAC, Kerala Government launched a telemedicine project to provide Telemedicine facilities in five medical colleges, 14 district hospitals and two taluk hospitals in Kerala. These hospitals would be in turn linked with AIIMS, New Delhi, AIMS, Kochi, and Sri Chithira Tirunal Institute of Medical Science and Technology, Thiruvananthapuram.

Source : http://www.cdacindia.com/html/press/3q04/spot434.asp

Regional Cancer Centre, Thiruvananthapuram with the support of department of information technology had launched telemedicine project called ONCONET to broadbase diagnostic evaluation and consultation services for cancer patients with telemedicine nodes in six points in the state.

Andaman & Nicobar Telemedicine Project
This project links the G.B. Pant Hospital in Port Blair with the Sri Ramachandra Medical College and Research Institute in Chennai.
In ISRO Telemedicine Network, GB Pant Hospital and INS Dhanvantari Hospital two Hospitals at Port Blair and Indira Gandhi Hospital at Car Nicobar enable the local Doctors to communicate with speciality hospitals like Apollo Hospital at Chennai and Amrita Institute of Medical Sciences at Kochi.
Source : http://www.and.nic.in/telemedicine.htm

Lakshadweep
Indira Gandhi Hospital, Kavaratti linked with AIMS, Kochi with the support of ISRO.
Source : http://www.and.nic.in/telemedicine.htm

2.1.4. Super speciality hospital Telemedicine Network (Public & Corporate Sector)

Apollo Telemedicine Network Foundation (ATNF)
Apollo has set up over 45 Telemedicine Centres across different locations in the country and abroad.

Source : http://www.whoindia.org/EIP/GATS/13-Annex2.pdf

Apollo hospital groups project at Aragonda, serves 24 villages covering 48000 people in the vicinity and provides access to super-specialists at the Apollo hospitals in Chennai and Hyderabad. The project will soon extend across five states, covering 10 districts and 20 village groups in each state. In the next phase of the project 125 primary, Maharashtra, Gujarat, Madhya Pradesh, Tamil Nadu and Andhra Pradesh will be covered. Phase three will connect 500 primary, 500 secondary and 100 tertiary centers all over the country.
Source : http://medind.nic.in/maa/t05/i1/maat05i1p51.pdf

The Indian Army has tied up with ATNF for setting up of Telemedicine centers to connect its smaller hospitals in the periphery to its main Command hospitals. Command Hospital (CH, CC), Lucknow is now the hub center and linked to the military hospitals at Jabalpur, Allahabad, Namkum, Meerut, Dehradun and Barelly. Apollo Hospitals Group free Telemedicine consultation at Naga Hospital, Kohima, Guwahati and Tinsukhia in the North East region.
Source : http://www.telemedicineindia.com/news.html accessed on 23rd Sept. 2005

Telemedicine Initiatives at Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), Lucknow, Uttar Pradesh

SGPGIMS is linked with three medical colleges of Orissa i.e. Cuttack, Berhampur and Burla under ISRO/DIT funding and with district hospitals of Almora and Srinagar in Uttaranchal region under Govt. of Uttaranchal support to provide tele-education, tele-consultation and tele-followup services. Through National Informatics Centre (NIC) project, CME sessions are conducted monthly towards professional carrier development of doctors with 8 district hospitals and 450 Community Information Centres of North East States. SGPGIMS is connected via satellite and ISDN to similar facilities with other tertiary level hospitals like AIIMS, New Delhi, PGI, Chandigarh, AIMS, Kochi, SRMC, Chennai. Under a project of Ministry of Information Technology, the Mercury

and Sanjeevani software for telemedicine was developed by SGPGIMS, AIIMS and PGIMER in collaboration with Centre for Development of Advanced Computing (C-DAC) as part of Research and Development. SGPGIMS is now setting up a School of Telemedicine & e Health in its campus with the objective of meeting the demand of highly skilled health technologist in this emerging area. The department of radiotherapy of SGPGIMS with support of Department of Science and Technology is planning to link the radiotherapy department of medical colleges of Uttar Pradesh.

Source : www.sgpgitelemedicine.in

The Amrita Institute of Medical Sciences (AIMS) Telemedicine facility

AIMS is presently connected to the following Telemedicine centers in India: SRMC, Chennai; Sankara Netralaya, Chennai; Indira Gandhi District Hospital, Kavaratti, Lakshadweep Islands; GB Pant Hospital, Port Blair, Andaman & Nicobar Islands; Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow; SNM hospital, Leh-Ladakh; Katuah district Hospital, J&K; Govt. District hospital, J&K; Swami Vivekananda memorial Hospital, Sargur, Karnataka; District Hospital, Carnicobar, Andaman & Nicobar Islands; AIIMS, New Delhi; Trivandrum Medical College; Pattanamthitta District Hospital, Kerala; Narayana Hrudayalaya, Bangalore; Ravindranath, Kolkata; Ramchandra Bhanja, Cuttack.

The Indian Space Research Organisation (ISRO) has drawn up ambitious plans to extend AIMS Telemedicine facility to connect 80 more district hospitals to speciality hospitals in the north eastern states of India.

Source : http://www.chennaionline.com/health/homearticles/2003/AIMS.asp accessed on 23rd Sept. 2005.

Asia Heart Foundation (AHF)
AHF is an organization working towards establishing cardiac network in and around the country with establishment in Bangladesh and The Republic of Yemen. Installed in 2002 by Narayana Hrudayalaya, Bangalore, Karnataka it has now achieved a figure of more than 2000 tele-cardiology consultation through an enterprise based network. Creating a Hub and Spoke Network between the Tertiary Care Centres in the Cities and the peripheral Coronary Care units in the remote areas.

Source : http://www.expresshealthcaremgmt.com/20011231/bangalore2.shtml

Escort Heart Institute & Research Centre Project :
Installed in 2002 by Escort Heart Institute & Research Centre, it has been involved in telecardiology service.

Mobile Tele-Ophthalmology service :
With the support of ISRO, Shankar Nethralaya at Chennai, Meenakshi Eye mission at Madurai & Arvinda Eyecare Centre has Centres at Madurai, Theni, Tirunelveli & Coimbatore districts of South India have launched Mobile Tele-ophthalmology to give tertiary care service on wheels.

Telepathology India

Telepathology India is a free consultancy service and distance learning by the use of the internet in the field of diagnostic pathology. Telepathology is basically "Second Opinion" on gross and microscopic images which have been amply proved in the world literature to be useful for those pathologists staying in remote areas.
Source : http://www.telepathology.org.in/about.html

3. The Telemedicine/ e Health Grid

The Primary Health Care Centre (PHC) is the first echelon in the health care delivery system in India, which cater to a group of villages and are posted with General Duty Medical Officers. There are sub centers under the PHCs, which cater to the remote villages. Community Health Centers (CHC) are located at the block levels.

The PHCs and CHCs can be connected to the respective District/General Hospitals, where basic speciality care is available. This is as per the existing patient referral chain. The doctors from the PHCs will be able to take expert opinion from the specialists without sending the patient. Even if the patient requires specialized treatment at the CHCs/District hospitals, a prior appointment can be taken, saving the patient a repeat trip due to non availability of a specialist/malfunctioning equipments.

The District Hospitals can be connected to the regional Super Speciality Hospitals/ teaching hospitals as per the chain of patient referral. The district hospitals can also be connected amongst themselves, which will help to obtain a second opinion or getting expert comment from concerned specialists in case of non-availability.

Ultimately a patient can be referred to the national facility centers/premier institutes if so desired. Due to the vast geographical area of our country and huge numbers of health care centres, it may not be feasible to keep the whole network under one platform. There can be independent state level TM networks connected with the countrywide network.

In addition to the above, other governmental/semi-governmental organizations like the railways, defence services, oil and steel PSUs have their own large medical setups. Some of these organizations have started developing their own TM networks. It may be planned from the very outset to integrate these smaller networks to the national TM setup.

The issues to be considered for the National Telemedicine/Health Grid (Configuration, management, layering etc.), will include issues on Telecommunication for e-Health (defining optimum cost-effective bandwidth application wise, mix and match connectivity solution etc.), unlicensed spectrum under USO, Co-ordination with DOT/TRAI/ERNET/Public-Private broadband connectivity providers (BSNL, MTNL, GAILTel, PowerTel, RailTel, TataIndicom, Reliance etc.), Wireless LAN option with WiMax technology, Broadband Internet based telemedicine applications.

4. Implementation issues in Telemedicine

With the rapid growth of telecommunication technologies and the availability of adequate bandwidth at reasonable cost, telemedicine is bound to spread all over the country and reach the far-flung areas.

A need has therefore arisen to put in place a regulated network with proper referral mechanism for teleconsultations from the periphery to the super-speciality hospitals. A basic model for setting up a Telemedicine network with a large teaching hospital at the apex is proposed in the following paragraphs.

There are certain points which need to be kept in mind before setting up a network for Telemedicine.

(a) Interoperability : The Telemedicine networks must be able to interface together and create an open environment which permits the sharing of various applications on different participating systems in real-time or seamless interface between several applications.
(b) Scalability : It must be possible for the systems inducted to be augmented with additional features and functions as modular add-on options.
(c) Portability : It must be possible to port data generated on one system to another platform with minimum effort
(d) Reliability : Telemedicine systems must ensure availability of service with minimum system downtime.

4.1. Implementation Strategies

In a large country like India having vast area with different environmental and health care issues, it is important to carry pilot projects for testing and framing/planning of any project at a large scale and extend it country wide. The benefit of the telemedicine must first be extended at the rural level in plains and difficult terrain and inaccessible areas in the mountains like Leh and Zanaskar. Careful strategy and planning would ensure that the bottlenecks that may come in the way of implementation of Telemedicine project are recognized and removed before it is implemented at national level.

A schematic diagram of a possible referral model is given below which ensures the availability of the telemedicine facility to be available at the Primary Health Centre :-

Primary Telemedicine Centre (PHC/CHC)

↓

Secondary Telemedicine Centre (District Hospital)

↓

Tertiary Telemedicine Centre – L1 (State Medical College/Regional Super-speciality medical Centre)

↓

Tertiary Telemedicine Centre –L2 (Apex Hospital like AIIMS)

It is therefore necessary to prepare such pilot projects in different parts of the country to work simultaneously, results of which may help establish the national grid in a successful manner.

Annexure

Table-1 State wise location of telemedicine platforms

Sl. No.	State	District hospital, CHC & PHC	Types of Communication	Funding and Implementing Agencies
1	Jammu & Kashmir	Kargil, Kupwara, Poonch, Doda, Leh	VSAT	ISRO
2	Himachal Pradesh Implementation)	Chamba, Tissa, Hamirpur, Dhramshala, Recong-Peco, Kullu, Sangla, Mandi, Shimla, Rampur, Khaneri, Rohru, Pooh, Nichar, Bharmaur, Bilaspur, Keylong, Nahan, Solan, Una, Killar, Shalai, Kwar, Udaipur, Kaza	Leased line, VSAT & ISDN	DIT, CDAC
3	Punjab	Mata Kaushalaya Hospital, Patiala, Govt Hospital, Hoshiarpur & Amritsar	VSAT	ISRO
4	Uttranchal	Almora & Srinagar Base Hospitals	ISDN	Govt of Uttranchal
5	West Bengal	Coochbehar, Habra, Midnapore, Behrampur, Suri, Purulia	ISDN & VSAT	IIT Kharagpur, Webel ECS Ltd.
6	Orissa	Medical Colleges at Cuttack, Burla, and Berhampur	VSAT	ISRO, DIT
7	Maharashtra	Primary Healthcare Centres Wagholi, Chakan & Paud villages of Pune		Pune District Adm, Global Health portal & Tata Council for Community Initiatives
8	Karnataka	Mandya, Maddur, Tumkur, Shimoga, Chitradurga, Bagalkot, Yaddgir, Gadag, Kawar(operational), Bidar, Gulbarga, Bijapur, Raichur, Belgaum, Dharwad, Coppala, Haveri, Bellary, Davangere, Udipi, Chikmangalur, mangalore, Hassan, Madikeri, Mysore, Kolar, Sirsi(to be linked).	VSAT, ISDN	ISRO
9	Kerala	14 district hospital and 2 taluk hospital, Kollam, Kozhencherry, Kochi, Palakkad and Kannur	VSAT, ISDN	ISRO, DIT, CDAC, Trivandurm, Malabar Cancer Society
10	Andman & Nicobar	G B Pant Hospital and INS Dhanvantri Hospital in Port Blair, Indira Gandhi Hospial at Car Nicobar are linked with Sri Ramachandra Medical College and Apollo Hospital, Chennai.	VSAT	ISRO
11	Lakshdweep	Indira Gandhi Hospital, Kavaratti linked with AIMS, Kochi .	VSAT	ISRO

Table II. Super Speciality Hospital Telemedicine Network (Public & Corporate Sector)

Sl. No	Super Speciality Hospital	Telemedicine nodes linked with	Type of communication	Funding & Implementing Agencies
1.	SGPGIMS Lucknow	Orissa, Uttaranchal State network	VSAT, ISDN	ISRO, DIT, Govt. of Orissa Uttaranchal
		AIIMS, New Delhi PGIMER Chandigarh	ISDN	DIT, CDAC Mohali
		AIMS, Kochi, SRMC, Chennai	VSAT&ISDN	
		Eight states of North East	VSAT	NIC
2.	All India Institute of Medical Sciences, New Delhi	J&K network, Haryana (Rohtak Medical College, Ballabgarh Community Centre), Cuttack, Guwahati, Chennai, Kochi	ISDN, VSAT	DIT, ISRO, C-DAC, Mohali
3.	PGIMER Chandigarh	Punjab and Himachal network, SGPGIMS Lucknow, AIIMS, New Delhi	VSAT, ISDN	ISRO, DIT and Govt. of Punjal and Himachal
4.	Amrita Institute Medical Sciences (AIMS), Kochi	SRMC, Chennai; Sankara Netralaya, Chennai; Indira Gandhi District Hospital, Kavaratti, Lakshadweep Islands; Andaman & Nicobar Network; Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow; J&K Network; Swami Vivekananda memorial Hospital, Sargur, Karnataka; AIIMS, New Delhi; Trivandrum Medical College; Pattanamthitta District Hospital, Kerala; Narayana Hrudayalaya, Bangalore; Ravindranath, Kolkata; Ramchandra Bhanja, Cuttack, AIMS Emergency Medical Centre, Pampa	VSAT	ISRO
5.	Tata Memorial Hospital, Mumbai	Cancer Hospital at Barshi, Dr. B. Barooah Cancer Institute at Guwahati, Dr. Walawalkar Hospital at Dervan, Chiplun, Six Hospitals in the North east and Regional Cancer Centres		
6.	Asia Heart Foundation, Bangalore	Rabindranath Tagore International Institute of Cardiac Sciences (RTIICS) Calcutta, Narayana Hrudayalaya (NH), Bangalore	VSAT	ISRO
7.	Shankar Nethralaya, Chennai, Meenakshi Eye Mission & Arvinda Eyecare Centre, Madurai (Mobile Teleophthalmology)	Mobile tele-ophthalmology	VSAT	ISRO
8.	Apollo Hospital Group	Apollo Hospitals, Hyderabad, Aragonda village in Andhra Pradesh	33 nodes in India 24 villages	ISRO, Apollo Telemedicine Network Foundation (ATNF)

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Annex 1 **Flag C**

Madhya Pradesh
Health Sector Reform Strategy (HSRS)
(2006-12)

1.0 Introduction

MP is one of the poorer states of the country with more than 37% of its population (22 million) living below poverty line. SCs and STs constituting 35% of the population, account for the majority of the poor. State has low sex ratio (920 as compared to 933 for the country) and low female literacy (50% as compared to 54% for the country). Health status is characterised by high maternal and child mortality (MMR of 498 as compared to 409 for the country, IMR of 79 as compared to 64 for the country), high fertility (TFR of 3.3 as compared to 2.9 for the country), high burden of vector borne and communicable diseases and weak public health system with extremely low per capita public expenditure (Rs 132 as compared to Rs 207 for the country).

State has taken many steps in the recent past to improve the functioning of the health system and facilities. These efforts have acquired a new focus and thrust with the launch of the National Rural Health Mission that has become the umbrella programme for all vertical disease control programmes, including RCH. State has already signed MOU with the GOI committing itself to increasing public expenditure on health, increased decentralization and community participation, provision of community level health worker (ASHA) and granting functional autonomy to local health facilities. State has also prepared a Programme Implementation Plan (PIP) for NRHM and RCH covering the period up to 2012. These PIPs outline the operational plans of the government to reform the health systems for providing equitable and quality health care to its people.

This document outlines the current status of health system and its performance and strategy and the programme for reforming it. The strategy is largely based on the government policy and programme as contained in NRHM and RCH PIPs (Annex 1 and 2 respectively), which might be referred to for details. Recognising that all actions contained in the comprehensive reform programme may not be implemented at the same time, an **Early Action Plan (EAP)** has also been prepared to focus on the urgent reform priorities.

One of the challenges for the state will be to arrange adequate funding for the reform programme and to build capacity for implementing it. State has committed itself to an annual 10% increase in public expenditure on health. These would be supplanted by GOI support for

various programmes. However, it is anticipated that these sources may not be adequate for implementing the programme. Government will, on priority, finalize a Medium Term Expenditure plan for implementing the reform programme to assess gaps in fund availability and seek external assistance for bridging it.

2.0 Current Status of Health Outcomes and Health Systems in Madhya Pradesh[1]

State has made significant progress in reduction in MMR, IMR and CMR over the last 7 years. However, these are still worse than national averages and quite poor as compared to better performing states. Inequities in access and health outcomes extremely low expenditure on health and that too largely as out of pocket and high incidence of communicable diseases like TB and Malaria characterise the health status of the status. The current status of health outcomes and working of the public and private health care systems are discussed below.

2.1 Status of Health Outcomes

The salient health indicators are detailed in the following table:

		MP (NFHS 3)	MP (NFHS 2)	All India (NFHS 2)	Kerala (NFHS 3)	UP (NFHS 3)
1.	MMR (SRS 1998)	498		407		
2.	IMR	70	88	68	15	73
3.	Under 5 mortality rate		142	95		
4.	TFR	3.1	3.4	2.9	1.9	3.8
5.	Women receiving 3 Antenatal Check ups	40%	27%	20%	94%	26%
6.	% of children fully immunized	40%	22%	42%	75%	23%
7.	Institutional Deliveries	30%	22%	33%	100%	22%
8.	% of child malnourished	60%	54%	50%	29%	47%
9.	Unmet need for FP	12%	17%	16%	9%	22%

Based on the above, and the details contained in NRHM PIP (Annex 1), the major highlights of the health outcomes and key intermediate indicators are:

- High MMR and IMR with significant rural-urban, socio-economic group wise and inter-district variation both in health outcomes and utilisation of health services.
- High level of malnutrition amongst children and anaemia amongst women.
- High Gender disparity – CMR for girl child is 87.5 as compared to 49.2 for boys.

[1] This section is primarily based on NFHS 2 and 3 data, NRHM and RCH PIP, Draft Report of the Group on Health Financing for the XIth plan and data contained in the Situation Analysis done by HLSP for GoMP in 2002. Although, some of the data might be dated, the broad conclusions still hold good.

- IMR is double and CMR is more than five times in poor families as compared to well off families. Similarly, 12% of children in poor families were vaccinated as compared to 50% of well off.
- Only 11% OF ST children were fully immunized as compared to 22.4% for the state as a whole.
- Poor awareness of ORS therapy, while 28% of the state's IMR was due to diarrhoea.
- MP contributes 24% of malaria cases, 40% of PF cases and 20% of malaria deaths in the country.
- Poor coverage of sanitation facilities in rural areas.
- Increasing prevalence of TB with poor detection as well as cure rates in majority of districts.

2.2 Status of Social determinants of health

Madhya Pradesh is one of the India's poorer states, with a per capita income in 2003-04 of Rs. 8,284 compared to the all-India average of Rs. 11,799. More than 37% of its population live in poverty. For Scheduled Tribes (20% of the population) and Scheduled Castes (15%), the poverty levels are higher, at 57% and 40% respectively. Gender inequalities are reflected in the low sex ratio (920/1,000, against a national average of 933), female literacy of 50% and lower Human Development Indices for women. Within the state, there are significant regional inequalities, with extremely high poverty levels in southern and south-western districts compared to northern districts. High levels of poverty and gender inequalities impact on key social determinants of health:

- 53% of women are married before the legal age of marriage (18 years) with this indicator as high as 72% for women with no education.
- 13.6% of the women in the age group of 15-19 years were either pregnant or were mothers.
- IMR (125) of youngest mothers was twice that of mothers aged 30-35 (64).
- Prevalence of high anaemia (57.6%) and nutritional deficiency (40% women have BMI <18) amongst women in reproductive age.
- 70% of ST women are anaemic.
- More than 60% children are malnourished; 40% are stunted and 33% are wasted.
- Only 15% of children were breastfed within one hour of birth and only 21% of children (0-5 months) were exclusively breastfed.
- 86% of habitations are covered by safe drinking water sources. However, inadequate arrangements for preventive maintenance of hand pumps contribute to poor availability of safe drinking water.
- Rural sanitation is still a concern as less than 8% of all rural households are estimated to have an IHL. This situation is likely to improve with implementation of 'Swajal Dhara' scheme. However,

attitudinal awareness and constraints due to non-availability of water for flushing need to be tackled.

2.3 Inequalities in Health Services Utilisation and Outcomes

There is large variation in utilisation of health services and health outcomes across regions, between rural and urban population and across socio-economic groups:

- IMR in urban areas is 47 against 76 in rural areas. While 69% children in urban areas were fully immunized, only 32% in rural areas were covered.
- While 66% births in urban areas were assisted by doctor/health personnel, only 28% births in rural areas were so assisted; Institutional births in urban areas were 60% as compared to 20% in rural areas.
- IMR is double and CMR is more than five times in poor families having a low standard of living index as compared to well off families.
- 12% of children in poor families were vaccinated compared to 50% of children of better off families; vaccination coverage in Vindhya region was 10% compared to 32% in Malwa.
- Tribal areas had significantly worse health indicators (discussed in detail, later).

2.4 Public Health Care System

The public health care system is characterised by poor coverage, and indifferent quality of services due to lack of staff, poor resource availability and low accountability.

- The coverage of public health system is poor. There is a shortage of 1658 SHCs, 450 PHCs and 120 CHCs. This shortage is based on population norms and actual access is even poorer if regard is had to the distance that people have to cover to reach SHCs and PHCs in remote tribal areas.
- There is a shortage of buildings, equipment, drugs and most importantly staff, especially medical officers and specialists, in the existing facilities resulting in unreliable services with people preferring to go to private practitioners for even minor ailments. As a result government facilities are often under utilized.
- At the sub-centre level ANM is overloaded with field as well as staff duties and is unable to provide desirable level of service.
- Poor referral system in operation. People often bypass primary and secondary level facilities and go directly to tertiary facilities leading to overburdening of the system and result in inefficiencies.
- Over centralization, poor delegation and financial systems that lead to inflexibility in working of schemes and delays in utilization of funds.

- Panchayati Raj Institutions and community have little say in planning and management of health services. This coupled with poor internal control systems leads to low accountability.
- BCC and IEC plans that are not tailored to local needs and situation. Less emphasis on counselling and preventive measures.

2.5 Institutional framework – Organisation, Management and Systems

The institutional framework of public health system is characterised by high centralization, poor delegations, weak accountability mechanisms, weak HR policies, and inadequate control over the private sector.

- GOI plays a key role in laying down the policy and strategic framework, state allocates funds and manages human resources and districts and sub-district units are primarily responsible for service delivery, with very little say in determining the scope and nature of services. These levels have, therefore, little incentive to plan for local needs, although this is changing with the recent initiatives on district health planning.
- The management capacity at district and block level is weak. This, combined with staff shortages (14% for medical officers, 32% for specialists and 18% for ANMs), absenteeism, poor monitoring and poor quality of infrastructure results in poor quality of services.
- Although, interdependence of health outcomes, literacy and women empowerment, nutrition and water- sanitation issues is well recognised, holistic management (planning, implementation and monitoring) does not take place. The resources of various departments at district and sub-district level are not joined-up for optimising results.
- Involvement of community in planning and monitoring of health services is limited and linkages with CBOs and NGOs active in the health sector are weak.
- Although, RKS have provided some autonomy to the hospitals but their working needs to improve.
- The HR function at the state level is poorly organised. Cadre management rules are not linked to policies regarding postings and transfers. Ad-hoc transfers lead to inequitable allocation of already scare human resources with staff not willing to join or continue in poor / inaccessible areas.
- Absence of well structured incentive schemes, unclear guidelines for career progression and lack of transparency in postings results in low motivation and morale of the staff.
- Performance appraisal system does not distinguish between good and bad performance; there is weak link between performance and career progression.
- Training infrastructure is poorly managed and underutilised. As a result, a well thought out training and development plan does not exist.

- Health Management Information system is weak and focused primarily on measuring activities / inputs. The system overloads field level functionaries with data collection and provides little feedback to them leading to insufficient disaggregated analysis of health service utilization and outcomes.

2.6 Private Health Care Markets

Private sector is the major provider of the health care in the state. In rural areas, 90% of both minor and major ailments are treated by the private sector while in urban areas people seek private care for 95% of the minor and 75% of major ailments[2]. The private health care market is characterised by:

- Skewed geographical coverage of private providers with more than 50% of allopath GPs and 75% of the specialists located in urban areas.
- Presence of large number of unqualified / semi- qualified RMPs in rural areas, dispensing health care which is expensive and of poor quality.
- Weak regulation of the private sector. As a result, quality and cost of care is not checked.
- Poor availability of data regarding private sector which limits the scope of government to develop suitable partnerships with them for improving access in poorer regions.

2.7 Financing of Health Care

Health financing in the state is characterised by extremely low public expenditure, high share of out of pocket expense, poor coverage of insurance schemes and inefficient targeting of public subsidies.

- Per capita expenditure on health in the state was Rs 1200 as compared to national average of Rs 1377 (2004-05). Share of household expenditure is one of the highest (83% as compared to national average of 73%). Understandably, per capita public expenditure on health is one of the lowest (Rs 132 as compared to national average of Rs 207)[3].
- Even as public expenditure on health is very low in the state, rich gain disproportionately more from the curative care as compared to the poor (the ratio of subsidy of richest to poorest quintile in the state was 4.16 as compared to the national average of 3.28)[4]. These inequalities were more pronounced in rural areas than urban. The richest 20% of the poor in rural areas enjoy 40% of the subsidies – the poor 20% only 8.4%. However, targeting is better at the PHC level and for immunization.
- The share of primary health in total public expenditure on health has varied between 50-60% recent years which compares

[2] Report on the Working of the Private Health Care Market in MP, 2002, TARU Leading Edge.
[3] Draft Report of the Working Group on Health Care Financing for the 11th Plan, GOI, 2006
[4] Better Health Systems for India's poor, 2002, World Bank Publication.

favourably with other states. However, more than 80% of the expenditure is pre-committed for establishment costs (salaries and wages).

- Less than 2% of the population is covered by any risk pooling / insurance scheme. This, coupled with absence of social protection scheme, exposes the poor to catastrophic effect of illnesses.
- Allocation of public expenditure on health to districts is not done on the basis of health status or need. This may further accentuate regional inequalities.
- Out of pocket expenditure being the main source of financing of health care costs; this limits access to care and can have catastrophic economic and health consequences for the poor.

2.8 Health Problems in Tribal regions

MP has a large tribal population, majority of who reside in 8 tribal districts. These tribal districts are characterised by extreme poverty (more than 57% tribal population is poor), remoteness, inaccessibility and extremely weak public health infrastructure. The health outcomes in these areas are, understandably, extremely poor as compared to other regions and groups:

- CMR was 87 for ST children as compared to 57 for the state (NFHS 2).
- TFR was 3.9 for SC, 3.7 for ST against 3.3 for the state (NFHS 2).
- More than 70% ST women were anaemic as compared to 54% for the state (NFHS 2).
- 60% of ST children were anaemic as compared to 51% for the state (NFHS 2).
- 91% tribal women delivered at home as compared to 78% for the state as a whole.

Special strategies for improving access and availability of services and health outcomes in tribal areas will be devised as a part of the health reform programme.

2.9 Conclusions

Poor and inequitable health outcomes in the state are on account of poor social determinants of health, constraints on demand as well as supply side and poor functioning of health markets. Reform of health sector will require simultaneous addressing of these constraints.

3.0 Vision and Objectives of the Health Sector Reform Programme

3.1 State's Vision for the Health Sector

State is committed to achieve the MDG targets relating to health and the targets set under NRHM. The health systems in the state will be reformed with focus on achieving equitable, affordable and quality health care for all. The state has, accordingly, adopted the following vision for the health sector:

'All people living in the state of Madhya Pradesh will have the knowledge and skills required to keep themselves healthy, and have equity in access to effective and affordable health care, as close to the family as possible, that enhances their quality of life[5], and enables them to lead a healthy productive life'.

The key elements of the vision that will drive the development of health strategy are:

- **Knowledge and Skills:** to address social and cultural issues that impact health seeking behaviour and outcomes, to bring about changes in behaviour at the individual and community level.
- **Equity:** health infrastructure (both public and private) will be expanded with a clear focus on the most disadvantaged and vulnerable districts / groups, poorer regions and groups will be prioritised for resource allocation, benefits of public services will be shared equitably.
- **Effective:** to provide services that meet standards of quality, are effectively targeted at the needs of the poor, are delivered in a cost effective manner, and health systems that are accountable.
- **Affordable:** public services are affordable to the poor, safety nets for the poor to cope with the economic and social impacts of serious illnesses; regulation over quality and cost of services provided by the private sector.
- **Healthy Productive life:** public health systems will provide a range of essential health promotion and preventive services, and simple curative and emergency services and will also promote lifestyle changes for overall improvement in health of the people of the state.

[5] Quality of life is the perceived physical and mental health of a person or group over time.

3.2 Goals of the Health Sector Reform Programme (HSRP)

The Health Sector Reform programme will be implemented to achieve the following goals by 2012:

- Reduction in Infant Mortality Rate to 60 per 1000 live births
- Maternal Mortality Rate reduced to less than 220 per 1,00,000 live births
- Total Fertility Rate is reduced to 2.1.
- Reduction in inequalities (socio-economic, SC and ST, Rural-Urban and Gender) in health outcomes and utilisation of services[6].
- Malnutrition amongst children reduced to 35% from the current level of 60% and severe malnutrition reduced to <1%.
- Morbidity and mortality due to common communicable diseases such as malaria, dengue, leprosy, and tuberculosis is reduced as per the objectives set in the National NRHM document.

Achievement of these goals / outcomes will depend on several intermediate outcomes, the major ones being:

- Complete immunization rates for children increase from current level of 40% to 75% by 2012.
- At least 36% of Community Health Centres are upgraded to meet IPHS by 2008 and 100% by 2010.
- 170 Comprehensive Emergency Obstetric Care institutions are strengthened and made functional, 40% by 2006, 55% by 2007, 75% by 2008 and 100 % by 2009 and 500 Basic Emergency obstetric Care institutions are strengthened and 40% made functional by the year 2006, 50% by 2007, 60% by 2008, 80% by 2009 and 100% by 2010.
- The proportion of institutional deliveries is increased to 50% by year 2007, 65% by year 2008 and 75% by year 2009.

3.3 These goals / intermediate outcomes will be achieved by restructuring and improving the functioning of the health systems as measured by the following indicators:

- The public health facilities, especially in harder to reach areas, are fully staffed, have requisite buildings and equipment and have adequate resources **for providing notified essential preventive and simple curative services** as per agreed standards of quality.
- Health systems are redesigned to ensure that the **barriers to access of services by the poor and vulnerable are removed**; poor are protected from the financial and social consequences of illnesses; and inequalities in health outcomes are reduced as per targets.
- **Public expenditure on health** is increased as per agreed targets and it is allocated to levels (primary/secondary/tertiary), schemes

[6] Specific targets will be set once funds availability and its prioritisation are finalised.

and programmes and regions, based on objective analysis of information on cost-effectiveness and benefit-incidence.

- **Improved decentralization** of planning and management of Health services through district / sub-district level planning and management in consultation with community and PRIs.
- **Community level trained health workers** provide basic preventive care at the community level and are supported by the referral system for curative needs of the public. The paramedic staff is capacitated to play a major role in delivery of preventive and simple curative services at the SHC and PHC level.
- Productive **partnerships are developed with the private sector** for improving access of public to essential services and for harnessing efficiencies of the private sector.
- The provision of health services by the private sector (both large hospitals and RMPs) is **effectively regulated** to ensure that its reach is improved and public receives quality care at reasonable costs.
- **Risk pooling mechanisms** are piloted and successful models are up-scaled to ensure that the health care markets gradually move away from reliance on out of pocket expenses; and purchaser and provider functions are separated for better efficiencies.
- **The management of human resources** in the public health sector is improved so that staff is motivated to perform and is held accountable (internally and externally) based on performance. This will be achieved through career planning, sound policies for posting and clearer authority-responsibility descriptions at all levels.
- **Health management Information systems** enable disaggregated analysis of health situation and performance of health systems which enable **better monitoring and evaluation and evidence-based planning**.

4.0 Policy and Strategy Context

4.1 GOI Policies

GOI plays a key role in influencing and setting the direction of health policies and strategies due to presence of large number of central and centrally sponsored schemes. So far, these schemes have focused primarily on technical strategies (and finances) for addressing key public health challenges – maternal and child health, population stabilization and major communicable diseases such as TB, Malaria and HIV/AIDS. These strategies and schemes have had a limited impact as they did not address the core problems that are affecting the delivery of health services in general and of public health care delivery in particularly. These include, low public health expenditure, inequities in access of health services, poor quality and accountability of public services, weak regulation of private sector services, absence of risk pooling mechanisms, weak links to other determinants of health, poor quality of information systems and issues relating to Human resources availability and quality.

4.2 NRHM and RCH

In the absence of a coherent and comprehensive strategy, various health interventions and strategies have failed to deliver the desired impacts. This is sought to be corrected by the recently launched National Rural Health Mission (NRHM) that recognises that focus on narrowly defined diseases control programmes and projects is not sufficient to transform the public health system into an accountable, accessible and affordable system of quality services.

NRHM (and RCH) have laid out the medium term strategic framework for health sector reforms in the state that brings under its umbrella all vertical disease control programme (RCH,TB,Malaria, Polio etc.) except HIV/AIDS. More than this, it provides strategic direction for correcting the architecture of public health service delivery up to the sub-centre level. The main planks of NRHM strategy are:

- A cadre of community level health workers (ASHAs).
- District level planning and involvement of community and PRI institutions in planning and monitoring of health services at the field level.
- Substantial increase in public health expenditure – to raise it to 2-3% of GDP by 2012.
- Introduction of risk pooling mechanisms for protecting the poor from catastrophic consequences of illnesses.
- More autonomous functioning of the public health facilities through provision of untied funds at all levels and revitalising hospital management committees that have participation of PRI institutions on the management committees.

- Restructuring of the health set up at the state level with merger of the family health and family welfare functions.

The recently launched RCH programme has laid out key strategies for MCH that include focus on institutional deliveries, public-private partnerships, operationalising IMNCI, strengthening demand for MCH services through community involvement and targeted BCC interventions etc. An important feature of RCH programme is bottom up planning and setting up of strengthened management structures at state and district levels. GoMP has already signed an MOU with GOI under NRHM agreeing to the core strategies and a 5 year project implementation plan has been prepared. The PIP would be updated next year based on district level perspective plans subsuming all vertical disease control programmes.

4.3 State's Recent Reform Initiatives

At the state level, higher allocation for public health, support for decentralized governance, greater autonomy to hospitals through Rogi Kalyan Samitis, thrust on district level planning and piloting of insurance schemes for poorer groups have been the key reform themes. State is committed to empowering the PRIs and its benefits are visible in the education and ICDS schemes. The importance of decentralized planning is further being reinforced by planning commission with district plans being made mandatory for preparation of the XIth plan. However, roles and responsibilities of PRIs in planning for and managing of health services need to be more clearly defined to improve the accountability and responsiveness of the delivery system. MP has been the first state to have developed district health plans, which have enabled districts to assess their own situations and recommend priorities. The MP Health project supported by DFID encouraged districts to try out innovations in service delivery and some of these (such as Janani Express) have been extremely successful. MP, again, was one of the first states to initiate hospital autonomy through constitution of RKSs. Although, this model needs to be improved along many dimensions (improved targeting of the poor, better utiilisation of funds), it has provided much needed financial flexibility to field units. State expenditure on public health, which is 0.9% of GDP at present, is committed to grow at 10% p.a., which together with higher allocations from GOI should help strengthen the public health system.

Convergence of schemes, which address the problems that have a determining influence on the health status, has been given due priority by the state. State is striving hard to address the issues of rural poverty through initiatives such as Rural Employment Guarantee Scheme, MPRLP (DFID supported) and DPIP (supported by the World Bank). Schemes such as 'Swajaldhara' are being implemented to improve

water availability and hygiene practices in rural areas and issue of malnutrition is being actively addressed through schemes such as Balsanjivani and Balshakti. Implementation of these schemes needs to be coordinated for optimising their impact on health outcomes.

The state health reform strategy and programme will, therefore, need to be finalised within the above framework of national and state policies and priorities.

5.0 Health Sector Reform Strategy

The implementation of the vision of the government to provide accessible, affordable, equitable, accountable, effective and quality health care, especially to poor and vulnerable sections of the population will require significant strengthening of the health systems. The strategy will have to address constraints on demand and supply side and the working of health services market. The generic problems that the strategy will need to address are:

(a) **Demand Side**: improving health-seeking behaviour, ensuring that social and financial barriers to access of services are removed and greater community engagement in primary health services planning and delivery.
(b) **Supply Side**: higher public expenditure on health prioritised in favour of primary care and poorer regions, filling up of gaps in primary and secondary health infrastructure, addressing gaps in human resources, improvement in performance, quality and accountability of services, better coordination with the private providers; and improved health information system.
(c) **Health Care Market** – effective stewardship of the private health care market, knowledge creation and dissemination and promotion of risk pooling mechanisms.

The health sector reform strategy addresses these core issues and is based on the following principles:

- Strategy is to be consistent with the national and state policies, especially the policies laid down in NRHM and RCH.
- Government will have to play a key role in ensuring provision of basis health services. However, wherever possible, efficiencies of private sector may be tapped for actual delivery of services.
- Although, strategy will seek to address the issue of attainment of health related MDGs, removal of inequities in access to health services and health outcomes will be a key objective.
- Decentralization of planning, monitoring and management of health services will be a key plank of the strategy.
- All determinants of health need to be addressed in a convergent manner for effectively addressing the health challenges in the state.

In line with the above the key approaches to reform of the health sector will include:

- **Programmatic** – choice of basic package with focus on needs of the poor and vulnerable, provision of physical infrastructure and drugs, especially in poorer regions, effective referral system, approaches to resource allocation, communication strategies, and contracting for service provisioning.

- **Governance** – Changing institutional arrangements (decentralization, community participation, hospital autonomy, public private mix) for improving responsiveness and accountability, improved capabilities for policy making, planning and for financial management and procurement, health information systems, convergence with other determinants of health, and stewardship of the private sector.
- **Organisational** – Reorganising of health services at the state and filed level, skill-mix and skill up-gradation of work force, human resource development, adequacy of manpower especially in vulnerable regions.
- **Health Financing** - raising public expenditure on health, reducing financial barriers to accessing basic health services, risk pooling mechanisms for the poor and better targeting of resources.

These strategic components are discussed below.

5.1 Programmatic Reforms

(a) Essential Services at SHC, PHC and CHC level

State is committed to provide preventive and curative services to its people. In order that the health facilities ate appropriately resourced and optimum utilisation is made of available funds and infrastructure, and service delivery at the facility level adheres to standards, state will:

- Determine list of preventive and simple curative services to be provided at SHC, PHC, CHC level. This will be determined on the basis of study of the burden of disease, disaggregated by regions and by socio-economic groups, and cost-effectiveness of services keeping in view the health needs of the poor and the vulnerable. The (draft) IPHS standards, agreed MCH and population control strategies and standard treatment protocols will guide the determination of these essential services.
- Notify policy regarding payment for these services; groups that will be exempted from payment (of specified services); and how will exemption schemes work.
- Publicise nature of services provided and standards of service quality ate various levels (for example, as Citizen Charter) and institutionalise methods for periodic surveys of quality of services. Results of these surveys will be disseminated to public.
- Pilot Quality Assurance Programs through external evaluations.

(b) Maternal and Child Health; and Population Stabilization

State will broadly follow the strategies recommended in the RCH programme to address the **issue of high MMR and gender equity**. These will include:

- Promotion of institutional deliveries, to be achieved by:

- Strengthening public facilities to provide emergency obstetric care services to promote institutional deliveries.
- Develop competencies for SBA amongst ANMs, LHVs and staff nurses.
- Contracting with private providers wherever possible for providing EmOC services.
- Addressing the demand side constraints through household level counselling by ANMs and ASHAs, financial incentives, schemes such as Janani express and BCC

- Strengthening of antenatal and postnatal care by improving the functioning of sub centres, through effective integration of ASHAs with the primary care delivery system and targeted BCC interventions.
- Stringent check on female foeticide (in the state and more specifically in certain districts) through preparation and implementation of District-specific action plans for effective implementation of statutory provisions, coordination with the community, NGOs and medical fraternity, and targeted IEC.
- Promotion of safe abortions through:
  - Preventive actions by effectively meeting the unmet need for contraception and by checking sex selection practices.
  - Expansion of safe abortion services which are accessible, and ensure privacy
  - School / College education programmes linked to ARSH
  - Training of local providers

Strategies for **improved health status of children** will include:

- Universalization of routine immunization through:
  - Improved coordination between ANMs, AWWs and ASHAs.
  - Improved availability of vaccines through piloting alternative vaccine delivery mechanisms.
  - Better data collection and monitoring systems
  - Social awareness programmes
- Strengthening Neonatal care units at PHC level.
- Strengthening approaches for management of diarrhoea, ARI and for promotion of Breast feeding
- Management of severe malnourished children through schemes such as Bal Shakti.
- Implementation of IMNCI
- School Health programmes

The **population stabilization** programme will focus on meeting the unmet need for contraception through aggressive use of social marketing techniques, promotion of male vasectomy through NSV procedures, effective implementation of ARSH; and above all through extensive BCC and convergence with other programmes targeting early marriage, women empowerment and female literacy.

(c) Strengthening of Public Health Infrastructure

The key actions for improved availability of primary and secondary health facilities will include:

- Construction of 4911 SHCs, 450 PHCs and 120 CHCs in a phased manner with priority given to vulnerable regions.
- Upgradation of CHCs to IPHS standards in a phased manner.
- Upgrading infrastructure in all CeMOCs and BeMOCs on the basis of a facility survey.
- Provision of untied funds to health facilities for improving flexibility in their operations.
- Mobile clinics to cover inaccessible areas.
- Revamping of drug procurement and distribution arrangements on the pattern of Tamilnadu. This will involve review of essential drug lists, newer methods of procurement, construction of stores and training in management of drug procurement, storage and distribution.
- Rationalization of the working of the subcentres and PNCs. At the sub-centres, provision of two ANMs and at the PHC level multi-skilling of work force to ensure that PHCs are able to provide a basic minimum level of service on a regular basis would be experimented with.
- Provision of adequate number of staff – this is the key constraint at present and has been discussed in detail as a part of the HR strategy.

The strategy for filling up of infrastructure gaps will focus on the gaps in tribal and other areas where access is poor and availability of human resources will be ensured for optimum utilisation of facilities.

(d) Disease Control programmes

The focus will be on TB and malaria and effective implementation of national programmes targeting these. Vector control programmes will be integrated into village health plans, social marketing of bed nets will be given a priority and systems for surveillance will be strengthened. As regards TB, focus will be on improving detection rates and linking with private providers to ensure that they follow the prescribed protocol. The HIV programme will be implemented as per NACP strategies and focus here will be on strengthening of sentinel surveillance, making HIV control an area of interdepartmental convergent action and expanding programme of targeted interventions and VCTCs.

(e) Contracting with Non Governmental sector for provision of primary health care services:

In order to fill gaps in access and availability of primary and secondary health services and also for capturing the efficiencies of non governmental sector working, both contracting-in and contracting-out of public health services will be piloted and if successful, up-scaled. Contracting will also enable state to rationalize manpower by redeploying human resources to places where private sector is not available.

(f) Behaviour Change Communication:

Changes in health habits and attitudes at the family and community level are required for improving the health outcomes. Issues relating to age of marriage, planning for the family, use of antenatal and postnatal care, child- care practices, gender equity, hygiene practices etc require changes in behaviour and attitudes. BCC strategies will be developed at the regional and district level to ensure that they meet local needs. There will be emphasis on development of capacities at the state and district level in developing and delivering sound communication strategies and to monitor the efficacy of BCC plans.

(g) Strengthening Referral System

The tertiary care institutions provide vital support to primary and secondary health care facilities. The medical colleges will be strengthened to develop strong referral and back-referral system. The district hospitals will be strengthened to support PHCs and CHCs and to reduce burden on medical colleges. Here also, links will be developed with the private sector, wherever possible, to supplant public facilities.

5.2 Reforms in Governance of Health Systems

Improvement in capacities for better planning, management and delivery of quality health services and improved responsiveness and accountability of the public health system will be achieved through decentralization, community participation, strengthening of institutional set up and better health monitoring systems. Reorganisation of the public health set up, organisational development and review of HR practices are a part of overall governance improvement but have been discussed separately.

(a) Decentralization

For health services to be responsive to local needs in a cost effective manner, planning and delivery of these services needs to be decentralized. This will include decentralization of decision-making and enhanced delegation and autonomy at the operating level.

State has made a good beginning in preparing district plans taking care of local needs. **District Planning processes** will be strengthened by creating capacities for better collection, management and analysis of disaggregated data and in use of epidemiological insights for district level burden of disease studies for preparing more responsive plans. PRIs and local NGOs/CBOs will be involved intensively in the District planning processes that will be supported by providing technical assistance and also by the state resources centre. Few initiatives are underway for preparation of Village Health plans. These will be up-scaled gradually to prepare integrated village health and sanitation plans, which will ultimately be linked up with district plans. However for services to improve, decentralization has to move beyond planning. First, untied funds would be provided to districts to plan and innovate taking into account local needs and second, decentralization of powers to local government structures will be made to ensure that delivery of primary health care is gradually managed at local level.

Strengthening of **Rogi Kalyan Samitis** will be a key strategy for improving hospital autonomy. The organisation and structure of RKS will be reviewed to ensure that the local community and PRIs have a more effective say in running of the RKS. RKS will be provided technical support for preparing long term plans for bringing their facilities up to agreed standards (fro example, IPHS), improving systems for better utilisation of funds in a pro-poor manner, and also financial support to take care of the exemptions given to poor.

(b) Community Participation

Community involvement and participation would be a key to meet the public health challenges. **Para professionalisation of primary health care** services will be the key strategy to achieve this. State has already begun recruitment of ASHAs to prepare them to play a key role in providing community / household level preventive care. However, state's experiences with the Janswasthyay Rakshak scheme suggests that for ASHAs to be effective, action on following lines will need to be taken:

- Supporting ASHAs for them to be recognised as a vital link in addressing primary health needs of the community.
- Effective institutional linkages and referral mechanisms between ASHAs and the existing set up of primary health workers and facilities.
- State level structures to plan for the capacity building to be delivered through block / level set up supported by NGOs.
- Proper systems for monitoring and ensuring that ASHAs remain motivated to perform and retain their knowledge and skills.

Community participation in selection and control over ASHAs and in preparing village health plans will be further reinforced by introducing **community monitoring** of delivery of health services and social audits. These measures will likely make the public health care system more accountable. Collaboration with NGOs will be actively sought to support capacity building of communities for effective participation.

(c) Improved Health Management Information System (HMIS) and Monitoring

Ensuring availability of quality and timely information and its proper dissemination will enable better planning at state and district level, will result in higher transparency in the working of public health facilities and make them more accountable.

Strengthening of HMIS at all levels to provide disaggregated data on health status and geographical and social distribution of health problems will be a key priority of the programme. A situation analysis of the existing HMIS will be made leading to review of formats, data capturing methods and, as per requirement, setting up of the IT infrastructure. The HMIS will be linked to the district level disease surveillance systems and with progress on social determinants of health to enable more convergent planning and management. The key would be to ensure that HMIS not only results in better supervision but it also supports the filed staff in planning and managing their work better.

The **monitoring and supervision systems** will be revamped by developing key performance indicators (KPIs) that will focus on the attainment of health policy goals and especially the goals relating to reducing inequities in health status across regions, socio-economic groups and gender. Qualitative and participatory techniques for monitoring will be introduced and community monitoring processes will be set up. The mechanisms of periodic surveys of health facilities to monitor service adherence to service standards, formation of Health Monitoring and Planning Committees at SHC, PHC, CHC and District level and preparation and dissemination of public reports on health will be piloted for improved monitoring. These will be supplemented by **external surveys and impact evaluation** of major schemes and programmes.

Health management and monitoring information will be widely disseminated. **Public disclosure of information** on health system performance will inform the public and community to monitor service standards and hold government to account for deficiencies; and better monitoring of social inclusion.

- Decentralization – Functional review of health planning and management systems to decentralize decision making to PRIs with provision of untied funds.
- Capacity building of the community for preparation of Village Health and Sanitation plans.
- Community involvement in planning and management of health services
  - Village Health and Sanitation Plans
  - Control over ASHAs
  - Community Monitoring and Audits.
  - Community-managed support systems such as emergency transport schemes and emergency funds. This will also bridge
- Social Mobilisation programme to increase women to women peer support, engaging respected traditional practitioners, and building on traditional practices to elicit community support for maternal and child health care practices.

6.7 Monitoring of EAP

Specific time-bound milestones will be developed for various priorities listed in the EAP and these will be monitored on a quarterly basis by the government. State will also institutionalise systems for independent external assessment of the working and impact of major schemes and programs.

स्वर्ण जयंती वर्ष
2005 - 2006

NATIONAL RURAL HEALTH MISSION

Meeting people's health needs in rural areas

Programme Implementation Plan
2006-2012

State Health Mission
Department of Health & Family Welfare
Government of Madhya Pradesh
Bhopal

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i. TIME LINE FOR NRHM MILESTONES

S. No.	Milestone	Phasing and time line	Means of Verification
1	Selection of Accredited Social Health Activist (ASHA) for every 1000 population/large isolated habitations in all 48 districts- 43913 ASHAs in the State.	40% by 2006 i.e. 17565 ASHA 70% by 2007 i.e. 30742 100% by 2008 i.e. 43913	Quarterly Progress Report
2	Fully trained ASHA workers	40% by 2007 i.e. 17565 80% by 2008 i.e. 35130 100% by 2009 i.e. 43913	Quarterly Progress Report and sample verification
3	➢ Village Health and Sanitation Committee constituted in all 52143 inhabited villages ➢ Untied grants provided to them ➢ Village Health & Sanitation Plans prepared for local health action.	3% by 2007 i.e. 1565 25% by 2008 i.e. 11470 50% by 2010 i.e. 13036 100% by 2012	Quarterly Progress Report
4	➢ 2 ANM Sub Health Centres strengthened to provide service guarantees as per IPHS, in 8835 places upto year 3, 2 ANMs in 10493 SHCs from year 4 onwards. ➢ Untied grants provided to each Sub Centre for promoting local health action.	7% by 2007 25% by 2008 47% by 2009 69% by 2010 100% by 2012 100% each year	State reports, District Action Plans. Facility Surveys and External assessments State Reports
5	➢ 500 BEmONC facilities (including 8 Civil Hospitals, 178 CHCs and 314 PHCs) strengthened with 3 Staff Nurses to provide service	40% by 2006 i.e. 200 BEmONCs 50% by 2007 i.e. 250 BEmONCs	Annual Facility Surveys. External assessments

S. No.	Milestone	Phasing and time line	Means of Verification
	guarantees as per IPHS. ➢ Untied grants provided to each BEmONC facility for promoting local health action.	60% by 2008 i.e. 300 BEmONCs 80% by 2009 i.e. 400 BEmONCs 100% by 2010 i.e. 500 BEmONCs	
6	Untied grants provided to 1152 PHCs and 266 CHCs for promoting local health action.	Annual activity	State report
7	➢ 124 CEmONC institutions (32 CHs and 92 CHCs) strengthened with 7 Specialists and 9 Staff Nurses to provide service guarantees as per IPHS.	40% by 2006 i.e. 50 CEmONCs 55% by 2007 i.e. 68 CEmONCs 75% by 2008 i.e. 93 CEmONCs 100% by 2009 i.e. 124 CEmONCs	Annual Facility Surveys. External assessments.
8	48 District Hospitals strengthened to provide quality health services.	30% by 2007 i.e. 15 DH 60% by 2009 i.e. 30 DH 100% by 2010 i.e. 48 DH	Facility Surveys. External assessments.
9	➢ Rogi Kalyan Samitis established in all PHCs, CHCs/Civil Hospitals/District Hospitals. ➢ One time support to RKSs at PHCs/CHCs/Civil Hospitals/District Hospitals.	100% District Hospitals, Civil Hospitals and CHCs; 50% of PHCs by 2006, 100% PHCs by 2007	State report.
11	➢ District Health Action Plans 2005-2012 prepared by each of the 48	100% by 2007	Appraisal process with participation

S. No.	Milestone	Phasing and time line	Means of Verification
	districts. ➢ District Health Plans reflect the convergence with wider determinants of health like drinking water, sanitation, women's empowerment, child development, adolescents, school education, female literacy, etc.	100% by 2007	of DPs and GoI representatives
12	Annual maintenance grant provided to every Sub Centre, PHC and CHCs.	100% by 2007	State reports
13	State and District Health Societies established and fully functional.	100% by 2007	Regular meetings and sample verification
14	State and district PMUs staff receives training.	100% by 2007	State reports
15	Sample districts able to implement M&E triangulation involving community.	None by 2006 10% by 2007 25% by 2008 50% by 2009 100% by 2010	Independent assessment
16	Procurement and logistics streamlined to ensure availability of 100% availability of at least one month's stock of essential drugs and medicines at Sub Centres/PHCs/CHs/ CHCs.	100% by 2007	State reports
17	SHCs/PHCs/CHCs/Civil Hospitals/ District Hospitals fully equipped to develop intra health sector convergence, coordination and service guarantees for family welfare, vector borne disease programmes, TB, HIV/AIDS, etc.	30% by 2007 60% by 2008 100% by 2009	State reports
18	Districts constitute Quality Assurance	100% by 2007	State reports

S. No.	Milestone	Phasing and time line	Means of Verification
	Committees.		
19	Facility and household surveys carried out in each and every district of the State.	20% by 2007 100% by 2008	Survey reports
20	Annual State and District specific Public Reports on Health published.	30% by 2008 60% by 2009 100% by 2010	Independent assessment.
21	Institution-wise assessment of performance against assured service guarantees carried out.	50% by 2008 70% by 2009 100% by 2010	Independent assessment
22	Mobile Medical Units provided to each district of the State.	30% by 2007 60% by 2008 100% by 2009	Quarterly Progress Report

Note : 'Year' refers to financial year ending 31st March.

1. BACKGROUND

1.1 Demographic and Socio-economic Features

Madhya Pradesh, as its name implies, is located at the geographic centre of India. It shares its border with five states, namely, Maharashtra, Gujarat, Rajasthan, Uttar Pradesh, Chhattisgarh, Covering an area of 308,000 square kilometers with the population of 60.4 million, it has a large proportion of scheduled castes and tribes (15.4% and 19.9% respectively) with 73% of the population living in rural areas. Despite significant progress in socio-economic development over the last decade, the State continues to be afflicted with some of the worst indicators in India. These include low literacy rates, especially female literacy, high levels of morbidity and mortality and 37% of the population lying below the poverty line. 89% of the population in rural areas is dependent on agriculture. The State is typically characterized by difficult terrain, high rainfall variability, uneven and limited irrigation, deforestation and land degradation.

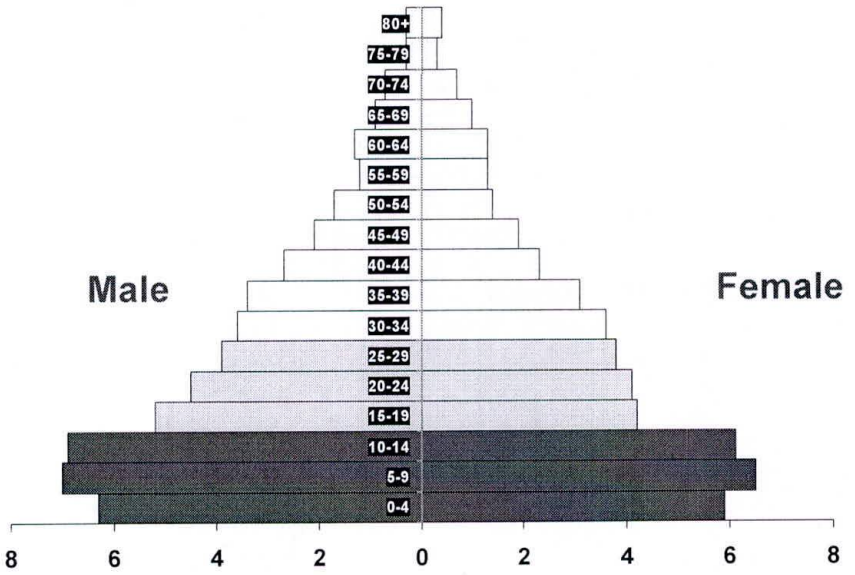
SOCIO-DEMOGRAPHIC PROFILE

INDICATORS	M.P.	India
Area (In sq. km)	3,08,245 (9.38% of India's total area)	32,87,263
Population (Census 2001)	6,03,85,118 (5.88% of India's population)	1,027,015,247
Population growth rate (1991-2001)	24.34	21.34
Population density	196	324
Literacy Rate • Male Literacy • Female Literacy	64.11 76.80 50.28	65.38 75.85 54.16
Sex ratio (Females per 1000 Males)	920	933
Urban population	26.67%	27.78%
Scheduled Castes	74, 78,000 (15.4%)	16, 65, 76,000 (16.20%)
Scheduled Tribes	96, 82,000 (19.94%)	8,31,88,235 (8.10%)
Maternal Mortality Rate (SRS 1998)	498	407
Infant mortality rate (SRS 2004)	79/1000	64/1000 (SRS 2004)
Total Fertility Rate (NFHS-II)	3.3	2.9

1.2 Age Distribution

The age distribution of the population in Madhya Pradesh is typical of populations in which fertility has fallen recently, with relatively low proportions of the population in the younger and older age groups. 39 percent are below 15 years of age, and 5 percent are aged 65 or older. The proportion below age 15 is higher in rural areas (40 percent) than in urban areas (35 percent), primarily because fertility is higher in rural areas.

Age & Sex composition of Population – 2001
Madhya Pradesh



1.3 Density of Population

Population density per square kilometer has increased from 158 in 1991 to 196 in 2001. Although the population density in Madhya Pradesh remains low relative to most other large states, the rising density indicates an increasing pressure on land and other resources.

1.4 Literacy Rate

According to the 2001 Census, literacy rate for Madhya Pradesh was 64.08 percent compared with 65.38 percent for India as a whole. The literacy rate for males was 76.50 percent and only 50.55 percent for females in Madhya Pradesh. Compared with the literacy rate of 1991 (44.67), there has been a considerable improvement in the last

ten years. There has been a greater improvement in the female literacy rate as compared to the male literacy rate. Education levels are much higher in urban areas than in rural areas. The proportion of illiterates is almost twice as high for rural females (63 percent) as for urban females (33 percent), and nearly thrice as high for rural males (34 percent) as for urban males (13 percent). Even in urban areas, however, only about half of the males (47 percent) and slightly more than one-quarter of the females (28 percent) of age 20 and above have completed at least high school. Illiteracy was virtually the same for women in the age-groups 35-39 to 45-49 before decreasing to 64 percent for women in age-group 20-24 and then rising slightly to 66 percent for women in age-group 15-19, undoubtedly because illiterate women are more likely to get married than the literate women at a young age.

1.5 Below Poverty Line Population

According to the Third Madhya Pradesh Human Development Report (2002), population Below Poverty Line (BPL) in 1999-2000 has been estimated at 37.43% (37.06% for rural and 38.44% for urban). This figure is higher than the national average of 26.10%. The Per Capita Income (calculated at constant prices, 1993-1994) for Madhya Pradesh was Rs.7876/- in 1999-2000, being much lower than the National figure of Rs.9739/- (Source: Dept. of Finance, GoMP). BPL population of 37% means that about 22.60 million people are classified as poor. Regionally, there is less poverty in the Gwalior region, western Bundelkhand and around Bhopal followed by moderate levels in the Malwa region and extreme poverty in the eastern and Bundelkhand areas.

1.6 Administrative Profile of the State of Madhya Pradesh

Indicator/Parameter	Nos.
Development Blocks	313
Tribal Blocks	89
No. of Towns/cities	394
No. of Municipal Corporations	14
No. of Municipalities	85
No. of Nagar Panchayats	235
No. of villages	55392
No. of inhabited villages	52143
No. Gram Panchayats	22,029
No. of Janpad Panchayats	313
No. of district Panchayats	48

2. SITUATIONAL ANALYSIS

In this chapter, situation of health and its determinants has been reviewed with reference to NFHS, RHS and such other reports. While the NFHS-2 provided state-level estimates, the RHS estimates are available at the district level. Data from these sources have been compiled by select background characteristics such as residence, caste and standard of living (SLI), in addition to analyzing the results from a qualitative study of RCH programme that was carried in the three regions of the state. All these results have been put together and presented in the following sections.

The current levels of major indicators are summarized in the following table:-

Sr.No	Indicator	Current Status
	Maternal Health	
1	Percentage of pregnant women registering in first trimester	26
2	Percentage of pregnant women receiving full ANC care	51.2
3	Percentage of deliveries attended by Skilled Birth Attended	30.0
4	Percentage of Home Deliveries	79.0
5	Percentage of Institutional Deliveries	21.0
	Child Health	
6	Percent of children who were exclusively breastfed for four months	36.5
7	Percent of Children (12-23 months) fully immunized	22
8	Percent of Children suffered from Diarrhea	23.4
9	Percent of Children suffered from ARI	29.2
	Family Planning	
10	Met need for FP method among eligible couples	44.3
11	Unmet need for Spacing method	8.9
12	Unmet need for Limiting method	7.3
13	Contraceptive prevalence rate	42.0
14	Total demand for FP services	60.5

MATERNAL HEALTH

Antenatal Care

It can be seen from the following Table that while 6 out of ten women availed antenatal check-up, more than half received two or more tetanus toxoid injections and 8 out of 10 women have received IFA tablets or syrup during pregnancy for three or more months.

Only one third of the pregnant women received more than 3 ANC check ups. The service utilization is better in urban area as compared to rural area.

Percentage of women receiving various types of ANC care

Indicator	Urban	Rural	Total
Women receiving any ANC check up	82.1	55.8	61.5
Women without any ANC check up	17.9	44.2	38.5
Women receiving 3 ANC check ups	51.2	21.8	28.1
Women receiving 2 or more doses of TT	73.7	49.8	55.0
Women receiving more than 100 IFA tablets	76.2	79.3	78.4

Delivery Care: Place and Assistance during Delivery

It indicates that eight out of 10 deliveries in Madhya Pradesh state are taking place at home and the remaining two deliveries either in public or private institutions. In urban areas half of the deliveries are in institutions while it is less than 1 out of 10 deliveries in rural areas. It is also seen that the proportion of deliveries attended by the health professional like Doctor, Staff Nurse or ANM is very high in urban area as compared to rural area. Half of the Home deliveries are attended by Traditional Birth Attendants.

Details of place of birth and assistance during delivery

Indicator	Urban	Rural	Total
Home Deliveries	50.1	86.5	78.7
Institutional Deliveries	49.1	12.1	20.1
Deliveries attended by Doctor	40.3	12.5	19.0
Deliveries attended by Nurse/ANM	20.8	8.2	11.0
Home deliveries attended by TBA	29.1	51.6	46.7

However, it may be mentioned here that with the introduction of schemes like Janani Suraksha Yojna, Prasav Hetu Parivahan Yojna and Vijaya Raje Janani Beema Kayan Yojna, there has been a clear spurt in institutional deliveries in the State. The State reports indicate that the institutional deliveries, which stood at 25% in April 2005 has gone up to 47% in September 2006.

Anemia among Women

The nutritional status of women in the state is low. Overall, 54 percent of women in the state have some degree of anemia, compared with 52 percent in India as a whole. About 16.6 percent of women in Madhya Pradesh are moderately to severely anemic. The percentage of anemic women is much higher in rural area as compared to urban area.

Prevalence of RTIs

The NFHS-2 depicts that four out of 10 currently married women have reported of at least one reproductive health problem. The common problems reported were abnormal vaginal discharge and symptoms of urinary tract infection. Rural women reported of these problems more frequently than their urban counterparts. Only 3 out of 10 women suffering with RTI/STI symptoms availed treatment.

CHILD HEALTH

The reproductive health survey collected information on child immunization, reasons for not availing child immunization services, and breast-feeding and weaning practices. This apart, the NFHS-2 has provided levels of infant and child mortality and the nutritional status of children at the state level.

Infant and Child Mortality

The NFHS-2 survey conducted in 1998-99 estimated the Infant Mortality Rate (IMR) to be 86 deaths of infants per 1,000 live births during the four years preceding the survey, much higher than the IMR of 68 in India. The Child Mortality Rate (CMR) in the state was 56 (deaths of children aged 1-4 years per 1,000 children reaching age one). In all, among 1,000 children born, 56 die before reaching age five. As expected, IMR in rural areas was higher than urban areas.

Child Immunization

Immunization of children is an important component of child-survival with efforts focusing on six childhood diseases of tuberculosis, diphtheria, pertusis, tetanus, polio and measles. The objective of Universal Immunization Programme (UIP) was to extend immunization coverage against these diseases to at least 85 per cent of infants by 1990, and the target now is to achieve 100 per cent immunization. However, in Madhya Pradesh, only 22 per cent of children aged 12-23 months were fully vaccinated; about 64 per cent had received some, while the remaining 14 per cent had not been vaccinated at all. Dropout rates for the series of DPT and polio vaccinations were also a problem. Sixty three per cent of children received first dose of DPT, but only 37 per cent received all three doses. Likewise, 85 per cent of children received first dose of polio but only 56 per cent received all the three doses. Coverage of measles was 35.6 per cent.

Infant Feeding Practices

Practice of breastfeeding is very poor in Madhya Pradesh. The NFHS-2 indicated that less than one-tenth of children were breastfed within an hour of birth and less than one third in the first day. Further, for 71 per cent of mothers squeezed out the first milk from the breast before feeding the baby, contrary to recommended feeding practices. Only one third of the children of less than four months of age were exclusively breastfed. The median duration of exclusive breastfeeding is only 2.6 months.

Diarrhea & ARI

Awareness and Treatment of Diarrhea

Only one third of the mothers were aware of two or more danger signs of diarrhea. About one-fourth of the children in the state had suffered from diarrhea in the two weeks preceding the survey (NFHS-2). Of them, 60 per cent of mothers reported having taken their child/children to a health facility or health-care provider but only 55 percent of mothers used ORS during the diarrheal episode.

Awareness and Treatment of ARI/Pneumonia

According to the NFHS-2, 31 per cent of children under age three were ill with fever during the two weeks preceding the survey and 29 per cent were ill with ARI. Fifty eight per cent of children who were ill with ARI were taken to a health facility. The prevalence was substantially higher in rural areas in comparison to urban areas.

FERTILITY AND FAMILY PLANNING

The levels of fertility and contraceptive use have been compiled using the NFHS-2 survey reports

Fertility

The State of Madhya Pradesh has a total fertility rate (TFR) of 3.31 still on a higher side required for replacement level fertility. The TFR in urban area is (2.61) lower as compared to rural area where it is 3.56. Among the women age 15-49, the mean number of children ever born is 2.8 for all women and 3.3 for currently married women. The mean number of children ever born increases with increasing the age and it is 5 for the age 45 -49. About thirty five percent of the women have birth order more than 4.

Contraceptive Prevalence

The awareness regarding the modern contraceptive methods is very high but the modern contraceptive prevalence in Madhya Pradesh according to the NFHS-2 was 42 per cent. Female sterilization as expected turned out to be the more popular method with about 35 per cent of currently married aged between 15 and 49 years accepting it. This was followed by condoms (3 percent), IUCD (0.8 percent) and oral pills (1.0 percent). The use of spacing methods was negligible. Contraceptive use increased with the number of living children and specifically with the presence of a son. Analysis by background characteristics of residence, caste and SLI depicted higher contraceptive prevalence among urban women (52 percent) in comparison with rural women (39 per cent).

Unmet Need for Family Planning

Currently married women who are not using any method of family planning but also do not want any more children or want to wait two or more years before having another child, are considered as having an unmet need for family planning. Current contraceptive users on the other hand are said to have a met need for family planning. The total demand for family planning is the sum of met and unmet needs. The need for spacing or limiting births depends upon, whether or not a woman wants to have a child. This concept helps in understanding the potential demand for family planning and facilitates in converting this potential demand to real demand.

The following table summarizes unmet need, met need and demand for family planning. The total unmet need in the state was 16 per cent and the unmet need for the spacing method was slightly higher than that for the limiting method. The unmet need was lower in urban areas than in rural areas.

Need for Family Planning Services

Indicator	Urban	Rural	Total
Met need for Spacing Method	4.1	1.6	2.2
Met need for Limiting Method	51.0	39.1	42.1
Unmet need for Spacing Method	7.9	9.3	8.9
Unmet need for Limiting Method	7.6	7.2	7.3
Total Demand for Spacing Method	12.0	10.8	11.1
Total demand for Limiting Method	58.6	46.3	49.4
Total demand for FP services	70.6	57.1	60.5

Source: NFHS-2, 1998-99

District Variations: (RHS-2202) The districts differ in their current status and performance. Districts like Jhabua, Shahdol and Sidhi are showing very low level for ANC check ups while the districts having the highest percentage of home deliveries are Sidhi and Shahdol. Districts like Vidisha, Jhabua, Panna, Chhatarpur and Satna show very low percentage of eligible couples using modern contraceptive method. The table below presents the current status of the various indicators across different districts:

Districts	Unmet need -total-2	Full ANC2 - (Atleast 3 visits for ANC + atleast one TT injection + 100 or more IFA tablets/syrup)	Institutional delivery	Exclusive breastfeeding atleast 4 months (children age 4-12 months)	Percentage of children age 12-35 months received Full Immunization	who had diarrhea (two weeks prior to survey)	Given ORS to children during Diarrhea	who had Pneumonia (two weeks prior to survey)	Sought treatment for Pneumonia	Women who had any symptom of RTI/STI
Indore	13.4	14.6	65.6	17.5	49.6	20.3	57.1	22.8	76.3	52.5
Dhar	14.6	4.6	27.9	0.9	38.1	29.0	21.0	27.0	52.0	53.2
Jhabua	25.6	4.9	26.2	1.3	24.8	21.2	14.7	22.8	63.3	54.1
Barwani	15.4	9.6	21.6	3.5	32.8	14.9	27.8	22.5	81.6	34.2
East Nimar	15.8	4.6	27.3	0.0	40.0	21.3	23.0	20.6	67.4	46.1
West Nimar	10.9	4.8	18.9	8.4	24.9	15.2	24.9	27.4	72.0	42.5
Ujjain	14.2	5.2	32.1	0.0	38.7	28.6	22.0	24.3	63.0	50.6
Dewas	16.9	2.5	31.7	2.7	36.1	21.9	24.9	26.9	61.0	58.3
Ratlam	17.3	6.1	25.7	0.0	42.8	22.1	32.9	16.6	70.3	27.6
Mandsaur	17.3	8.3	30.2	1.1	29.4	16.3	33.0	11.2	88.3	24.1
Shajapur	19.2	5.0	32.0	0.0	33.1	22.5	24.1	25.4	68.9	31.3
Neemuch	16.8	12.2	26.4	1.2	33.2	17.6	33.0	10.7	82.0	25.0
Bhopal	16.9	19.7	51.3	44.4	37.2	23.7	46.0	20.0	85.8	30.0
Sehore	20.3	3.1	30.7	4.2	21.3	31.1	33.3	31.3	63.2	66.8
Raisen	19.8	3.5	23.7	35.3	27.3	13.0	26.0	29.8	48.4	47.7
Vidisha	26.5	2.6	25.0	2.9	18.2	29.6	21.0	29.7	54.0	61.0
Betul	23.8	9.1	22.5	60.8	30.0	11.4	15.6	15.5	41.9	24.6
Rajgarh	19.8	3.3	35.9	8.3	26.0	13.8	31.9	18.3	71.5	30.8
Hoshangabad	14.4	9.0	36.8	9.6	66.5	25.9	22.6	8.7	59.9*	33.6
Harda	15.9	4.9	33.1	18.2	47.0	16.8	31.1	25.3	63.3	36.2
Jabalpur	16.9	13.2	42.4	5.1	50.2	11.5	43.3	19.5	68.3	27.6
Katni	23.6	2.5	18.9	7.3	39.3	22.1	20.4	15.6	61.0	31.3
Balaghat	20.6	15.2	21.5	47.7	48.2	7.2	27.4*	37.1	52.0	38.1
Chhindwara	17.4	6.1	25.9	39.6	46.8	26.8	27.9	42.2	57.7	30.1
Seoni	16.5	18.4	27.2	22.9	62.0	29.6	33.8	48.9	66.4	43.4
Mandla	15.8	2.8	20.2	24.1	55.8	19.6	17.7	25.3	33.6	42.0
Dindori	20.0	3.2	18.3	14.3	38.6	30.6	29.2	36.3	32.9	45.7

Districts	Unmet need -total-2	Full ANC2 - (Atleast 3 visits for ANC + atleast one TT injection + 100 or more IFA tablets/syrup)	Institutional delivery	Exclusive breastfeeding atleast 4 months (children age 4-12 months)	Percentage of children age 12-35 months received Full Immunization	who had diarrhea (two weeks prior to survey)	Given ORS to children during Diarrhea	who had Pneumonia (two weeks prior to survey)	Sought treatment for Pneumonia	Women who had any symptom of RTI/STI
Narsimhapur	14.2	3.8	38.3	41.4	50.1	26.8	27.3	36.5	48.3	49.1
Sagar	27.3	6.5	22.5	50.8	31.7	12.9	19.7	16.4	80.0	42.5
Damoh	18.4	3.5	23.3	3.7	25.9	20.0	16.4	18.8	46.3	26.9
Panna	25.4	0.6	28.4	5.9	17.2	17.2	28.8	17.6	46.2	30.6
Tikamgarh	23.3	2.7	20.7	12.5	10.2	21.5	18.7	26.0	51.1	31.4
Chhatarpur	37.2	0.5	17.6	51.3	34.3	11.9	9.7	12.8	65.9	51.6
Rewa	31.0	4.5	22.4	19.5	35.2	19.3	14.3	27.0	51.7	54.9
Sidhi	38.8	0.8	6.2	79.1	10.7	0.6	59.4*	9.9	3.3	16.9
Satna	26.8	1.0	20.7	63.2	23.1	13.1	20.7	12.7	46.0	29.5
Shahdol	25.1	8.6	14.1	17.3	33.8	16.8	32.8	20.3	44.5	42.6
Umaria	26.5	6.4	27.5	21.7	21.1	29.2	32.4	24.0	55.4	40.8
Gwalior	25.0	4.6	47.5	40.9	35.4	5.9	13.8*	13.7	65.9	25.4
Morena	19.5	4.1	43.2	10.9	36.1	34.7	32.3	18.3	66.5	26.2
Sheopur	22.3	5.7	29.3	25.3	37.2	28.8	30.6	20.3	64.9	21.7
Shivpuri	18.8	1.7	28.3	0.0	19.4	11.3	10.8	10.0	31.7	27.2
Guna	22.5	3.3	29.8	11.5	11.1	25.0	16.3	30.1	59.0	53.4
Datia	18.5	7.3	26.3	31.3	27.1	13.7	10.1	20.9	40.2	46.2
Bhind	30.6	1.5	23.5	6.5	14.0	16.3	12.9	15.1	75.2	35.3

Malaria

- MP is one of the 3 worst malaria affected states. MP and Orissa alone account for 50% of mortality due to malaria in India (ICRIER, 2001).
- Proportion of *Plasmodium Falciparum* malaria (associated with cerebral malaria and with higher death rate) increased from 44 % in 1996 to 55 % in 1999. (source: NMAP, MOHFW GoI data cited in ICRIER 2001).
- Rural residents are twice as likely to suffer from malaria than urban residents (10015 and 5240 respectively per lakh population – NFHS II).

Tuberculosis

- The overall prevalence of tuberculosis (TB) increased by 21% during the period 1992-93 to 1998-99 (440 in NFHS I and 602 in NFHS II).

- Prevalence of TB is higher in rural areas than urban areas (669 and 405 per lakh respectively).
- Prevalence is higher for males than females (678 and 519 per lakh respectively) attributed to higher outside contacts of male population and their smoking habit.

Diarrhea

- MP recorded the highest incidence of diarrhea in the country at 63 per 1,000 (as per NCAER 1995 data cited in TARU report) and 28% of state's IMR was due to diarrhoeal deaths. Rajiv Gandhi Mission for Control of Diarrhoeal Diseases is credited with contributing to the decrease of diarrhoeal deaths from 4387 p.a. in 1991to 610 by 1997 (source: TARU report).

Nutritional deficiency

Nutritional deficiency is a major cause for concern in MP:

- 38% of women have chronic energy (nutritional) deficiency indicated by body mass index (BMI)<18.5.
- Anemia is higher amongst breastfeeding women (58%) than non-pregnant/non breastfeeding women.
- Anemia prevalence is higher amongst scheduled tribes (70.3%) (NFHS II).

Nutritional deficiency amongst children

Malnutrition of children and anemia increases susceptibility towards morbidity/mortality: MP has the highest rate of undernourished children in the country:

- More than 55% of children (6-35 months) are underweight due to chronic/acute under nutrition.
- 51% are stunted due to chronic under nourishment/ recurrent diarrhea.
- 20% are wasted due to acute under nourishment or illness.
- 75% of children age 6-35 months have anemia; 53% suffering from acute anemia.

Gender Disparity

Women/girl children are distinctly worse off in MP:

- Women have a limited role in key decisions related to maternal and child health: only 37% of women take decisions affecting their healthcare and only 24% of women discuss family planning with husband/somebody else;
- Mortality rates for girls are higher than for boys except during early infancy when girls have a biological advantage, as the following table shows:

Sex of child	NMR	PNMR	IMR	CMR	U5M
Male	67.3	29.8	97.2	49.4	141.7
Female	51.7	35.9	87.5	66.3	148.0

- % of boys getting vaccinated (27%) was greater than girls (18%);
- Boys are more likely to get at least one dosage (26%) than girls (23%);
- 16.5% of girls did not get any vaccination as compared to 11.5% for boys.

Health Status of Poor/Socio Economically Disadvantaged

The poor/socio economically disadvantaged are worse off in MP:

- IMR is double and CMR is more than five times in poor families having a low standard of living index;
- 12% of children in poor families were vaccinated compared to ~50% for economically better off families;
- 67% of deliveries in rich families were assisted by doctor/trained healthcare personnel compared to 17% in poor families;
- 11% of ST children received vaccinations compared to 22.4% in total MP;
- 70.3% ST women suffered from anemia compared to 54.3% in total MP.

Water and Sanitation Services

Physical installation of water facilities (PHED data, April 2000) in MP is quite impressive. 86% of a total of 111,780 habitations are fully covered (@ 40 lpcd), 13% are partially covered, while only 1% do not have any safe water source. There are 283,651 hand pumps, 2321 spot sources and 3589 piped water supply systems; 2-8% of these installations are reported by PHED to be temporarily non-functioning due to drying up of water sources, while 13% of installations are classified as irreparable. The data does not include wells/pumps installed by households and GPs through their own funds; however the number of such installations is relatively low.

STATUS OF WATER SUPPLY INSTALLATIONS IN MP

Description	Hand pumps		Spot source		Piped water supply	
	Nos.	%	Nos.	%	Nos.	%
Total installations	2,83,651		2,321		3,589	
In working condition	2,42,034	85	1,839	79	2,924	81
Temporarily non functioning due to drying of water sources	6,296	2	180	8	208	6
Irreparable	35,321	13	302	13	457	13
		100		**100**		**100**

Source: PHED, 2001.

Although coverage is largely satisfactory in terms of physical installations, the reduced availability of safe water is a cause for concern. There are three issues:

- Over-exploitation of water sources, especially in west MP, where a number of villages face the problem of drying up of water sources. Water is not available even at a depth of 800 feet in Neemuch district.
- Preventive maintenance of hand pumps is practically non-existent. Further, inappropriate operational practices such as installing additional pipes results in a collapse of the vertical column of the pipeline.
- Average downtime for repairs when needed is 4-5 days and up to a month in remote areas; a contributory factor being a shortage of hand pump mechanics with PHED.

Sanitation facilities and coverage

Sanitation in the rural context is perceived as physical provision of latrines. Solid waste management, effluent disposal and surface water drainage are considered to be of even lower priority although some GPs have provided drains for effluent from households.

Since 1992-93 PHED has been the nodal agency for implementing sanitation programmes in MP. According to PHED, 215,080 toilets have been constructed for households below poverty line (BPL), whereas the corresponding figure for APL households is 240,569. These numbers do not include privately constructed septic tank type latrines. Less than 8% of all rural households are estimated to have an IHL.

Sanitation is perceived primarily as the presence of a physical latrine (Delivery Mechanisms for Water and Sanitation in MP, MSG, 2001):

- The installed IHLs (purchased through a subsidy scheme) are typically used for storage, bathing etc.
- Attitudinal barriers: The community is used to the traditional practice of defecating in the open and does not readily accept small latrines.
- Low priority : Even in large crowded villages where there is a lack of open space, sanitation is low priority; a TV typically takes precedence over an IHL.
- Lack of water: Use of existing facilities is often reduced due to lack of water for flushing/cleaning.
- Low awareness levels: While communities have an appreciation of the link between drinking safe water and health, awareness of the importance of hygiene practices is low.
- Technical issues: Key concerns include collapse of brick lining, lack of ventilation, flooding of pits during rains, use of one pit model etc. These experiences adversely affect demand for latrines.

3. VISION, GOALS, OBJECTIVES AND ENVISAGED OUTCOMES

3.1 State's Mission

The State's vision statement is as follows:-

'All people living in the state of Madhya Pradesh will have the knowledge and skills required to keep themselves healthy, and have equity in access to effective and affordable health care, as close to the family as possible, that enhances their quality of life[1], and enables them to lead a healthy productive life'.

Thus, it may be observed that the State's vision has primarily two components, namely empowering the people living in the State with knowledge and skills required to keep them healthy and equity in access to effective and affordable health care.

The State of Madhya Pradesh also subscribes to the vision adopted by the National Rural Health Mission. Consequently, the adapted vision components to be pursued by the State are presented in the box below:

- Equip people with knowledge and skills required to keep themselves healthy.
- Provide effective healthcare to rural population throughout the State with special focus on worst performing districts, which have weak public health indicators and/or weak infrastructure. These districts will receive special focus. These are: ***Dindori, Damoh, Sidhi, Badwani, Anuppur, Chhindwara, Rewa, Betul, Raisen, Seoni, Chhatarpur, Morena and Sheopur.***
- Raise level of public spending on health from 0.89% GDP to 2-3% of GDP, with improved arrangement for community financing and risk pooling.
- Undertake architectural correction of the health system to enable it to effectively handle increased allocations and promote policies that strengthen public health management and service delivery in the State.
- Revitalize local health traditions and mainstream AYUSH into the public health system.
- Effective integration of health concerns through decentralized management at district, with determinants of health like sanitation and hygiene, nutrition, safe drinking water, gender and social concerns.
- Address inter-district disparities.
- Pursue time bound goals and publish report to the people of the state on progress.
- Improve access to rural people, especially poor women and children to equitable, affordable, accountable and effective primary health care.

Vision Statement of State Rural Health Mission, MP

[1] Quality of life is the perceived physical and mental health of a person or group over time.

3.2 Goal of NRHM

The goal of National Rural Health Mission is to improve the availability of and access to quality health care by the people especially for those residing in rural areas, the poor, women and children. The main aim of National Rural Health Mission is to provide accessible, affordable, accountable, effective and reliable primary health care, especially to poor and vulnerable sections of the population. It aims at reduction in Infant Mortality Rate and Maternal Mortality Ratio, universal access to public health services such as women's health, child health, water, sanitation and hygiene, immunization and nutrition, prevention and control of communicable and non-communicable diseases including locally endemic diseases; access to integrated comprehensive primary health care; population stabilization; gender and demographic balance; revitalize local health traditions and mainstream AYUSH and promotion of healthy lifestyle.

3.3 Objectives of State Programme Implementation Plan under NRHM

The State Programme Implementation Plan under the National Rural Health Mission shall pursue the following objectives by the year 2012: -

- Reduction in Infant Mortality Rate to 60 per 1000 live births
- Maternal Mortality Ratio reduced to less than 220 per 1,00,000 live births
- Total Fertility Rate is reduced to 2.1.
- Morbidity and mortality due to common communicable diseases such as malaria, dengue, leprosy, and tuberculosis is reduced as per the objectives set in the National NRHM document.
- At least 36% of Community Health Centres are upgraded to meet IPHS by 2008 and 100% by 2010.
- 170 Comprehensive Emergency Obstetric Care institutions are strengthened and made functional, 40% by 2006, 55% by 2007, 75% by 2008 and 100 % by 2009 and 500 Basic Emergency obstetric Care institutions are strengthened and 40% made functional by the year 2006, 50% by 2007, 60% by 2008, 80% by 2009 and 100% by 2010.
- 40% of Accredited Social Health Activists (ASHA) are identified by 2006, 70% by 2007 and 100% by 2008 and 40% trained by 2007, 80% by 2008 and 100% by 2009.
- The proportion of institutional deliveries is increased to 50% by year 2007, 65% by year 2008 and 75% by year 2009.

- Janani Suraksha Yojana for below poverty line families is effectively implemented to improve institutional deliveries through provision of referral transport, escort and improved hospital care to all BPL families by the year 2007.
- To improve outreach of health services through Mobile Medical Units in difficult to reach areas and disadvantaged population groups.

3.4 Envisaged Outcomes from the Mission in terms of Programme Indicators

- IMR reduced to 60/1000 live births by 2012.
- Maternal Mortality reduced to below 220/100,000 live births by 2012.
- TFR reduced to 2.1 by 2012.
- Malaria Mortality Reduction Rate - 50% up to 2010, additional 10% by 2012.
- Filaria/Microfilaria Reduction Rate - 70% by 2010, 80% by 2012 and elimination by 2015.
- Dengue Mortality Reduction Rate - 50% by 2010 and sustaining at that level until 2012.
- Cataract operations-increasing to 46 lakhs until 2012.
- Leprosy Prevalence Rate –reduce from 1.8 per 10,000 in 2005 to less that 1 per 10,000 thereafter.
- Tuberculosis DOTS series - maintain 85% cure rate through entire Mission Period and also sustain planned case detection rate.
- Upgrading all Community Health Centers to Indian Public Health Standards.
- Increase utilization of First Referral units from bed occupancy by referred cases of less than 20% to over 75%.
- Engaging 43913 female Accredited Social Health Activists (ASHAs).

3.5 The expected outcomes at Community level

- Availability of trained community level worker at village level, with a drug kit for generic ailments.
- Health Day observed at Aanganwadi level on a fixed day/month for provision of immunization, ante/post natal check ups and services related to mother and child health care, including nutrition.
- Availability of generic drugs for common ailments at sub Centre and hospital level.
- Access to appropriate and guaranteed hospital care through assured availability of doctors, drugs and quality services at PHC/CHC level and

assured referral-transport-communication systems to reach these facilities in time.

- Improved access to universal immunization through induction of Auto Disabled Syringes, alternate vaccine delivery and improved mobilization services under the programme.
- Improved facilities for institutional deliveries through provision of referral transport, escort and improved hospital care subsidized under the Janani Suraksha Yojana (JSY) for the below poverty line pregnant women.
- Availability of assured health care at reduced financial risk through pilots of Community Health Insurance under the Mission.
- Availability of safe drinking water.
- Adoption of household toilets.
- Improved outreach services to medically under-served remote areas through mobile medical units.
- Increased awareness about preventive health including nutrition.

3.6 The core strategies of the Mission

- Capacity building of Panchayati Raj Institutions (PRIs) to recognize their stakes in the public health system.
- Promote access to improved healthcare at household level through the female health activist (ASHA).
- Promote formulation of Village Health Plans for each village through Village Health & Sanitation Committees of the Gram Sabhas.
- Strengthening sub-centre through better human resource development, clear quality standards, better community support and an untied fund to enable local planning and action and more ANMs.
- Strengthening existing (PHCs) through better staffing and human resource development policy, clear quality standards, better community support and an untied fund to enable the local management committee to achieve these standards.
- Provision of 30-50 bedded CHC per lakh population for improved curative care to a normative standard (IPHS defining personnel, equipment and management standards, its decentralized administration by a hospital management committee and the provision of adequate funds and powers to enable these committees to reach desired levels).

- Preparation and implementation of an inter-sector District Health Plan prepared by the District Health Mission, including drinking water, sanitation, hygiene and nutrition.
- Integrating the management of vertical Health and Family Welfare programmes at district level.
- Provisioning of technical support to State and District Health Missions for improved public health management.
- Strengthening capacities for data collection, assessment and review for evidence- based planning, monitoring and supervision.
- Formulation of transparent policies for deployment and career development of human resource for health.
- Developing capacities for preventive health care at all levels for promoting healthy life style, reduction in consumption of tobacco and alcohol, etc.
- Promoting involvement of private and corporate non-profit sector particularly in underserved areas.

3.7 Supplementary Strategies

- Regulation for private sector including the informal Rural Medical Practitioners (RMP) to ensure availability of quality service to citizens at reasonable cost.
- Promotion of public-private partnerships (PPP) for achieving public health goals.
- Mainstreaming AYUSH – revitalizing local health traditions.
- Reorienting medical education to support rural health issues including regulation of medical care and medical ethics.
- Effective and visible risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

3.8 The Special Focus Districts

While the Mission is state-wide, 10 districts having very poor indicators, low population density and weak infrastructure shall receive special attention. These districts are ***Dindori, Damoh, Sidhi, Badwani, Anuppur, Chhindwara, Rewa, Betul, Raisen, Seoni, Chhatarpur, Morena and Sheopur***. While all the Mission activities are the same for all the districts, the high focus districts would be more closely monitored by the State apart from providing them with increased technical assistance in implementing the respective district PIPs.

3.9 The efforts so far

The emphasis in the first six months since the launch of the mission has been on the preparatory activities necessary for the laying the ground work for implementation of the Mission such as:

Institutional Framework

- The State and district level societies have been merged. State and District Missions have been set up. The institutional framework including Executive Committee at the State level has been put in place.
- State has organized the launch workshop.
- Mission Document; Guidelines on Indian Public Health Standards; Guidelines for ASHA; Training Modules for ASHA; Guidelines for District Health Mission and merger of societies have been disseminated to the districts.
- MoU has been signed with GoI. It spells out the reform commitment of the State in terms of its enhanced public spending on health, full staffing of management structures, steps for decentralization and promotion of district level planning and implementation of various activities and achievement of milestones.

Programmes

- Reproductive and Child Health Programme – II (RCH-II), the Janani Suraksha Yojana (JSY), Prasav Hetu Parivahan Yojna (PHPY) and Vijaya Raje Janani Kalyan Beema Yojna have been launched.
- Operationalisation of CEmONC facilities is being stepped up under the EC-supported Sector Investment Programme, which is in its last leg this year.
- Polio eradication programme has been intensified.
- Sterilization insurance scheme has been introduced.
- Routine Immunization programme is being strengthened through alternative vaccine delivery system and Auto Disabled Syringes have been introduced.
- State's RCH II Programme Implementation Plan RCH II has been appraised by the National Programme Coordination Committee of the GoI.

Infrastructure

- Facilities have been identified for detailed survey.
- Repair and renovation of Sub Centres taken up under RCH- II.

- Untied fund of Rs. 10,000 provided to 8835 SHCs in the Joint accounts in the names of Sarpanch and ANM.
- 2 CHCs in each district for upgradation to IPHS have been selected.
- Upgradation of CHCs as Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) and Primary Health Centres for Basic Emergency Obstetric and Neonatal Care (BEmONC) for 24 hours and 7 days a week delivery services have been taken up.
- Funds for upgradation of two CHCs per district to IPH Standards have been released.

District Plans

- Integrated district health action plans have been developed and appraised for all the 48 districts. The appraisal has been done by the State Appraisal Committees.
- ASHAs selection for the year 2006 has been completed. Selection for the year 2007 is in progress.
- Training of the state/district level trainers of ASHAs completed. District level training has been initiated.

Technical Support to the Mission

- State Programme Management Unit (SPMU) and District Programme Management Units established. These bodies will get subsumed in to the State Health Systems Resource Center (SHSRC).

Training and Capacity Building

1. Integrated training calendar prepared.
2. Training modules for Skilled Birth Attendants finalized.
3. Training of medical and para medical staff in BEmONC and CEmONC initiated.
4. Public health management courses started. First two batches completed.

4. CRITICAL AREAS FOR CONCERTED ACTION

4.1 The launch of NRHM has provided the Central and the State Governments with a unique opportunity for carrying out necessary reforms in the health sector. The reforms are necessary for restructuring the health delivery system as well as for developing better health financing mechanisms. The strengthening and effectiveness of health institutions like SHCs/PHCs/CHCs/CHs/district hospitals should necessarily lead to positive consequences for the health programmes like TB, Malaria, HIV/AIDS, Filaria, Family Welfare, Leprosy, Disease Surveillance etc. as all programmes are based on the assumption that a functioning public health system actually exists. In order to improve the health outcomes, it is necessary to give close attention to critical areas like institutional mechanism, service delivery, finances (including risk pooling), resources (human, physical, knowledge technology) and leadership. The following are identified as some of the areas for concerted action:-

- Well functioning and responsive health system;
- Quality and accountability in the delivery of health services;
- Need to acknowledge the rights perspective in respect of the poor and vulnerable sections of the society and their empowerment;
- Prepare for health transition with appropriate health financing;
- Effective public private partnership for expanding choice and access;
- Intra- and inter-sector convergence for effectiveness and efficiency.
- Responsive health system meeting people's health needs.

4.2 The Priorities and constraints

The table given below brings out an analysis of the priorities and constraints in addressing the concerns:

S. No.	Priorities	Constraints
1.	Functional facilities - Operationalizing Sub Health Centers / PHCs / CHCs / CHs / District Hospitals	• Dilapidated or absent physical infrastructure. • Non-availability of doctors / paramedics. • Vacancies / absenteeism • Lack of skills and skills mismatch • Shortage of drugs, vaccine and supplies. • Lack of equipments, non-functioning equipments. • Choked fund flows

S. No.	Priorities	Constraints
		• Lack of accountability framework. • Inflexible financial resources. • Facility specific service packages are not defined
2.	Ensuring requisite availability of skilled human resources	• Large jurisdiction and poor monitoring. • Lack of any plan for career advancement or for systematic skill upgradation. • Lack of articulation HR policies.
3.	Accountability of health system	• Panchayati Raj institutions / ULBs / user have little say in health system. • Lack of decentralization.
4.	Empowerment for effective decentralization and flexibility for location action	• Only tied funds. • Local initiatives have no role. • Centralized management and schematic inflexibility. • Lack of mandated functions of PRIs/ULBs/users. • Lack of financial and human resources for local action. • Lack of indicators and local health status assessments that can contribute to local planning. • Poor capability to design and plan programmes.
5.	Reducing maternal and child deaths and population stabilization	• Lack of 24X7 facilities for safe deliveries. • Lack of facilities with emergency obstetric care. • Unsatisfactory access and utilization of skilled assistance at birth. • Lack of equity / sensitivity in family welfare services / counseling. • Non-availability of Specialists for anesthesia, obstetric care, pediatric care, etc. • No system of new born care with adequate referral support. • Lack of referral systems. • Gender inequity adversely influencing utilization of health services. • Socio-cultural practices and taboos affecting health-seeking behavior.
6.	Action for preventive and promotive health	• No action on promoting healthy lifestyles whether it be fighting alcoholism or promoting tobacco control or promoting positive actions like sports / yoga etc. • Week school health programmes. • Absence of health counseling / early detection. • Compartmentalized IEC of every scheme.
7.	Disease Surveillance	• Vertical programmes for communicable diseases.

S. No.	Priorities	Constraints
		• No integrated / coordinated action for disease surveillance at various levels in place yet. • Lack of block and district level epidemiological date.
8.	Health Management Information System.	• Poorly designed and poorly administered system.
9.	Planning and monitoring with community ownership	• Lack of involvement of local community, PRIs, RKSs, NGOs in monitoring public health institutions like SHC / PHC / CHC / CH / District Hospitals.
10.	Work towards women's empowerment and securing entitlements of SCs / STs / OBCs / Minorities	• Insensitivity and neglect of service providers with other socio-economic barriers for accessing public health services.
11.	Convergence of programme for combating / preventing HIV / AIDS, chronic diseases, malnutrition, providing safe drinking water etc. with community support.	• Vertical implementation of programme. • Only curative care. • Inadequate service delivery. • Non-involvement of community.
12.	Chronic disease burden	• Lack of integration of programmes with main health programmes. • Poor IEC / advocacy. • Inadequate Policy interventions.
13.	Social security to poor	• Large out of pocket expenditures even while attending free public health facilities - food / transport, escort, livelihood loss etc. • Lack of financial security in the event of catastrophic illness.

5. BROAD FRAMEWORK FOR IMPLEMENTATION

5.1 Based on the analysis of the priorities, constraints and the action to overcome them, a broad framework of implementation of NRHM is proposed as follows:

State's Leadership

The State has determined to decentralize planning and implementation arrangements to ensure that need-based and community-owned District Health Action Plans become the basis for interventions in the health sector. The State has also taken steps to introduce innovative schemes to deal with local issues. The State has taken steps to devolve requisite administrative and financial powers at various administrative levels. The State is also seeking to increase its expenditure on health sector by at least 10% every year over the Mission period. The State would be guided by the mutually agreed milestones as are reflected in the MOU signed with the GoI. The State would undertake rigorous capacity building initiatives to ensure that integration of programme management bodies and the use of untied funds is most effectively optimized so that complex health issues are competently addressed.

Institutionalizing community led action for health

The State is committed to achieve the goals enshrined under the NRHM and MDG keeping the community in focus. It is the stated agenda of the State that PRIs, right from the village to district level, would have to be the central stakeholders of the public health delivery system in their respective jurisdiction. Other vibrant community organizations and women's groups like SHGs will also be associated in communitization of health care.

The NRHM would seek to involve the PRIs at each level i.e. Gram Panchayat, Janpad Panchayat and Zila Panchayat and enhance their capacities for ensuring community mobilization efforts for appropriate health seeking behaviour.

- The Village Health and Sanitation Committee (VHSC) will be formed in each village under each Gram Sabha ensuring adequate representation to the disadvantaged categories like women, SC / ST / OBC /minority communities.

- The Sub Health Centres shall function in close coordination with village health and sanitation committees as well as the village development committee at the Gram Panchayat level.
- Similarly, the Primary Health Centres and Community Health Centres will also work in close conjunction with Janpad Panchayats.
- The RKSs will undertake the day-to-day management of PHCs and CHCs and the capacities of these RKSs will be suitably enhanced.
- The District Hospital and the Civil Hospital would be accountable to District Health Society and their Rogi Kalyan Samitis will undertake their day-to-day management functions. The capacity of RKSs of district and civil hospitals will also be suitably enhanced.

To institutionalize community led actions for health; the village health and sanitation committees will be constituted in each village in a phased manner. These committees will prepare village health action plans. These village action plans will be synthesized at Gram Panchayat and Janpad Panchayat levels before being refined into integrated district health action plans. Each village health and sanitation committee will be provided untied fund of Rs. 10000/- per year for initiating and implementing local health actions based upon its approved village health action plans.

Promoting Equity

This is one of the main challenges under NRHM. Empowering those who are vulnerable through education and health education, giving priority to areas/hamlets/households inhabited by them, running fully functional facilities, exemption for below poverty line families from all charges, ensuring access, risk pooling, human resource development / capacity building, recruiting volunteers from amongst them are important strategies under the Mission. These are reflected in the planning process at every level. Under the NRHM, The State would make conscious efforts to address the issue of inequity. The percentage of vulnerable sections of society using the public health facilities would be a benchmark for the performance of these institutions.

Promoting Preventive Health

The NRHM would increase the range and depth of programmes on Health Education / IEC activities which are an integral part of activities under the Mission at every level. In addition it would work with the departments of education to make

health promotion and preventive health an integral part of general education. The Mission would also interact with the Ministry of Labour for occupational health and the Ministry of Women and Child Development to ensure due emphasis on preventive and promotive health concerns.

Dealing with Chronic Diseases and Mental Health

Tobacco, cancer, diabetes and renal diseases, cardio vascular diseases, neurological diseases and mental health problems and the disability that may arise due to the chronic diseases are major challenges before the NRHM. Special emphasis will be given on mental health programme so that specific psychiatric health needs are adequately addressed. It may be mentioned here that by addressing the mental health, the social health would also be automatically addressed thereby fully meeting the premise of health definition as provided by WHO. It is also proposed to integrate the disease surveillance and mobilize preventive and curative care with the regular health care programmes at all levels.

Reducing child and maternal mortality rates and reducing fertility rates – population stabilization through quality services

NRHM provides a thrust for reduction of child and maternal mortality and in reduction of the fertility rates. The approach to population stabilization is to provide quality heath services in remote rural areas along with a wide range of contraceptive choices to meet the unmet demand for these services. Efforts are on to provide quality reproductive health services (including delivery, safe abortions, treatment of Reproductive Tract Infections and Family Planning Services to meet unmet needs, while ensuring full reproductive choices to women). Also, it is the strategy to promote male participation in Family Planning. Efforts would also be made to suitably reorient the service providers at all levels to deal with the needs of victims of domestic violence.

Reduction of IMR requires special and sustained attention in respect of integrated management of neonatal and childhood illnesses (IMNCI). Keeping in view the continued high proportion of domiciliary deliveries, special attention is required on home based newborn care particularly in rural areas and in urban slums. In addition, greater convergent action is called for in order to influence the wider determinants of health care like female literacy, safe drinking water, sanitation, gender and social empowerment, early childhood development, nutrition, marriage after 18 / 21, spacing of children, and behavioral changes etc.

The main strategy for maternal mortality focuses on promotion of institutional deliveries at health facilities both in the government as well as private sectors. Efforts would also be made to concomitantly develop competencies needed for Skilled Birth Attendants (SBAs) in the entire cadre of ANMs, LHVs and Staff Nurses. Further essential obstetric care competency is required to be imbibed by select medical officers posted at BEmONC and CEmONC institutions. Regular training of select Medical Officers to administer anesthesia has also been taken up. Also, multi skill training of Medical Officers, ANMs and Para-medics will be initiated to bridge gaps in skills and performance. Intense IEC would be pursued to ensure behavioral changes that relate to better child survival and women's health i.e. exclusive breast feeding, timely initiation of complementary feeding, young child feeding, spacing, age at marriage, education of the girl child etc. CHCs are being upgraded to CEmONC / BEmONC for providing referral services to the mother and child and taking care of obstetric emergencies and complications for provision of safe abortion services and for prevention, testing/counseling in respect of HIV AIDS.

Adolescent health is another significant thematic area of attention under the NRHM. Adolescent friendly health services will be provided in identified primary health centres and community health centers to address the specific health needs of adolescents for both in and out-of-school adolescents.

Management of NRHM activities at State / District / Sub district level

Block Level Pooling

The success of decentralization experiment would depend on the strength of the pillars supporting the process. It is imperative that management capacities be built at each level. To attain the outcomes, the NRHM would provide management costs up to 6% of the total annual plan approved for a State/district as has been introduced under the RCH-II programme. Apart from medical and para-medical staff, such services would include skills for financial management, improved community processes, procurement and logistics, improved collection and maintenance of data, the use of information technologies, management information system and improved monitoring and evaluation etc. The NRHM would also establish strong managerial capacity at the block level as blocks would be the link between the villages and the districts. At the district level the Mission would support and insist on developing health management capacities and introducing

policies in a systematic manner so that over time all district programme officers and their leadership are professionally qualified public health managers. Management structures at all levels will be accountable to the Panchayati Raj institutions, the State Level Health Mission and the National Level Missions/Steering Group.

The amount available under the management cost could also be used for improving the work environment as such improvements directly lead to better outcomes. The management structure holds the key to the success of any programme and priority would be given to direct efforts to develop appropriate arrangements for effective delivery of NRHM. Clarity of tasks, fund flows, powers, functions, account keeping, audit, etc. will be attempted at all levels.

Based on the outcomes expected in NRHM, the organization structure of the health department at different levels would be carefully reviewed. The State will constantly undertake review of management structure and devolution of powers and functions to carry out any mid course correction. Block Level Pooling will be one of the priority activities under the NRHM. Keeping in view the time line needed to make all facilities fully functional, specialists working in PHCs would be relocated at CEmONCs to facilitate their early synchronization. Outreach programmes are being organized with "block pooled" CHCs as the nodal point. NRHM will attempt to set up Block level managerial capacities as per need. Creation of a Block Medical Officer's office to support the supervision of NRHM activities in the Block would be a priority. Support to block level CHCs will also aim at improving the mobility and connectivity of health functionaries with support for Ambulances, telephones, computers, electric connection, etc.

Human resources for rural areas

Improvement in the health outcomes in the rural areas is directly related to the availability of the trained human resources. The Mission aims to increase the availability through provision of trained women as ASHAs/Community Health Workers (resident of the same village/hamlet for which they are appointed as ASHA). The Mission also seeks to provide minimum two Auxiliary Nurse Mid-wives (ANMs) against one at present at each Sub Health Centre (SHC) to be fully supported by the Government of India. Similarly, against the availability of one staff nurse at the PHC, it is proposed to provide three Staff Nurses to ensure round the clock services in every PHC. The Outpatient services would be strengthened through posting/ appointment on contract of AYUSH doctors over and above the

Medical Officers posted there. The State would integrate AYUSH by relocation at PHC and/or by new contractual appointment. GOI support will be for all new contractual posts and not for existing vacancies that State has to fill up. The Mission seeks to bring the CHCs on a par with the Indian Public Health Standards (IPHS) to provide round the clock hospital-like services. As far as manpower is concerned, it would be achieved through provision of seven Specialists as against four at present and nine staff nurses in every CHC (against seven at present). A separate AYUSH set up would be provided in each CHC/PHC. Contractual appointment of AYUSH doctors will be provided for this purpose. This would be reflected in the State Plans as per their needs.

Given the current problems of availability of both medical as well as paramedical staff in the rural areas, the NRHM seeks to try a range of innovations and experiments to improve the position. These include incentives for compulsory rural posting of Doctors, a fair, transparent transfer policy, involvement of Medical Colleges, improved career progression for Medical / Para Medical staff, skill upgradation and multi-skilling of the existing Medical Officers, ANMs and other Para Medical staff, strengthening of nursing / ANM training schools and colleges to produce more paramedical staff, and partnership with non governmental stakeholders to widen the pool of institutions. The Ministry has already initiated the process for the upgradation of ANMs into Skilled Birth Attendants (SBA) and for providing six-month anesthesia course to the Medical Officers. Convergence of various schemes under NRHM including the disease control programmes, the RCH-II, NACO, disease surveillance programme, would also provide for optimum / efficient utilization of all paramedical staff and help to bring down the operational costs.

State level Resource Centres for capacity development

Decentralized Planning, preparation of district plans, community ownership of the health delivery system and inter-sectoral convergence are the pillars on which the super-structure of the NRHM would be built. The implementation teams particularly at district and state levels would require development of specific skills. The State Health Resource Centre (SHRC) will act as the complementary technical capacity in the improved programme management and service delivery.

The NRHM would also require a comprehensive plan for training at all levels. The States would closely review its training infrastructure and identify the investment required so that effective HRD is put in place.

Drug supplies and logistics management

Timely supply of drugs of good quality which involves procurement as well as logistics management is of critical importance in any health system. The GoMP has recently issued its Drug Policy wherein the State plans to institute a system of drug supplies and logistics management on the lines of Tamil Nadu. The State would also seek to build capacity so that it may effectively take up scale procurement of goods and services.

Monitoring / Accountability Framework

The NRHM proposes an intensive accountability framework through a three pronged process of community based monitoring, external surveys and stringent internal monitoring. Facility and Household Survey, NFHS-II, RHS (2002) would act as the baseline for the mission against which the progress would be measured.

While the process of communitization of the health institutions itself would bring in accountability, the NRHM would help this process by wide dissemination of the results of the surveys in a language and manner which could be understood by the general population. It would be made compulsory for all the health institutions to prominently display information regarding grants received, medicines and vaccines in stock, services provided to the patients, user charges to be paid (if any) etc, as envisaged in the Right to Information Act. The community as well as the Rogi Kalyan Samitis would be expected to monitor the performance of the health facilities on those parameters. Health Monitoring and Planning Committees would be formed at PHC, Block, District and State levels to ensure regular community based monitoring of activities at respective levels, along with facilitating relevant inputs for planning. Organization of periodic Public Hearings or dialogues would strengthen the direct accountability of the Health system to the community and beneficiaries. The State Health Society/Mission will also monitor progress periodically. Both at State and district levels, Public Reports on Health would be published to report to the community at large on progress made. The State would involve NGOs, resource institutions and local communities in developing this monitoring arrangement. The Mentoring Group on ASHA, the National Advisory Committee on Community Action (which have been constituted with the leading

NGOs as their members) and the Regional Resource Centres would provide valuable inputs to the Mission. A wide network of MNGOs, FNGOs / SNGOs would also be providing feedback to the Mission.

The periodic external, household and facility surveys would track the effectiveness of the various activities under the NRHM for providing quality health services.

The requirements of audit will apply to all NRHM activities. The State and District Health Missions will be subject to annual audit by the CAG as well as by a Chartered Accountant and any special audit that the GoI may specify. Special audit by agencies like the Indian Public Auditors of India could also be undertaken. All procedures of government regarding financial grants including Utilization Certificates etc. would apply to the State and District Health Societies.

For the accountability framework to be truly community-owned, the effort will be to ensure that at least 70 percent of the total NRHM expenditures are made by institutions and organizations that are being supervised by an institutional PRI/community group.

Monitoring outcomes of the Mission

- Right to health is recognized as inalienable right of all citizens as brought out by the relevant rulings of the Supreme Court as well as the International Conventions to which India is a signatory. As rights convey entitlement to the citizens, these rights are to be incorporated in the monitoring framework of the Mission. Therefore, providing basic Health services to all the citizens as guaranteed entitlements will be attempted under the NRHM.
- The village health records would be maintained and updated by village health and sanitation committees. These records would form the basis for development and the implementation of respective village health plans.
- Periodic Health Facility Survey at SHC, PHC, CHC, District level to see if service guarantees are being honored. [By district /Block level Mission Teams/ research and resource institutions].
- Formation of Health Monitoring and Planning Committees at PHC, Block, District and State levels to ensure regular monitoring of activities at respective levels, along with facilitating relevant inputs for planning.
- Sharing of all data and discussion at habitation/ village level to ensure full transparency.

- Display of agreed service guarantees at health facilities, details of human and financial resources available to the facility.
- Sample household and facility surveys by external research organizations/NGOs.
- Public reporting of household and health facility findings and its wider dissemination through public hearings and formal reporting.

Convergence within the Health Department

Special programmes have been initiated as per need for diseases like TB, Malaria, Filaria, HIV AIDS etc. While the disease specific focus has helped in providing concerted attention to the issue, the weak or absence of integration with other health programmes has often led to lack of coordination and convergent action. All central programmes have worked on the assumption that there is a credible and functional public health system at all levels in all parts of the country. In practice, however, the public health system has not been in a satisfactory state. The challenge of NRHM, therefore, is to strengthen the public health institutions like SHC/PHC/CHC/Sub Divisional and District Hospitals. This will have positive consequences for all health programmes. Whether it is HIV/AIDS, TB, Malaria or any other disease, NRHM attempts to bring all of them within the umbrella of a Village/District/State Health Plan so that preventive, promotive and curative aspects are well integrated at all levels. The intention of convergence within the Health Department is also to reorganize human resources in a more effective and efficient way under the umbrella of the common District Health Society. Such integration within the Health Department would make available more human resources with the same financial allocations. It would also promote more effective interventions for health care.

The pandemic of HIV/AIDS requires convergent action within the health system. By involving health facilities in the programme at all stages, it is likely to help early detection, effective surveillance and timely intervention wherever required. The NACO has presence only from district level upwards. The NRHM would enable the NACO to provide necessary investment and support to the programme at district and sub district levels. NACO will provide Counselors at CHCs and PHCs along with testing kits as part of the NACP–III. It would also help to integrate training on HIV/AIDS to ASHA, ANMs, LHVs, para-medicals, lab technicians and medical officers. Common programmes for condom promotion and IEC are also planned. NRHM seeks to improve outreach of health services for common people through

convergent action involving all health sector interventions. The RTI / STI management services will be strengthened at PHCs by ensuring availability of testing and counseling services on identified PHCs and appropriate behaviour change communication interventions for adoption of healthy practices and life styles.

Convergence with other departments

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 seeks to adopt a convergent approach for intervention under the umbrella of the district plan. The Anganwadi Centre under the ICDS at the village level will be the principal hub for health action. Likewise, wherever village committees have been effectively constituted for drinking water, sanitation, ICDS etc. NRHM will attempt to move towards one common Village Health Committee covering all these activities. Panchayati Raj institutions will 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 will be by the concerned Department, the Village Health Plan/District Plan will provide an opportunity for some catalytic resources for convergent action. NRHM household surveys through ASHA, AWW will target availability of drinking water, firewood, livelihood, sanitation and other issues in order to allow a framework for effective convergent action in the Village Health Plans.

The success of convergent action would depend on the quality of the district planning process. In MP, the District Health Action Plans reflect integrated action in all section that determine good health – drinking water, sanitation, women's empowerment, adolescent health, education, female literacy, early child development, nutrition, gender and social equality. At the time of appraisal of District Health Plan, care would be taken to ensure that the entire range of wider determinants of health have been taken care of in the approach to convergent action.

Role of Non Governmental Organizations

The Non-governmental Organizations are critical for the success of NRHM. With the mother NGO programme scheme, 24 MNGOs covering 37 districts have

already been appointed. Their services are being utilized under the RCH-II programme. The Disease Control programmes, the RCH-II, the immunization and pulse polio programme, the JSY make use of partnerships of variety of NGOs. Efforts are being made to involve NGOs at all levels of the health delivery system. Besides advocacy, NGOs would be involved in building capacity at all levels, monitoring and evaluation of the health sector, delivery of health services, developing innovative approaches to health care delivery for marginalized sections or in underserved areas and aspects, working together with community organizations and Panchayati Raj institutions, and contributing to monitoring the right to health care and service guarantees from the public health institutions. The effort will be to support/ facilitate action by NGO networks of NGOs in the State which would contribute to the sustainability of innovations and community participation in the NRHM.

Grants-in-aid systems for NGOs will be established at the District and State levels to ensure their full participation in the Mission.

Risk pooling and the poor

While setting up of effective health insurance system is clearly a very important mission goal, it is realized that the introduction of such a system without the back up of a strong preventive health system and curative public health infrastructure would not be cost effective. Such a venture would only end up subsidizing private hospitals and lead to escalation of demand for high cost curative health care. The first priority of the Mission is therefore to put the enabling public health infrastructure in place.

While the public and private insurance companies would be encouraged to bring in innovative insurance products, the Mission would strive to set up a risk pooling system where the State and the local community would be partners. This could be done by resource sharing, facility mapping, setting standards, establishing standard treatment protocols and costs, and accreditation of facilities in the non-governmental sector.

Primary health care would be made accessible to all. However, in the case of need for hospitalization, CHCs would be the first referral unit. Only when the CHC is not in a position to provide specialized treatment, a patient would be referred to an accredited private facility/teaching hospital. The BPL patients would have the choice of selecting any provider out of the list of accredited hospitals as provided

under various schemes of GoMP. Reimbursement for the services would be made to the hospitals based on the standard costs for various interventions decided by the experts from time to time.

It is envisaged that the hospital care system would progressively move towards a fully funded universal social health insurance scheme. Under such a system, the government facilities would also be expected to earn their entire requirement of recurring expenditure including the salary support out of the procedures they perform, while taking care that access to those who cannot pay is not compromised. This system would obviously work only when the personnel working in the CHCs are not part of a state cadre but are recruited locally at the district level by the District Health Mission on contract basis. Since evolving such a system is likely to take some time, it is proposed that the RKSs take greater charge of day-to-day management of the health institutions for improving the quality of care.

Reforms in Medical / Nursing Education

The medical / para medical education system would require a new orientation to achieve these objectives. While the existing colleges would require strengthening for increased seat capacity, a conscious policy decision would be required to promote new colleges in deficient states. A fresh look also needs to be given on the norms for setting up new medical colleges under the regulations framed under Indian Medical Council Act to see whether any relaxation is necessary for such areas. The viability of using the caseload at district hospital for setting up Govt. / private medical colleges would also be examined. Apart from creating teaching infrastructure at the district level, it would also promote much needed investment and improvement in tertiary care in the district hospitals.

The curriculum in the Medical Colleges perhaps gives undue emphasis on specialization and tertiary care which is available only in large cities. In the syllabus, the primary health care as well as preventive aspects of health are largely ignored. It is therefore natural for the students to aspire for a career in a big hospital in urban setting. In the process the health care in the rural areas suffers. The Mission would look at ways and means to correct the situation.

The NRHM also recognizes the need for equipping medical colleges and other suitable tertiary care centres – including select district hospitals, select not for profit hospitals and public sector undertaking run hospitals for a variety of special

courses to train medical officers in short term courses to handle a large number of essential specialist functions in those states where medical colleges and postgraduate courses are below recommended norms. This includes courses from multi skilling serving Medical Officers, especially for anesthesia, emergency obstetrics, emergency pediatrics especially new born care, safe MTP services, mental health, eye care, trauma care etc. Further short-term programmes are needed to upgrade skills of nurses and ANMs to that of nurse-practitioners for those centres/regions which potentially have adequate nurses, but a chronic shortage of doctors over at least two decades.

The Mission would continue to support strengthening of Nursing Colleges wherever required, as the demand for ANMs and Staff Nurses and their development is likely to increase significantly. This would be done on the basis of need assessment, identification of possible partners for building capacities in the governmental and non governmental sectors in each of the States/UTs, and ways of financing such support in a sustainable way. Special attention would be given to setting up ANM training centres in tribal blocks which are currently para-medically underserved by linking up with higher secondary schools and existing nursing institutions.

Efforts to improve skills of Registered Medical Practitioners would also be introduced. The NRHM recognizes the need for universal continuing medical education programmes, which are flexible and non-threatening to the medical community, but which ensures that they keep abreast of medical advances, and have access to unbiased medical knowledge, and adequate opportunity to refresh and continuously upgrade existing knowledge and skills.

Pro-people partnerships with the non-governmental sector

The Non-governmental sector accounts for nearly 4/5 of health expenditure in India. In the absence of an effective Public Health System, many households seek health care from the Non-governmental / organized private sector also. A variety of partnership modes are proposed to be undertaken by the State.

Public Private Partnerships would be evolved, modeled and operationalized with the objective of expanding the service base so that access to under-served and under-reach population may be ensured. A system of accreditation would be evolved to ensure quality and service responsiveness amongst these partnerships.

The other model pertains to working in close collaboration with professional bodies such IMA, FOGSI, IAP and IPHA. The idea behind this partnership is to focus the development and sustenance of best practices and observance of standard treatment protocols. These bodies would also be involved in capacity building of service providers both in public and private sectors.

The third model of partnership pertains to deriving coordinated technical assistance from development partners with a view to refining programme planning, implementation, monitoring and evaluation of various programme interventions as envisaged under NRHM. Further, representatives of these development partners would also be the members of various committees / bodies so that the decision making functions may be appropriately facilitated.

6. CORE STRATEGIES AND PROGRAMME IMPLEMENTATION PLAN

1. Selection and Training of ASHA

The NRHM envisages that every village/large habitat will have a female Accredited Social Health Activist (ASHA) chosen by and accountable to the Panchayat to act as the interface between the community and the public health system. The States have been given freedom to determine state-specific model in operationalizing this bridge between the ANM and the village community through the Panchayat.

Functioning as an honorary and a volunteer worker, she would be granted a performance-based compensation for promoting universal immunization, referral transport and escort services under RCH II, construction of household toilets and other healthcare delivery programmes.

At the national level, Standing Mentoring Group supports the design of training of these ASHA workers. The emphasis of this training is on best practices in public health that are to be steered through the network of community-based health resource organizations.

The ASHA workers would play a central role in facilitating the development of Village Health Plan, working in close conjunction with the Anganwadi Workers (AWWs), ANM, local level functionaries of other departments and in particular the Self-Help Groups towards centrestaging the health agenda for the health committee of the Gram Panchayat and, in reference to the State of Madhya Pradesh, she would be the catalyzing resource for the Development Committee of the Gram Sabha.

The GoI will bear the cost of training, incentives and the drug kits and the remaining activities would be covered under the financial envelope given to the States by the GoI. The drug kit will include generic medicines under allopathic and AYUSH for treating common ailments.

The following activities constitute the Programme Implementation Plan for this component:

- Development and issuance of guidelines for selection and appointment of ASHA workers and determination of district-wise number of required ASHA Workers.
- Identification of ASHA Workers.
- District level orientation workshops for BMOs, Facilitators, PRIs and NGOs.
- Identification of ASHA Workers through the Facilitators.
- Training of State Level master trainers
- Training of District Level master trainers
- Training of Block level master Trainers
- Training of ASHA Workers
- Supply of drug kits for treatment of common ailments
- Performance based incentive for ASHA Workers
- Establishment of work routines for ASHA workers

Out of the total 43913 ASHAs in the State, 40 percent ASHA workers will be selected in the year 2006, 70% by 2007 and 100% by 2008. The training of 40% ASHAs will be completed by the year 2007, 80% by year 2008 and 100% by year 2009. It is proposed that their selection would be facilitated through 10 Facilitators in each of the 313 blocks. The process of facilitation would be supported by 10 accredited mother NGOs through the active involvement of Gram Panchayats and Gram Sabhas. The guidelines have been issued vide a government order and the process of identification and selection of ASHA Workers has been initiated.

2. **Village Health and Sanitation Committee constituted in all 52143 inhabited villages and untied grants provided to them**

Under this activity, Gram Sabhas shall be called upon to constitute Village Health & Sanitation Committees. These committees shall steer the preparation of Village Health & Sanitation Plans.

Each village and community participating in a Village Health Plan initiative needs to establish a committee at the local level. Such committees are essential for broad approaches to health improvement that involve a wide range of activities and individuals. A committee can coordinate and support the different activities, provide leadership for the community and can serve as the community contact point with local and district government functionaries under the NRHM programme. These committees can also facilitate broad community

participation in the programme, something that may be difficult to achieve by outsiders. Local committees are therefore crucial for promoting the village health approach in a community.

The composition of a local committee is crucial for a successful outcome. Committee members should be such people who are respected, are able to represent the interests of all sections of the community. It is also helpful if ANM/MPW/ASHA/Anganwadi Workers and such local staff from the development department of the government are also included as members of the committee.

The committee should be accountable and transparent both to the community and to local government or NGOs that may provide support. The committee should take minutes of all meetings, record the decisions made and make sure that the community members have access to this information. A regular feedback mechanism to the Gram Sabha should also be established, along with a broader debate by the community about major activities and issues. Since the committee would be managing untied funds, accounts will need to be kept and made available to other community members and external support agencies. To do this, the committee should elect executive officers, such as a chairperson, treasurer and secretary, and meet regularly.

Some of these committee members may also be on the committees at Sub Health Centre/PHC/CHC levels. Both in individual capacities as well as through the Village Health & Sanitation Committees, these community representatives shall have an interface with the field functionaries of government and receive technical support and guidance from them. Essentially, the primary roles of the Village Health & Sanitation Committees may be summarized as follows:

- Disseminate, encourage and empower the community with regard to knowledge and skills required to keep it healthy by addressing its health seeking behavior outcomes.
- Generate community demand for health care services.
- Act as social monitors on quality and appropriateness of health care services.

There are 52143 inhabited villages in the State. It is proposed to gradually build up this village level institution, beginning with a sample coverage of 3% (1565

villages) by year 2007 and thereafter increasing to 25% (13035 villages) by year 2008, 50% (26071 villages) by year 2010 and 100% (52143 villages) by year 2012.

The activities to the run up to the operationalisation of Village Health & Sanitation Committees would include the following stages:

- Development of guidelines
- Orientation of district, block and Janpad Panchayats and corresponding government functionaries from the departments of health, women & child development, public health engineering and Panchayats and rural development.
- Identifying and orienting facilitators for organizing and leading village level consultative processes.
- Election of members to the Village Health & Sanitation Committees
- Development of Village Health & Sanitation Plans by the Village Health & Sanitation Committees.
- Approval of Village Health & Sanitation Plans by respective Gram Sabhas.
- Implementation and monitoring of village plans.

These village health and sanitation committees would be provided with an untied grant of Rs. 10,000/- per year which would be used for developing the village health plans and carrying-out the approved activities therein.

3. Strengthening of Sub Health Centers

National Rural Health Mission proposes to provide to each Sub Health Center a sum of Rs. 10,000/- as an untied fund to facilitate meeting urgent yet discreet activities that need relatively small sums of money. For this purpose a fund will be kept in a joint bank account of ANM and Sarpanch. This fund will be utilized and spent on the activities approved by Village Health Committee and administered by Auxiliary Nurse Midwife. In areas where the Sub Health Center is not coterminous with Gram Panchayat and Sub Health Center covers more than one Gram Panchayat, the Village Health Committee of the Gram Panchayat where the Sub Health Center is located will approve the action plan. However, the funds can be used for any of the villages, which are covered by the Sub Health Center. The untied funds could be used only for the commonly good and not individual needs except in case of referral and transport of emergency situations. The untied funds could be used for undertaking local

health activity as envisaged under the village health plan. The indicative purposes for which this fund could be used by the village health and sanitation committee would include but be not limited to the following:-

- Ad hoc payments for cleaning up Sub Health Center, especially after childbirth.
- Transport of emergencies to appropriate referral centers.
- Transport of samples during epidemics.
- Purchase of consumables such as bandages in Sub Health Center.
- Purchase of bleaching powder and disinfectants for use in common areas of the village.
- Labour and supplies for environmental sanitation, such as clearing or larvicidal measures for stagnant water.
- Payment / reward to ASHA for certain identified activities.

According to the NRHM guidelines it is clear that the untied funds cannot be used for payment of salaries, purchase of vehicle, to meet any recurring expenditure or to meet the expenses of Gram Panchayat.

The state of Madhya Pradesh has 8835 Sub Health Centers. A sum of Rs. 10,000/- will be allocated per Sub Health Centre in the district plan of each district. The CMHO of the district will be advised to transfer this fund to the ANMs with the instructions that this fund will be kept in a joint account of ANM and Sarpanch and will be administered and utilized by the ANM for the activities approved by Village Health Committee. The guidelines will include the directions for keeping the record and replenishment of this fund.

Likewise, every SHC will also get maintenance grant of Rs.10,000/- per year for undertaking infrastructure related need based maintenance.

The State has also decided to bring about communication connectivity with SHCs and accordingly telephones will be installed at each SHC. The telephone connections will be installed in 8835 SHCs during year 1 to year 3 and 1658 connections in year 4.

Out of the total 8835 SHCs in the State, 3253 SHCs are functioning from rented premises. In addition, as per 2001 population there is a shortfall of 1658 SHCs. Thus in all 4911 SHC buildings are required to be constructed during the NRHM programme period. The State proposes to construct 200 SHCs in year 1, 1000 SHCs in year 2 and 3711 SHCs in year 3 as per the latest guidelines of GoI.

As provided under NRHM guidelines, services of second ANM would be made available at each SHC by appointing additional ANM on contractual basis. This would ensure that the SHC will always be open for serving the clients. It is proposed that during year 1, 600 ANMs will be appointed, 1600 in year 2, 2000 in year 3, 3000 in year 4 and 3293 in year 5.

4. Strengthening of PHCs

Every PHC will get an untied grant of Rs.25,000/- for undertaking planned local health activity. Likewise each PHC will receive annual maintenance grant of Rs. 50,000/- as provided under NRHM guidelines of the GoI.

There is a shortfall of 450 PHCs as per 2001 population. These PHCs will be constructed during the NRHM programme period. It is proposed to construct 100 PHCs in year 2, 150 PHCs in year 3 and 200 PHCs in year 4.

5. Strengthening of CHCs

Every CHC will get an untied grant of Rs.50,000/- for undertaking planned local health activity. Likewise each CHC will receive annual maintenance grant of Rs. 1,00,000/- per year as provided under NRHM guidelines of the GoI.

There is a shortfall of 120 CHCs as per 2001 population. These CHCs will be constructed during the programme period. It is proposed that construction of 60 CHCs will be undertaken in year 2 and year 3 respectively.

The State has also identified two CHCs per district for up-gradation to meet IPHS criteria. The remaining CHCs will be upgraded to meet IPHS in phased manner during the NRHM programme period.

Strengthening existing PHCs and CHCs, and provision of 30-50 bedded CHC per one lakh population for improved curative care to a normative standard,

Indian Public Health Standards (IPHS) which defines personnel, equipments and management standards: The Community Health Centres were designed to function as institutions to provide secondary level of health care to the rural population. The state has 227 Community Health Centers. However, most of these are not fulfilling their envisaged tasks. The National Rural Health Mission has developed Indian Public Health Standards to ensure that the Community Health Centers are able to provide good quality specialist health care to the rural population. These standards describe the services that should be available at Community Health Center. It includes routine and emergency care in surgery, medicine, obstetric and gynecology and pediatrics and all the National Health Programmes. These standards also prescribe the standards for support services at CHC level. The minimum requirements in terms of staff, skills, equipment, drugs, investigated facilities, physical infrastructure including electricity, telephone, water and sanitation have been prescribed.

The state has decided that a minimum of 2 Community Health Centers per district will be identified for strengthening to meet IPHS in the year 2006 and remaining Community Health Centers by year 2007.

The state has identified the gaps in human resource and skills. A process of recruitment of specialists, Medical Officers and nursing staff on contractual basis has been initiated. It is proposed that specialists in gyne. and obstetric, anesthesia and pediatrics will be hired on contract basis on a fixed emolument of Rs. 18000/- per month. In addition a provision has been made to pay an incentive of upto Rs. 10000/- per month based on performance. The Medical Officers and nursing staff will also be hired on contract basis. The skill gaps in existing staff and newly recruited staff will be addressed by offering in-service training.

The earlier experience of the state indicates that despite offering higher remuneration and incentives specialists in gynecology and obstetric and anesthesia do not join public services particularly in less developed areas. To overcome this problem it is also proposed that Medical Officers will be trained for a longer duration (4-6 months) in anesthesia, pediatrics and gynecology. These Medical Officers after successful completion of training in the medical colleges of the states will be posted in CEmONC facilities till qualified specialists in these specialties are not available.

A facility survey of all CEmONC institutions have been undertaken to identify the infrastructure gaps and assess the need for equipments and drugs. Based on the findings this survey necessary maintenance, repair renovation work will be undertaken to improve the infrastructure. The availability of running water and power will be ensured by providing a genset. The necessary equipments, drug and supplies as per IPHS will be ensured at all CEmONC facilities.

The blood bank at District Hospitals and blood storage facilities at other CEmONC facilities will be developed or strengthened. The guidelines for blood storage units prepared by MOHFW, GoI will be followed.

The hospital waste management system will be strengthened in each hospital using the national guidelines on hospital waste management, which are based on the bio-medical waste (management and handling) rules 1998. Accordingly, the Infection Management and Environment Plan (IMEP) guidelines of GoI would be followed by each institution. The staff involved in collection segregation, transportation, treatment and disposal of hospital waste will be trained and provided adequate safety equipments.

6. Mainstreaming of AYUSH Systems in the National Health Care Delivery System

The term AYUSH covers Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy. These systems are popular in a large number of States in the country. The Ayurveda system is popular mostly in the States of Kerala, Himachal Pradesh, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Uttar Pradesh and Orissa. The Unani system is particularly popular in Andhra Pradesh, Karnataka, Tamil Nadu, Bihar, Maharashtra, Madhya Pradesh, Uttar Pradesh, Delhi and Rajasthan. The Siddha system is widely acceptable in Tamil Nadu and Kerala. The Homeopathy is practiced all over the country but primarily popular in Uttar Pradesh, Kerala, West Bengal, Orissa, Andhra Pradesh, Maharashtra, Punjab, Tamil Nadu, Bihar, Gujarat and North-Eastern States. This is to imply that the AYUSH systems of medicine and its practices are well accepted by the community, particularly, in rural areas. The medicines are easily available and prepared from locally available resources, economical and comparatively safe. With this background, the GoI has proposed to mainstream/integrate AYUSH systems in National Health Care Delivery System under "National Rural Health Mission (NRHM)".

Presently, there are 194 AYUSH Hospitals and dispensaries existing in the rural areas of the State. These include 8 hospitals and 186 AYUSH dispensaries.

For mainstreaming of AYUSH in NRHM, the personnel of AYUSH shall work under the same roof of the Health Infrastructure, i.e., PHC, CHC. However, separate space would be allocated exclusively for them in the same building. The Doctors under the Systems of AYUSH are required to practice as per the terms & conditions laid down for them by the appropriate Regulatory Authorities. Following provisions have been made under the NRHM:

- Provision of one Doctor of any of the AYUSH systems as per the local acceptability assisted by a Pharmacist in PHC.
- Provision of one Specialist of any of the AYUSH systems as per the local acceptability assisted by a Pharmacist in CHC.
- Supply of appropriate medicines pertaining of AYUSH systems.
- The already existing AYUSH infrastructure to be mobilized. AYUSH dispensaries *that are not functioning well* should be merged with the PHC or CHC barring which, displacement of AYUSH clinic is not advised.
- Cross referral between allopathic and AYUSH streams shall be encouraged based on the need for the same.
- AYUSH Doctors shall be involved in IEC, health promotion and also supervisory activities.

NRHM implementation guidelines provide integration of AYUSH with community health centers and district hospitals. The adequate space will be provided at CHCs and District Hospitals for the doctors of AYUSH and the drugs of AYUSH system will also be procured and arranged.

AYUSH has a wide network of practitioners in the State and it provides reliable, effective and economic alternative health services to the people. Considering the fact that AYUSH systems of medicine which include Ayurveda, Unani and Homeopathy are popular and acceptable to people, mainstreaming this system in the health care delivery could contribute better synergy and utilization of AYUSH practitioners in the State. NRHM envisages for mainstreaming of AYUSH in health care delivery system of the State. There are 17 district level ayurvedic hospitals located at Bhopal, Hoshangabad, Betul, Shivpuri, Morena,

Mandla, Khargone, Jhabua, Dhar, Ratlam, Mandsaur, Sagar, Damoh, Chhatarpur, Sidhi, Shahdol and Satna. There are four ayurvedic hospitals at tehsil level at Rau (Indore), Tamia (Chhindwara), Beihar (Balaghat) and Lakhnadoan (Seoni) and two homeopathy hospitals at Navegaon Sanitorium (Chhindwara) and Pithampur (Dhar), in addition to these institutions there are 1427 single doctor ayurvedic dispensaries of which 61 are urban and 1366 are rural. Likewise there are 50 Unani dispensaries, of which 27 are located in urban area and 23 are located in rural area. There are 146 single doctor dispensaries of which 64 are in urban areas and 82 in rural areas.

NRHM guidelines provide that each Community Health Center must provide adequate space for AYUSH practitioners and also make provisions for AYUSH medicines. In the State out of 265 CHCs only 28 CHCs have AYUSH doctors. It is proposed that 200 AYUSH doctors will be engaged on contract basis for CHCs / PHCs along with 200 Pharmacists. Adequate provisions will be made in the NRHM programme for AYUSH drugs and documentation of traditional practices, promoting healthy life styles and other related activities.

7. **Support to Rogi Kalyan Samitis for community management of hospitals and annual maintenance of the facilities**

The National Rural Health Mission guidelines provide a corpus grant for hospital management societies. It is proposed that a sum of Rs. 5 Lakhs per district hospital, Rs.1 lakh each per Civil Hospital, CHC and PHC will be provided as an incentive formation and operationalisation of hospital management societies. It is envisaged that the hospital management societies will promote social audit for provision of quality health services and will contribute to creation of a fund at the facility level through levy of user charges on the services available at the institution.

Madhya Pradesh is one of the pioneering states where hospital management societies (Rogi Kalyan Samitis) were established and operationalized at all health institutions up to the level of primary health centres. To take advantage of the scheme of MOHFW, GoI of providing corpus grant for hospital management societies all CHCs, sub-district hospitals and district hospitals where the Rogi Kalyan Samitis have been registered and are operational, will be eligible for this grant.

8. Mobile Medical Units

NRHM guidelines propose that one Mobile Medical Unit will be provided in each district to improve outreach of services.

The state had been using mobile medical services to increase the reach of medical and health services to inaccessible areas and disadvantaged population groups. The state launched a scheme called Jeewan Jyoti Yojana in 1988-89 with the assistance from Govt. of India to provide mobile medical services in tribal areas on Hat-Bazaar days. Under this scheme 39 mobile medical units were obtained and provided to the districts. Later in the year 2003 10 mobile health units were provided 2 per district in 5 IPDP districts namely Chhatarpur, Panna, Rewa, Satna and Sidhi. These mobile health units were equipped with generator, inverter, minor OT with OT table and lights, oxygen cylinder and facilities for running water. These mobile health units had facilities for examining patients and conducting minor surgical interventions. The experience of the state of using mobile medical units and mobile health units for providing medical and health services in unreached areas had been a mix one. Organizing health services through mobile medical / health units requires intensive management inputs and sustained provisions for POL, maintenance and availability of staff and provisions for drugs. Considering the constraints faced by the state and learning from previous experiences this time the state proposes to involve private sector in running mobile medical / health units in the state.

The mobile medical / health units will be run in all 48 districts. For this purpose one mobile health unit with diagnostic facilities and a staff vehicle per district will be procured as per the guidelines of NRHM.

The mobile health units will be used to improve the access and availability of health services in remote and difficult reach areas. These units will be run through RKS / NGOs / Public Private Partnerships. Appropriate budget provisions as per the guidelines for recurring expenditure have been made in the proposal.

9. Preparation of District Health Action Plan

The NRHM provides for an allocation of Rs.20 lakhs per district for preparation of District Health Action Plans. The amount can be used for surveys,

workshops, studies, consultations, orientation in the process for preparation of District Health Action Plans.

The State has already instituted the mechanism and process for preparation of district plans since year 2004. Going by the experiences of the recently concluded appraisal of 48 districts' action plans, the State plans to institutionalize the process of preparation of integrated district health action plans. Consequently, it is proposed that the planning for formulating the district plans for 2007-08 shall be initiated in the month of December 2006. The State intends to utilize the allocation for plan preparation in terms of the following:

- Enhancing capacities of programme managers at State, district and sub-district levels.
- Development and updation of district data sets.
- Development of computerized authoritative specifications for equipments, instruments and supplies.
- Development of computer-aided standard civil and architectural designs for building constructions.

10. Setting up State Health Systems Resource Centre

The NRHM provides an allocation of Rs. 1 Crore for this. The detailed ToRs on its functionality and its linkage with the State Government would be determined. The state proposes to establish the State Health Systems Resource Center to enable innovations and channelise coordinated technical assistance in the areas of strategic planning, technical assistance and operational support. The State desires that the UNFPA, being the assigned Development Partner for the state may be requested for creation, supporting and backstopping the SHSRC. The similar resource centers would be created at the district and block levels subsequently and the State Health Systems Resource Centre will function as an apex resource centre in the State.

11. Preparation of State and district public report on health

The NRHM provides for Rs. 2 lakhs for the State and Rs. 25,000/- per district for this activity. The respective reports would be generated based on a standardized format through outsourcing. Initially, it is proposed to prepare this report for 10 districts in year 1 and the State Report. From year 2 onwards the State Report and the District Reports for all the districts will be prepared on annual basis.

12. Strengthening of ANM Training Centers

The State has 27 ANM training centers with a capacity to train 1620 trainees. Considering the requirement of ANMs in the State, State needs to augment its training capacity. It is proposed that ANM training school will be created in all the districts of the State, for this 21 new training centers will be created. The existing 27 training institutions also need strengthening in terms of repair / renovation, extension, training equipments, furniture and other basic amenities. Out of 27 existing ANM training centers, **7** are running in rented and / or makeshift accommodation like DTC, District Hospital and CHC, which are inadequate for the purpose of training. Therefore it is proposed that buildings for 28 ANM training schools are constructed and equipped. Each ANM Training School will be provided with mobility support for transporting trainees to the attached hospital and community for training purpose.

13. Enhancing Training Capacity for Training ANMs through Public Private Partnership

There is a wide gap between the demand of trained ANMs and the available capacity in the public sector in the State. Even after setting up new ANM training centres in remaining 19 districts the gap between demand and supply will continue to exist. To further enhance the training capacity, the State proposes to promote public private partnership. Upto 10 ANM training schools will be supported for three consecutive batches of ANM training.

14. Strengthening of LHV Training Centres

There are two LHV training centres in the State. These centres need strengthening in terms of repair / renovation, maintenance of the building and training equipments and upgrading library facilities. For this purpose it is proposed to provide Rs. 50,000/- each during year 1, Rs. 2.5 Lakhs each during year 2 and Rs. 2 Lakhs each in year 3.

15. Strengthening of Nursing Training Schools

There are 11 Nursing Schools in the State.

S.No.	Name of the Training Center	Capacity
1.	Hamidia Hospital, Bhopal	35
2.	M.Y. Hospital, Indore	41
3.	J.A. Hospital, Gwalior	41

4.	Medical College Hospital, Jabalpur	47
5.	G.M. Hospital, Rewa	32
6.	Victoria Hospital, Jabalpur	25
7.	District Hospital, Chhindwara	10
8.	District Hospital, Ujjain	17
9.	District Hospital, Khandwa	10
10.	District Hospital, Sagar	10
11.	District Hospital, Ratlam	10
	Total	**278**

These nursing schools needs strengthening in terms of repair / renovation, extension, equipments and basic amenities. In the year 1 a need assessment study will be undertaken. Based on the study findings the strengthening activities will be undertaken during year 2 and year 3 for which a sum of Rs. 2 Lakhs per Nursing School will be provided respectively except for the nursing schools in Jabalpur and Ujjain. For these nursing schools a separate has been received from GoI for upgrading them to Nursing Colleges.

16. Quality Assurance

A system of accreditation will be introduced on a pilot basis in two districts. The Quality Counsel of India will undertake this work. Based on the experience of this pilot a decision for up-scaling this intervention will be taken. All the districts will be covered under this programme in phased manner. This intervention will also be coordinated with timeline of strengthening health institutions under IPHS standards.

17. Health Melas

Swasthya Melas will be organized one per district and one at block level in all the districts. This way 48 district level and 265 block level health melas will be organized. For district health melas a sum of Rs. 5 Lakhs per mela and for block level melas Rs. One lakh per mela will be sanctioned. These melas will be organized every year from year 2 onwards.

18. Mobility Support for Block Medical Officers

Block Medical Officers need to conduct supervisory visits to the sub centers and primary health centers as well as maintain contact with PRIs. In order to facilitate their mobility, it is proposed to provide hired vehicle on a monthly basis

to all the Block Medical Officers. This will not only improve the monitoring and supervision of different national health programmes but will also help in promptly investigating disease outbreaks and organizing rapid response. A provision of Rs. 15,000/- per month per block is proposed. For the year 2006-07 a provision has been made for mobility support for 3 months only.

19. Health Insurance

19.1 Social Insurance

Recognizing that the poor are quite vulnerable to diseases, natural and other disasters, the State has considered it prudent to bring them under the net of social insurance. It is proposed to purchase an insurance cover for 45 Lakhs BPL families at a premium of Rs. 51/- per family per year, this insurance coverage will cover medical and surgical disease conditions.

19.2 Maternity Insurance

The State has introduced Vijaya Raje Janani Kalyan Beema Yojana from July 2006 with the objective promoting institutional deliveries amongst all BPL women. Both the response and uptake of the scheme has been very encouraging. The State has therefore decided to continue with the scheme so that its advantages may accrue to all pregnant women belonging to BPL. During the year 2006-07, Rs. 6 Crores has been paid to the insurance company as the initial installment of the premium from the DFID funded project. The balance amount of premium will be paid from the NRHM.

20. Supply of Essential Drugs for PHCs and CHC

The State provides a budget of Rs. 5,000/- per sub center, 1,00,000/- per PHC and 2,00,000/- per CHC per annum for procurement of drugs. To enhance the availability of all essential drugs and to ensure that all poor patients are provided free drugs, a need has been appreciated for augmenting this budget. An additional allocation of Rs. 10000/- per sub centre, Rs. 2 Lakhs per PHC and Rs. 4 Lakhs per CHC has been proposed.

21. Drug Stores

The State has drug stores at 28 districts out of the total 48 districts. The State has decided to introduce a centralized procurement and distribution system based on the Tamil Nadu Drug Corporation. In order to have smooth distribution and storage of drugs in all the districts it is proposed to construct

drug stores at remaining 20 districts. Cost of construction a drug store will be Rs. 40 Lakhs. The construction of the new drug stores will be undertaken in the year 2007-08.

The drug procurement cell of the Directorate will be strengthened with the introduction of e-procurement. A provision for covering the cost of setting of the office and its running cost has been made.

22. Facility Survey of CHCs / PHCs

It is proposed to undertake a facility survey of all 48 district hospitals, 54 civil hospitals, 127 CEmONC and 500 BEmONC institutions and non-BEmONC PHCs to identify gaps and infrastructure, repair / renovation requirements, gaps in human resource and equipments. The study will cost approximately Rs. 1.5 crores for district hospitals, Rs. One crore for civil hospitals, Rs. 2.54 crores for CHCs and Rs. 5 crores for PHCs. It is proposed that during 2006-07 the facility survey will be conducted for 2 district hospital, 5 civil hospitals, 12 CHCs and 50 PHCs, during year 2 for 46 district hospitals, 49 civil hospitals, 115 CHCs and 450 PHCs.

23. Research and Evaluation

Role of operations research needs to be optimized for improving programme performance as well as for improving the quality of programme implementation and monitoring. The State would establish an Operations Research Cell, which will coordinate all operational researches and maintain a catalogued documentation. This cell would be appropriately manned with requisite professionals having expertise in public and related disciplines including research methodology. The State would also seek to strengthen monitoring and evaluation system so that effective HMIS is put in place. In addition, the state proposes to develop and document best practices so that the programme implementers can benchmark their performances. The state Government would also specifically include E-governance and telemedicine in its operations research agenda. The detailed work plan would be developed to address these initiatives.

The Cell would specifically undertake a pilot project on prevention of anemia among tribal women. This project would seek to meet the IFA supplementation

needs of seven lakhs pregnant women and lactating mothers across 89 tribal blocks through consumption of double fortified common salt. Baseline and endline surveys will be conducted to determine the performance of the intervention.

It is also proposed to commission a series of studies, both short term and long term in order to continually assess maternal health outcomes. Towards this end process indicators captured through institution based MIS would be analyzed and interpreted through such analytical studies. The appropriate TORs shall be developed for these studies and an amount of Rs. 1.5 crores shall be kept apart for remitting to the individual experts / agencies who are assigned these studies.

In addition, the other activities under research and evaluation would include developing and instituting e-governance, HMIS and Tele-Medicine.

24. Networking with NGOs and Professional Organizations

With a view to strengthening grass root level advocacy as well as availability of health care services, the State proposes to strengthen the network of NGOs in health and allied sectors. These NGOs would include all such non-government organizations whether they are new or old and they may be functioning as voluntary organizations (VOs), community based organizations (CBOs) and such other civil society organizations (CSOs). It is important here to underline the fact that when it comes to NGOs, it would not be necessary for them to be registered organizations, *per se.* What is more important in the proposed networking of civil society organizations to bring about synergistic action amongst them so that effective advocacy in health and allied sectors can become more pronounced. The efforts will be made to identify such purposive organizations / movements (like White Ribbon Alliance for Safe Motherhood, Breastfeeding Promotion Network of India etc.). However, social clubs like rotaries, lions, inner-wheel club etc. would not be considered as NGOs for this purpose. The professional organizations like FOGSI, IMA, IPA, IPHA, IAPSM, Private Practitioners' Association etc. would be having primacy in their roles in this networking.

25 Addition of Gyne. And Pediatric Ward in District Hospitals

Institutional deliveries have registered a significant increase of 20% in last year as a result of various innovative schemes implemented in the State to promote institutional deliveries. It is expected that proportion of the institutional deliveries will increase to a level of 50% by next year. To meet the increased demand of institutional deliveries there is an urgent need for expansion of capacities of district hospitals especially terms of bed capacity in Gynec. and Pediatric Wards. It is proposed to add 20 beds in each speciality in each district hospital. During the year 1, the expansion work will be undertaken in 5 districts and in year all district hospitals will be covered. The recurring expenditure on the enhanced bed capacity will be borne by the State from its own sources and / or different other programmes.

26 Behavioural Change Communication (BCC)

Behavioural change communication is an important thrust area under NRHM. The State intends to determine behavioural change communication needs of the community on different thematic areas apart from identifying and supporting the specific communication roles which different committees are required to play at different levels of governance. Following the identification of BCC needs, district and region specific communication plans for different audience segments would be developed and implemented. It is also a perceived need that the tenets of NRHM require to be widely disseminated. For this purpose, both at the block as well as district levels, intensive programme communication drive would be carried-out by way of workshops for different stakeholders.

27 Capacity Building of PRIs

The PRIs constitute the third-tier of governance and have crucial roles in surveillance in public health system in mobilizing the community for positively altering its health seeking behaviour. Given the fact that these elected representatives are changed every five years, it is necessary to have a continuity of communication and dialogue with them so that they may effectively discharge their roles vis-à-vis the NRHM programme. The State has therefore determined to institute a continued initiative of capacity building of the PRIs at village, Gram Panchayat, Janpad Panchayat and Zila Panchayat levels. It is hoped that with this investment the PRIs would be able to play their designated roles in planning, implementation and monitoring of community health plans.

28. Support to FOGSI

RCH-II Programme guidelines provide that FOGSI will coordinate and organize training of medical officers in emergency obstetric care including caesarian sections. These trainings will be organized by FOGSI specialists for the MOs of both public and private institutions. To strengthen the training sites Rs. 40 Lakhs will be required. The training sites at two medical colleges will be developed and strengthened, one during 2006-07 and the other in 2007-08. One of these sites will be upgraded to the level of similar unit at CMC Vellore.

29. Strengthening Blood Banks

The State proposes to strengthen the management of State Blood Transfusion Council so that it may effectively play its mandated role. The requisite facilities including manpower on contract would be made available to the council's office which will be located in the Directorate of Health Services.

The State has 5 blood banks in the medical colleges, 36 blood banks in district hospitals and 50 blood banks in private sector. It is proposed to network these blood banks so as to optimize the availability of blood especially of rare groups. All the blood banks will be inter-connected through a network of computers and a special software will be developed. For this purpose Rs. 40 Lakhs will be required for developing software and training.

The five blood banks are providing blood components. The medical social workers (10) of these blood banks will be trained on donor motivation and social marketing by an agency 'Prathima Blood Center, Ahmedabad (Gujarat)'. It is a 15-day training. Cost of one training for 10 participants including training fee, TA/DA of participants and per diem is Rs. 1,27,500/-. This training will be done in a batch of 3 participants per training programme.

30. Creation of Disaster Management Cell

It has been decided that a state level Disaster Management Cell will be created in the Directorate of Health Services, Bhopal as per the guidelines of National Disaster Management Authority, this cell will formulate and implement state contingency plan to deal with disaster situations arising out of changes in climate, accidents, chemical and industrial hazards and geological and biological disasters. This Cell will also plan and manage the appropriate resource inventory and position identified emergency wards both in the public

as well as private hospitals. The initiative will also include constitution multi-disciplinary rapid response teams which will be duly trained in taking proactive as well as responsive steps in managing natural and man-made disasters. On the similar lines district level rapid response teams will also be created, trained and equipped. It involves the following:-

- Identification of appropriate physical space for the Cell, provision for its furnishing and procurement of communication equipments.
- The training of district and state level rapid response teams.
- Preparation of district and state level disaster preparedness plans which should include inventorization of resources and the logistics involved therein.
- Enabling structures for ensuring inter-sectoral coordination both at the state and district level.

31. School Health Programme

The school health programme will be further strengthened to provide regular health check-up and health care services for all school going children. Sick children suffering from common illness will be treated by the local institutions while sick children requiring higher level of care will be referred to secondary and tertiary care health institutions. Health education and improving the hygiene will be an important component of the programme.

32. Ambulance Services

It has been decided that two ambulances per District Hospital and one ambulance per Civil Hospital, CHC and PHC will be procured and provided to these institutions for being run through RKS / PPP mode. During the year 1, 48 ambulances for district hospitals, 50 ambulances for CHCs, 10 ambulances for civil hospitals will be procured. During the year 2, 48 ambulances will be procured for district hospitals, 216 ambulances for CHCs, 45 ambulances for civil hospitals and 383 ambulances for PHCs. During year 3, 769 ambulances will be procured for PHCs. Thus in all, 108 ambulances will be procured during 2006-07, 383 ambulances during 2007-08 and 769 ambulances during 2008-09. A provision has been made in the proposal for providing running cost for these ambulances @ Rs. 15000/- ambulance per month.

33. District Mental Health Programme

The prevalence of mental disorder is one of the major Mental Health Problem of the state as we know more than 2% of the population of the state suffers from serious mental disorder and another 15-20% of the population suffers from minor mental disorders. As per WHO, depression is the 4th leading cause of morbidity all over the world. Apart from this 30-40% of the patients who attend general OPD of various other clinical department require psychiatric consultation. Not only this, after delivery more than 50% of the women develop either depression or other psychiatric disorder. As regards school mental health, there are no facilities for early identification and treatment of various psychiatric disorders among children. As we know 15-20% children require psychiatric help. One percent of the population of the country is suffering from severe mental retardation. Drug addiction is another major mental health problem, which requires early intervention and treatment. There is no proper rehabilitation facility in the state of Madhya Pradesh for mentally ill patients including mentally retarded ones. As we know, psychiatric problems are quite common among old age people and they need better care. The magnitude of the problem is very high but the facilities are inadequate.

Each district of Madhya Pradesh must have mental health unit, which must be headed by a psychiatrist. Unit should have one psychiatrist, one psychologist, one psychiatric social worker and 10 beds for admission. District Hospitals should have needed infrastructure and staff as per norms. For proper investigation and treatment, EEG, ECT and psychological tests facilities should be provided in the district hospitals.

For meeting the demand of psychiatrists in the districts, the department of psychiatry in medical colleges should start teaching and training program of medical officers and P.G. (MD) in Psychiatry. Required technical assistance may be sourced from the department of psychiatry, NIMHANS Bangalore and AIIMS New Delhi. The State Government may recruit required staff on contract.

34. Convergence with MPSACS

Keeping in view the fact that presently National Aids Control Organization does not have sub-district institutional presence, it is proposed to institute appropriate strategies for bringing about integration between RCH and AIDS

Control Programme at sub-district levels. The proposed convergence will include the following activities:-

- Orientation training of ASHA workers in consultation with MPSACS
- Orientation of ASHA workers in consultation with MPSACS.
- Sensitization of ANMs, LHVs, Staff Nurses, Lab. Technicians and Medical Officers.

These activities will be undertaken in conjunction with programme implementation plan of MPSACS.

35. Strengthening Referral Services and Tertiary Care Units

The tertiary care health institutions plan an important role in providing critical health care to women and children. The primary and secondary health institutions refer serious and complicated cases for further management. The current system of referral needs improvement and strengthening at the tertiary care level. To fulfill this objective it is proposed that all the 5 medical colleges will be strengthened appropriately during year 2 and year 5 of the programme.

36. NRHM Management

NRHM guidelines provide for 6% of the total budget to be utilized for programme management costs. It is proposed that the State would utilize these funds for creating and supporting appropriate management structures at State, district and block levels. It is also proposed that the management costs would also be used for defraying the costs towards recently created divisional level offices of Joint Directors apart from strengthening the offices of CMHOs and BMOs.

ABBREVIATIONS

AIIMS	All Indian Institute of Medical Science
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
AWW	Aanganwadi Worker
AYUSH	Ayurved Siddha and Homeopathy
BEmONC	Basic Emergency Obstetric Neonatal Care
BPL	Below Poverty Line
CBO	Community Based Organization
CEmONC	Comprehensive Emergency Obstetric Neonatal Care
CH	Civil Hospital
CHC	Community Health Centre
CMHO	Chief Medical and Health Officer
CMR	Child Mortality Rate
CSO	Civil Society Organization
DFID	Department for International Development
DH	District Hospital
DP	Development Partners
DTC	District Training Centre
EEG	Electro Encephalogram
FNGO	Field Non-Governmental Organization
FOGSI	Federation of Obstetric and
GOI	Government of India
HMIS	Health Management Information System
HRD	Human Resource Development
IAP	Indian Association of Pediatrics
IAPSM	Indian Association of Preventive and Social Medicine
ICDS	Integrated Child Development Scheme
ICRIER	Indian Council of Research
IEC	Information Education and Communication
IFA	Iron Folic Acid
IMA	Indian Medical Association
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
IPDP	Integrated Population and Development Project
IPHA	Indian Public Health Association
IPHS	Indian Public Health Standards
IUCD	Inter Uterine Contraceptive Devices
JSY	Janani Suraksha Yojana
LHV	Local Health Visitor
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MNGO	Mother Non-Governmental Organization
MOHFW	Ministry of Health and Family Welfare
MoU	Memorandum of Understanding
MP	Madhya Pradesh
MPSACS	Madhya Pradesh State AIDS Control Society
MPW	Multi-Purpose Worker
MTP	Medical Termination of Pregnancy

NACO	National AIDS Control Organization
NACP	National AIDS Control Programme
NCAER	National Council for Applied and Economic Research
NFHS	National Family Health Survey
NIMHANS	National Institute of Mental Health and Neuro Sciences
NMR	Neonatal Mortality Rate
OBC	Other Backward Class
OPD	Outdoor Patient Dispensary
PG	Post Graduate
PHC	Primary Health Centre
PHED	Public Health Engineering Department
PHPY	Prasav Hetu Parivahan Yojana
PIP	Programme Implementation Plan
PMU	Programme Management Unit
POL	Petrol Oil and Lubricant
PRI	Panchayati Raj Institution
RCH	Reproductive and Child Health
RHS	Rapid Household Survey
RKS	Rogi Kalyan Samiti
RMP	Registered Medical Practitioner
RTI	Reproductive Tract Infection
SBA	Skilled Birth Attendant
SC	Scheduled Caste
SHC	Sub Health Centre
SHSRC	State Health Systems Resource Centre
SNGO	Service Non-Governmental Organization
SPMU	State Programme Management Unit
ST	Scheduled Tribe
STI	Sexual Tract Infection
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
TT	Tetanus Toxoid
U5M	Under 5 Mortality
UIP	Universal Immunization Programme
UNFPA	United Nations Population Fund
UT	Union Territory
VHSC	Village Health and Sanitation Committee
VO	Voluntary Organization

DRAFT REPORT ON RECOMMENDATION OF TASK FORCE ON PUBLIC PRIVATE PARTNERSHIP FOR THE 11TH PLAN

The Planning Commission constituted a Working Group on Public Private Partnership to improve health care delivery for the Eleventh Five-Year Plan (2007-2012) under the Chairmanship of Secretary, Department of Health & Family Welfare, Government of India with the following members:

1.	Secretary, Department of Health & Family Welfare, New Delhi	Chairman
2.	Secretary (Health), Government of West Bengal	Member
3.	Secretary (Health), Government of Bihar	Member
4.	Secretary (Health), Government of Jharkhand	Member
5.	Secretary (Health), Government of Karnataka	Member
6.	Secretary (Health), Government of Gujarat	Member
7.	Director General Health Services, Directorate General of Health Services, New Delhi	Member
8.	President, Indian Medical Association, New Delhi	Member
9.	Medical Commissioner, employees State Insurance Corporation, New Delhi	Member
10.	Dr. H. Sudarshan, President /Chairman, Task Force on Health & Family Welfare, Government of Karnataka, Bangalore	Member
11.	Dr. Sharad Iyengar, Action Research & Training in Health, Udaipur, Rajasthan	Member
12.	Executive Director, Population Foundation of India, New Delhi	Member
13.	Dr. S.D. Gupta, Director, Indian Institute of Health Management Research, Jaipur	Member
14.	Ms. Vidya Das, Agragamee, Kashipur, District Rayagada, Orissa	Member

15.	Dr. C.S. Pandav, Centre for Community Medicine, All India Institute of Medical Sciences, New Delhi	Member
16.	Dr. V.K. Tiwari, Acting Head, Department of Planning & Evaluation, National Institute of Health & Family Welfare, New Delhi.	Member
17.	Dr. A Venkat Raman, Faculty of Management Sciences, University of Delhi	Member
18.	Dr. K.B. Singh, Technical Adviser, European Commission, New Delhi	Member
19.	Shri K.M. Gupta, Director, Ministry of Finance, New Delhi	Member
20.	Shri Rajeev Lochan, Director (Health), Planning Commission, New Delhi	Member
21.	Joint Secretary, Ministry of Health & Family Welfare, New Delhi	Member Secretary

The Terms of reference of the Working Group were as under:

(i) To review existing scenario of Public Private Partnership in health care (Public, Private, NGO) in urban and rural areas with a view to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people, reduction of child and maternal deaths as well as population stablization and also achieve goals set under the National Health Policy and the Millennium Development Goals.

(ii) To identify the potential areas in the health care delivery system where an effective, viable, outcome oriented public private partnership is possible.

(iii) To suggest a practical and cost effective system of public private partnership to improve health care delivery system so as to achieve the goals set in National Rural Health Mission, National Health Policy and the Millennium Development Goals and makes quantitative and qualitative difference in implementation of major health & family welfare programmes, functioning of health & family welfare infrastructure and manpower in rural and urban areas.

(iv) To deliberate and give recommendations on any other matter relevant to the topic.

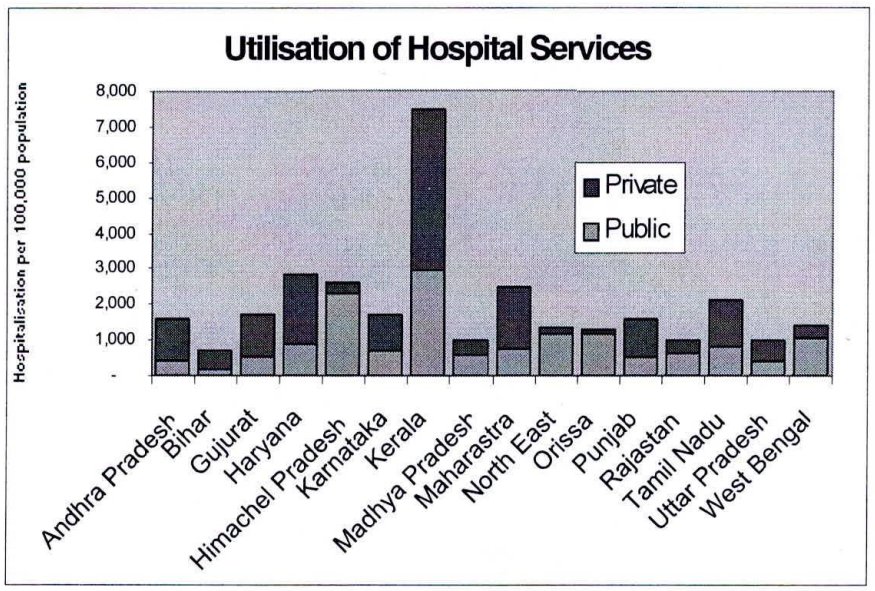
DEFINING PUBLIC PRIVATE PARTNERSHIP IN HEALTH

Public-Private Partnership or PPP in the context of the health sector is an instrument for improving the health of the population. PPP is to be seen in the context of viewing the whole medical sector as a national asset with health promotion as goal of all health providers, private or public. The Private and Non-profit sectors are also very much accountable to overall health systems and services of the country. Therefore, synergies where all the stakeholders feel they are part of the system and do everything possible to strengthen national policies and programmes needs to be emphasized with a proactive role from the Government.

However for definitional purpose, "Public" would define Government or organizations functioning under State budgets, "Private" would be the Profit/Non-profit/Voluntary sector and "Partnership" would mean a collaborative effort and reciprocal relationship between two parties with clear terms and conditions to achieve mutually understood and agreed upon objectives following certain mechanisms.

PPP however would not mean privatization of the health sector. Partnership is not meant to be a substitution for lesser provisioning of government resources nor an abdication of Government responsibility but as a tool for augmenting the public health system.

THE ROLE OF THE PRIVATE SECTOR IN HEALTH CARE



Source Pearson M, Impact and Expenditure Review, Part II Policy issues. DFID, 2002

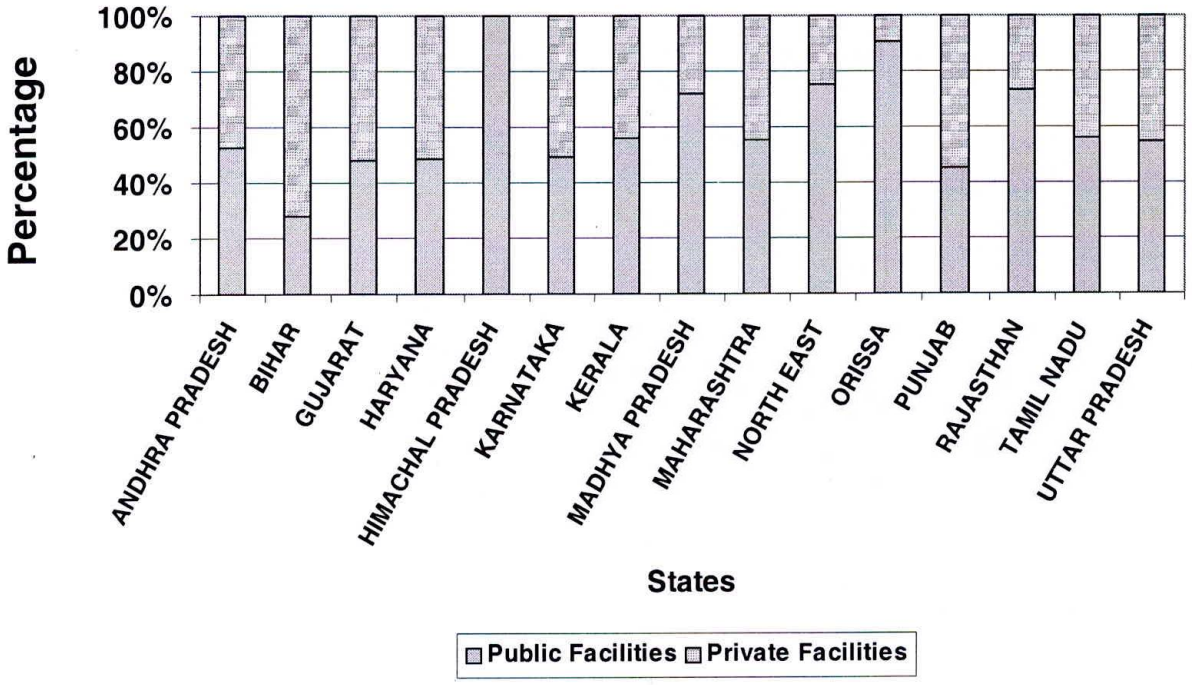
Over the years the private health sector in India has grown markedly. Today the private sector provides 58% of the hospitals, 29% of the beds in the hospitals and 81% of the doctors. *(The Report of the Task Force on Medical Education, MoHFW)*

The private providers in treatment of illness are 78% in the rural areas and 81% in the urban areas. The use of public health care is lowest in the states of Bihar and Uttar Pradesh. The reliance on the private sector is highest in Bihar. 77% of OPD cases in rural areas and 80% in urban areas are being serviced by the private sector in the country. *(60th round of the National Sample Survey Organisation (NSSO) Report.*

The success of health care in Tamil Nadu and Kerala is not only on account of the Public Health System. The private sector has also provided useful contribution in improving health care provision.

Studies of the operations of successful field NGOs have shown that they have produced dramatic results through primary sector health care services at costs ranging from Rs. 21 to Rs. 91 per capita per year. Though such pilot projects are not directly upscalable, they demonstrate promising possibilities of meeting the health needs of the citizens by focused thrust on primary healthcare services. (NSSO 60th Round)

India: Percentage of Hospitalizations In The Public and Private Sector Among Those Below The Poverty Line, According To State



Source Pearson M, Impact and Expenditure Review, Part II Policy issues. DFID,2002

While data and information is still being collated, the private health sector seems to be the most unregulated sector in India. The quantum of health services the private sector provides is large but is of poor and uneven quality. Services, particularly in the private sector have shown a trend towards high cost, high tech procedures and regimens. Another relevant aspect borne out by several field studies is that private health services are significantly more expensive than public health services – in a series of studies, outpatient services have been found to be 20-54% higher and inpatient services 107-740% higher. ***(Report of the Task Force on Medical Education, MoHFW.***

Widely perceived to be inequitable, expensive, over indulgent in clinical procedures, and without standards of quality, the private sector is also seen to be easily accessible, better managed and more efficient than its public counterpart.

Given the overwhelming presence of private sector in health, there is a need to regulate and involve the private sector in an appropriate public-private mix for providing comprehensive and universal primary health care to all. However there is an overwhelming need for action on privatization of health services, so that the health care does not become a commodity for buying and selling in the market but remains a public good, which is so very important for India where 1/3 of the population can hardly access amenities of life, leave alone health care.

In view of the non-availability of quality care at a reasonable cost from the private sector , the upscaling of non-profit sector in health care both Primary, Secondary and Tertiary care, particularly with the growing problems of chronic diseases and diseases like HIV/AIDS, needs long term care and support.

OBJECTIVES OF PUBLIC PRIVATE PARTNERSHIPS

Universal coverage and equity for primary health care should be the main objective of any PPP mechanism besides:

- Improving quality, accessibility, availability, acceptability and efficiency
- Exchange of skills and expertise between the public and private sector
- Mobilization of additional resources.
- Improve the efficiency in allocation of resources and additional resource generation
- Strengthening the existing health system by improving the management of health within the government infrastructure
- Widening the range of services and number of services providers.
- Clearly defined sharing of risks
- Community ownership

REVIEW OF EXISTING SCENARIO OF PPP

POLICY PRESCRIPTION

Public-Private Partnership has emerged as one of the options to influence the growth of private sector with public goals in mind. Under the Tenth Five Year Plan (2002-2007), initiatives have been taken to define the role of the government, private and voluntary organizations in meeting the growing needs for health care services including RCH and other national health programmes. The Mid Term Appraisal of the Tenth Five Year Plan also advocates for partnerships subject to suitability at the primary, secondary and tertiary levels. National Health Policy-2002 also envisaged the participation of the private sector in primary, secondary and tertiary care and recommended suitable legislation for regulating minimum infrastructure and quality standards in clinical establishments/medical institutions. The policy also wanted the participation of the non-governmental sector in the national disease control programmes so as to ensure that standard treatment protocols are followed. The Ministry of Health and Family Welfare, Government of India, has also evolved guidelines for public-private partnership in different National Health Programmes like RNTCP, NBCP, NLEP, RCH, etc. However, States have varied experiences of implementation and success of these initiatives. Under the Reproductive and Child Health Programme Phase II (2005-2009), several initiatives have been proposed to strengthen social-franchising initiatives. National Rural Health Mission (NRHM 2005-2012) recently launched by the Hon'ble Prime Minister of India also proposes to support the development and effective implementation of regulating mechanism for the private health sector to ensure equity, transparency and accountability in achieving the public health goals. In order to tap the resources available in the private sector and to conceptualize the strategies, Government of India has constituted a Technical Advisory Group for this purpose, consisting of officials of GOI, development partners and other stakeholders. The Task Group is in the process of finalizing its recommendation.

REVIEW OF PPP IN THE HEALTH SECTOR

During the last few years, the Centre as well as the State Governments have initiated a wide variety of public-private partnership arrangements to meet the growing health care needs of the population under five basic mechanisms in the health sector:

- **Contracting in-**government hires individual on a temporary basis to provide services
- **Contracting out-** government pays outside individual to mange a specific function
- **Subsidies-**government gives funds to private groups to provide specific services
- **Leasing or rentals-**government offers the use of its facilities to a private organization
- **Privatization-**government gives or sells a public health facility to a private group

An attempt has been made here to encapsulate some of the on-going initiatives in public private partnerships in selected states.

A. Partnership between the Government and the for profit sector

1. Contracting in Sawai Man Singh Hospital, Jaipur

- The SMS hospital has established a Life Line Fluid Drug Store to contract out low cost high quality medicine and surgical items on a 24-hour basis inside the hospital. The agency to operate the drug store is selected through bidding. The successful bidder is a proprietary agency, and the medical superintendent is the overall supervisor in charge of monitoring the store and it's functioning. The contractor appoints and manages the remuneration of the staff from the sales receipts. The SMS hospital shares resources with the drug store such as electricity; water; computers for daily operations; physical space; stationery and medicines. The contractor provides all staff salaries; daily operations and distribution of medicine; maintenance of records and monthly reports to SMS Hospital. The SMS Hospital provides all medicines to the drug store, and the contractor has no power to purchase or sell medicines himself. The contractor gains substantial profits, could expand his contacts and gain popularity through LLFS. However, the contractor has to abide by all the rules and regulations as given in the contract document.
- The SMS Hospital has also contracted out the installation, operation and maintenance of CT-scan and MRI services to a private agency. The agency is paid a monthly rent by the hospital and the agency has to render free services to 20% of the patients belonging to the poor socio-economic categories

2. The Uttaranchal Mobile Hospital and Research Center (UMHRC) is three-way partnership among the Technology Information, Forecasting and Assessment Council (TIFAC), the Government of Uttaranchal and the Birla Institute of Scientific Research (BISR). The motive behind the partnership was to provide health care and diagnostic facilities to poor and rural people at their doorstep in the difficult hilly terrains. TIFAC and the State Govt. shares the funds sanctioned to BISR on an equal basis.

3. Contracting out of IEC services to the private sector by the State Malaria Control Society in Gujarat is underway in order to control malaria in the state. The IEC budget from various pharmaceutical companies is pooled together on a common basis and the agencies hired by the private sector are allocated the money for development of IEC material through a special sanction.

4. Contracting in of services like cleaning and maintenance of buildings, security, waste management, scavenging, laundry, diet, etc. to the private sector has been tried in states like Himachal Pradesh; Karnataka; Orissa (cleaning work of Capital Hospital by Sulabh International); Punjab; Tripura (contracting Sulabh International for upkeep, cleaning and maintenance of the G.B. Hospital and the surrounding area); Uttaranchal, etc.

5. The Government of Andhra Pradesh has initiated the Arogya Raksha Scheme in collaboration with the New India Assurance Company and with private clinics. It is an insurance scheme fully

funded by the government. It provides hospitalization benefits and personal accident benefits to citizens below the poverty line who undergo sterilization for family planning from government health institutions. The government paid an insurance premium of Rs. 75 per family to the insurance company, with the expected enrollment of 200,000 acceptors in the first year.

The medical officer in the clinics issues a Arogya Raksha Certificate to the person who undergoes sterilization. The person and two of her/his children below the age of five years are covered under the hospitalization benefit and personal accident benefit schemes. The person and/oor her/his children could get in-patient treatment in the hospital upto a maximum of Rs. 2000 per hospitalization, and subject to a limit of Rs. 4000 for all treatments taken under one Arogya Raksha Certificate in any one year. She/he gets free treatment from the hospital, which in turn claims the charges from the New India Insurance Company. In case of death due to any accident, the maximum benefit payable under one certificate is Rs. 10,000.

B. Partnership between the Government and the non-profit sector

1. Involvement of NGOs in the Family Welfare Programme

- The MNGO (Mother NGO) and SNGO (Service NGO) Schemes are being implemented by NGOs for population stabilization and RCH. 102 MNGOs in 439 districts, 800 FNGOs, 4 regional Resource Centers (RRC) and 1 Apex Resource Cell (ARC) are already in place. The MNGOs involve smaller NGOs called FNGOs (Field NGOs) in the allocated districts.

  The functions of the MNGO include identification and selection of FNGOs; their capacity building; development of baseline data for CAN; provision of technical support; liaison, networking and coordination with State and District health services, PRIs and other NGOs; monitoring the performance and progress of FNGOs and documentation of best practices. The FNGOs are involved in conducting Community Needs Assessment; RCH service delivery and orientation of RCH to PRI members; advocacy and awareness generation.

  The SNGOs provide an integrated package of clinical and non-clinical services directly to the community

- The Govt. of Gujarat has provided grants to SEWA-Rural in Gujarat for managing one PHC and three CHCs. The NGO provides rural health, medical services and manages the public health institutions in the same pattern as the Government. SEWA can accept employees from the District Panchayat on deputation. It can also employ its own personnel by following the recruitment resolution of either the Government or the District Panchayat. However, the District Health Officer or the District Development Officer is a member of the selection committee and the appointment is given in her/his presence. In case SEWA does not wish to continue its services, the District Panchayat, Bharuch would take over the management of the same.

2. The Municipal Corporation of Delhi and the Arpana Trust (a charitable organization registered in India and in the United Kingdom have developed a partnership to provide comprehensive health services to the urban poor in Delhi's Molarbund resettlement colony. Arpana Trust runs a health center primarily for women and children, in Molarbund through its health center 'Arpana Swasthya Kendra'. As contractual partners, Arpana Trust and MCD each has fixed responsibilities and provides a share of resources as agreed in the partnership contract. The Arpana Trust is responsible for organizing and implementing services in the project area, while the MCD is responsible for monitoring the project. The MCD provides building, furniture, medicines and equipment, while the Arpana Trust provides maintenance of the building, water and electricity charges, management of staff and medicine.

3. Management of Primary Health Centers in Gumballi and Sugganahalli was contracted out by the Government of Karnataka to Karuna Trust in 1996 to serve the tribal community in the hill y areas. 90% of the cost is borne by the Govt. and 10% by the trust. Karuna Trust has full responsibility for providing all personnel at the PHC and the Health Sub-centers within its jurisdiction; maintenance of all the assets at the PHC and addition of any assets if required at the PHC. There has been redeployment of the Govt. staff in the PHCs, however some do remain in deputation on mutual consent. The agency ensures adequate stocks of essential drugs at all times and supplies them free of cost to the patients. No patient is charged for diagnosis, drugs, treatment or anything else except in accordance with the Government policy. The staff salaries are shared between the Govt. and the Trust.

Gumballi district is considered a model PHC covering the entire gamut of primary health care – preventive, promotive, curative and rehabilitative

Similarly in Orissa, PPPs are being implemented for safe abortion services and social marketing of disposable delivery kits. Parivar Sewa Sanstha and Population Services International are implementing the Sector Investment Plan in the state.

4. The Government of Tamil Nadu has initiated an Emergency Ambulance Services scheme in Theni district of Tamil Nadu in order to reduce the maternal mortality rate in its rural area. The major cause for the high MMR is anon-medical cause - the lack of adequate transport facilities to carry pregnant women to health institutions for childbirth, especially in the tribal areas. This scheme is part of the World Bank aided health system development project in Tamil Nadu. Seva Nilayam has been selected as the potential non-governmental partner in the scheme. This scheme is self-supporting through the collection of user charges. The Government supports the scheme only by supplying the vehicles. Seva Nilayam recruits the drivers, train the staff, maintain the vehicles, operate the program and report to the government. It bears the entire operating cost of the project including communications, equipment and medicine, and publicizing the service in the villages, particularly the telephone number of the ambulance service. However, the project is not self-sustaining as the revenue collection is lesser than anticipated.

Seva Nilayam also operates another program in the Theni district called the Emergency Accident Relief Center for which the government has also provided a vehicle.

5. The Urban Slum Health Care Project the Andhra Pradesh Ministry of Health and Family Welfare contracts NGOs to manage health centers in the slums of Adilabad. The basic objectives of the project are to increase the availability and utilization of health and family welfare services, to build an effective referral system, to implement national health programs, and to increase health awareness and better health-seeking behaviour among slum dwellers, thus reducing morbidity and mortality among women and children. To serve 3 million people, the project has established 192 Urban Health Centers. Five 'Mahila Aarogya Sanghams' (Women's Wee-Being Associations) were formed under each UHC, and along with the self-help groups and ICDS workers mobilize the community and adopt Behaviour Change Communication strategies.
The NGOs are contracted to manage and maintain the UHCs, and based on their performance, they are awarded with a UHC, or eliminated from the program. Additional District Magistrates and Health Officers supervise the UHCs at district level and the Medical Officer is the nodal officer at the municipality level. The District Committee approves all appointments made by the NGOs for the UHC staff. The Govt. of Andhra Pradesh constructs buildings for the UHCs; provide honoraria to the Project Coordinators of the UHCs, medical officers and other staff; train staff members; and supply drugs, equipment and medical registers.
6. In recent examples, collaboration that has developed between Government of Arunachal Pradesh, VHAI and Karuna Trust in managing significant number of PHCs may be seen at Annexure IV.

C. Partnership between the Government and a private service provider

Several examples for the above partnership could be quoted from the Indian experience:

1. Partnership between the Department of Family Welfare and Private Service Providers:

- The DoFW has appointed one additional ANM on contractual basis in the remote sub-centers (which constitute 30% of all sub centers in C category districts in 8 states) to ensure better emergency obstetric care under the RCH programme. Similarly 140 ANMs could be appointed in Delhi for extending their services in the slum areas. The scheme has been extended to the North Eastern states with effect from 1999-2000
- Public Health/Staff nurses have been appointed on a contractual basis at PHCs/ CHCs having adequate infrastructure for conducting deliveries.
- In order to plug deficiencies in providing emergency obstetric care at FRU due to non-availability of anesthetist for surgical interventions, states have been permitted to engage the anesthetist from the private sector on a payment of Rs.1000 per case at the sub-district and CHC level.
- With a view to supplement the regular arrangement, provision has been made for engaging doctors trained in MTP as Safe Motherhood Consultant who will visit the PHC (including CHCs in NE states) once a week or at least once in a fortnight on a fixed day for performing MTP and other Maternal Health care services. These doctors will be paid @Rs.500 per day visit.
- A scheme for reservation of sterilization beds in hospitals run by government, local bodies and voluntary organizations was introduced in 1964 with view to provide immediate facilities for tubectomy operations in hospitals. At present too, beds are sanctioned to hospitals run by local bodies and voluntary organizations and grant-in-aid is provided as per approved pattern of assistance.
- The Haryana Urban RCH Model is being implemented in 19 urban slums and benefits 15 lakh beneficiaries. In this model, a private health practitioner (PHP) has been identified to provide comprehensive primary health care service to a group of 1000-1500 targeted beneficiaries. S/he provides services related to National Disease Control Programme, contraception, immunization, ambulatory care. The PHP gets an incentive of Rs. 100 p.a. per beneficiary by the Government. The model is envisioned to be self-sustaining by the 5^{th} year.
- A proposal has been submitted by PSS, Rajasthan to the GOI for establishing a comprehensive RCH clinic in 3 districts, wherein PSS would provide services like sterilization, MTP, spacing, ante/post natal care, immunization, RTI/STI. The cost to be borne by the Govt. is Rs. 18 to 20 lakhs p.a. per clinic. With a view to ensure project sustainability, the user fees is sought to be deposited in a bank account.
- The Samaydan Scheme in Gujarat aims to ease the problem of vacancies of specialists in health and medical services. About 125 honorary and part-time specialists have been appointed in rural hospitals under the scheme and the removal of age-eligibility criteria for appointment of doctors in government services is also being considered.
- Under the Urban Health Care Project, the community base health volunteers in the urban areas would roped in to provide primary health care in the urban slums of Gujarat. Their activities would be monitored by CHC/PHC/PPU/Urban Family Welfare Center/Trust Hospital and they would be paid a fixed monthly honorarium.

2. The Department of AYUSH envisages accreditation of organizations with the MoHFW for research and development in order to be eligible for financial assistance under the scheme of Extra Mural Research on ISM&H. The eligible organizations include R&D organizations recognized by the Ministry of Science and Technology, Govt. of India; one Government or semi-Government or autonomous R & D Institution under the GoI/State Government/Union Territory; and one private R&D institutions registered under any State/Central Act as Research Organization.

D. Partnership between the Government and a private sector and/or the non-profit sector and/or a private service provider and/or multilateral agencies

1. The National Malaria Control Programme has involved the NGOs and private practitioners at the district level for the distribution of medicated mosquito nets. (LOGISTICS)

2. Under the National Blindness Control Programme, District Blindness Control Societies have been formulated, which are represented by the Government, non-government and private sectors. The NGOs have been involved for providing a package of services

3. The National AIDS Control Programme has involved both the voluntary and private sector for outreaching the target population through Targeted Interventions (WIDER COVERAGE)

4. The Revised National Tuberculosis Control Programme has involved the private practitioners and the NGOs for the rapid expansion of the DOTS strategy. The non-inclusion of the private providers had been one of the main reasons for the failure of the earlier programme. The private medical practitioners serve as the first point of contact for more than two-thirds of TB symptomatics.

The GOI has initiated a Public Private Mix (PPM) pilot project with technical assistance from WHO in 14 sites across the country viz. Ahmedabad, Bangalore, Bhopal, Chandigarh, Chennai, Delhi, Jaipur, Kolkata, Lucknow, Patna, Pune, Bhubaneshwar, Ranchi and Thiruvananthapuram. The areas of collaboration with the NGOs include: community outreach; health education and promotion; provision of DOTS and in-hospital care for TB disease; TB Unit Model; programme planning, implementation, training and evaluation.

Presently, there are 550 NGOs and 200 Private Practitioners involved in RNTCP. Attempts are also underway to involve the medical colleges in the programme.

5. The Rajiv Gandhi Super-specialty Hospital in Raichur Karnataka is a joint venture of the Government of Karnataka and the Apollo hospitals Group, with financial support from OPEC (Organization of Petroleum Exporting Countries). The basic reason for establishing the partnership was to give super-specialty health care at low cost to the people Below Poverty Line. The Govt. of Karnataka has provided the land, hospital building and staff quarters as well as roads, power, water and infrastructure. Apollo provided fully qualified, experienced and competent medical facilities for operating the hospital. The losses anticipated during the first three years of operation were reimbursed by the Govt. to the Apollo hospital. From the fourth year, the hospital could get a 30% of the net profit generated. When no net profit occurred, the Govt paid a service charge (of no more than 3% of gross billing) to the Apollo Hospital.

Apollo is responsible for all medical, legal and statutory requirements. It pays all charges (water, telephone, electricity, power, sewage, sanitation) to the concerned authorities and is liable for penal recovery charges in case of default in payment within the prescribed periods. Apollo is also responsible for maintenance of the hospital premises and buildings, and maintains a separate account for funds generated by the hospital from fees for registration, tests and medical charges. This account is audited by a Chartered Accountant engaged by Apollo with approval of the Governing Council. Likewise, Apollo maintains separate monthly accounts for all materials used by patients below the poverty line (including diagnostic services), which are submitted to the Deputy Commissioner of Raichur for reimbursement. Accountability and responsibility for outsourcing the support services remain with the Apollo.

The controlling authority of the Govt. of Karnataka is vested in its District Commissioner. A Governing Council is established to review the performance of the hospital periodically (twice a year), make recommendations to improve the administration and management and also resolve any disputes that might arise. The ten-member council is chaired by the Karnataka Health

Minister and includes the Raichur District Collector, the Apollo CEO, the Principal Secretary, the Health Secretary, the Finance Manager, the Hospital Operations Manager, Medical Directors and local Members of the Legislative Assembly (as special invitees).

6. The Karuna Trust in collaboration with the National Health Insurance Company and the Government of Karnataka has launched a community health insurance scheme in 2001. It covers the Yelundur and Narasipuram Taluks. Underwritten by the UNDP, the Karuna Trust undertook the project to improve access to and utilization of health services, to prevent impoverishment of the rural poor due to hospitalization and health related issues, and to establish insurance coverage for out-patient care by the people themselves. The scheme is fully subsidized for Scheduled Castes and Scheduled Tribes who are below the poverty line and partially subsidized for non-SC/ST BPL. Poor patients are identified by field workers and health workers who visit door-to-door to make people aware of the scheme. ANMs and health workers visiting a village collect its insurance premiums and deposit them in the bank.

The annual premium is Rs. 22, less than Rs.2 a month. If admitted to any government hospital for treatment, an insured member gets Rs. 100 per day during hospitalization – Rs. 50 for bed-charges and medicine and Rs. 50 as compensation for loss of wages – up to a maximum of Rs.2500 within a 25-day limit. Extra payment is possible for surgery. The insurance is valid for one year. If members want to continue the coverage, they must renew their membership and pay the full premium.

7. The Government of Karnataka, the Narayana Hrudalaya hospital in Bangalore and the Indian Space Research Organization initiated an experimental tele-medicine project called 'Karnataka Integrated Tele-medicine and Tele-health Project' (KITTH), which is an on-line health-care initiatives in Karnataka. With connections by satellite, this project functions in the Coronary Care Units of selected district hospitals that are linked with Narayana Hrudalaya hospital. Each CCU is connected to the main hospital to facilitate investigation by specialists after ordinary doctors have examined patients. If a patient requires an operation, s/he is referred to the main hospital in Bangalore; otherwise s/e is admitted to a CCU for consultation and treatment.

Tele-medicine provides access to areas that are underserved or un-served. It improves access to specialty care and reduces both time and cost for rural and semi-urban patients. Tele-medicine improves the quality of health care through timely diagnosis and treatment of patients. The most important aspect of tele-medicine is the digital convergence of medical records, charts, x-rays, histopathology slides and medical procedures (including laboratory tests) conducted on patients.

8. The Yeshasvini Co-operative Farmer's Healthcare Scheme is a health insurance scheme targeted to benefit the poor. It was initiated by Narayana Hrudayalaya, super-specialty heart hospital in Bangalore, and by the Department of Co-operatives of the Government of Karnataka. The Government provides a quarter (Rs. 2.50) of the monthly premium paid by the members of the Cooperative Societies, which is Rs.10 per month. The incentive of getting treatment in a private hospital with the Government paying half of the premium attracts more members to the scheme. The cardholders could access free treatment in 160 hospitals located in all districts of the state for any medical procedure costing upto Rs. 2 lakhs.

The premium is deposited in the account of a charitable trust, the regulatory body for implementing the scheme. A Third Party Administrator – Family Health Plan Limited that is licensed by Karnataka's Insurance Regulatory and Development Authority. The FHPL has the responsibility for administering and managing the scheme on a day-to-day basis. Recognized hospitals have been admitted to the network throughout Karnataka, which are called as network hospitals (NWH). These hospitals offer comprehensive packages for operations that are paid by Yeshasvini. A Yeshasvini Farmers Health Care Trust is formed to ensure sustainability to the scheme, which comprises of members of the State Government and the network hospitals. The Trust monitors and controls the whole scheme, formulates policies, appointed the TPA and addresses the grievances of the insured members or doctors.

Only the members of an agricultural cooperative society could join this scheme, and also all members of a given cooperative society must become members of Yeashsvini. This ensures increase in the enrollment rates. The Government, apart from the premium subsidy has provided key access to the cooperatives. The Department of Cooperatives has provided an administrative vehicle to popularize the scheme.

The major drawback of this scheme is that the poor farmers are not covered for all health related issues but only for out-patient care and all expenses connected with surgery.

9. A Rogi Kalyan Samiti (RKS) was formed in Bhopal's Jai Prakash Governement Hospital to manage and maintain it with public cooperation. The RKS or Patient Welfare Committee or Hospital Management Society is a registered society and the committee acts as trustees for the hospitals responsible for proper functioning and management of the hospital. Its members are from local PRIs, NGOs, local elected representatives and government officials. Participation of the local staff with representatives of the locl population has been made essential to ensure accountability. It functions as an NGO and not a government agency. It may utilize all government assets and services to impose user charges. It may also raise funds additionally through donations, loans from financial institutions, grants from government as well as other donor agencies. The funds received are not deposited in the State exchequer, but are available to be spent by the Executive Committee constituted by the RKS/HMS. Private organizations could be contracted out for provision of the super specialty care at a rate fixed by the RKS/HMS.

At JP Hospital, RKS was formed due to lack of resources and other functional problems, which acted as an impediment to timely, and quality health service delivery. Due to delay or no disbursement of funds, creation of a hospital management society capable of generating revenues became imperative. After the formation of RKS, the quality of services increased in terms of 24-hour availability of doctors and medicine, diagnostic facilities, better infrastructure, cleanliness, maintenance and timeliness of services. Through RKS, the hospital has also been able to provide free services to patients below the poverty line.

10. A public/private DOTS model was established on a pilot basis in Hyderabad at Mahavir Trust Hospital, which is a private non-profit hospital. This partnership also involves private service providers like doctors and nursing homes. This new approach is known as PPM DOTS (Public Private Mix DOTS). As there are virtually no government services in the area, the private sector is a full substitute for the public sector. Individual private practitioners were involved in the DOTS programme as they form the first point of contact for most of the TB patients both for quality health care as well as convenience to refer to the private practitioners rather than the hospitals at frequent intervals.

The Mahavir Trust Hospital acts as a coordinator and intermediary between the government and private medical practitioners (PMPs). It also acts as a supervisor. The PMPs refer patients suspected of having TB to the hospital or to any of the 30 specified neighborhood DOTS centers operated by PMPs. The patients pay the fees to the PMPs. In addition to providing a referral center for an hour every morning at their own expense, the doctor gains professional and commercial benefits to their practice that far outweigh the loss of several patients who could never afford proper treatment in any case. In turn the Mahavir TB clinic informs the private practitioners about the progress of their patients throughout their treatment. The Mahavir Hospital and the PMPs keep the records for the government. The government provides TB control policy, training, drugs and laboratory supplies. Five outreach workers trace late or delinquent patients and provide community mobilization.

All stakeholders gain an advantage through this partnership. The Mahavir Trust Hospital benefits because the money spent on the DOTS service cures patients. The government benefits because the DOTS medicine are properly used instead of being wasted or even contributing to the development of drug resistant TB. The medicines are curing the patients and the spread of the

disease is being arrested. From tan economic point of view, the PMPs and nursing homes are able to provide an effective treatment, which enhance their goodwill and affects their business as a whole too.

The pilot project is aimed at attaining uniformity in the diagnosis, treatment and monitoring, wider programme coverage; saving the patient's time and expenditure by a good referral network.

11. Multilateral organizations like the World Bank and the European Commission have supported the Sector Investment Programme in India and the Department of International Development (DFID) in the area of health sector reforms in India.

12. In recent examples, the Chiranjeevi experiment of Govt of Gujarat may be seen at Annexure IV.

CHALLENGES FACED IN THE OPERATIONALISATION: KEY CONCERNS

The existing evidence for PPP do not allow for easy generalizations. However it appears that despite additional efficiencies, the objective of additional resources is not met, as State revenue remains the bedrock of all services. The evidence also reveals great disparity in services and in remuneration. As is evident the objectives of the initiatives have been to overcome some of the deficiencies of the public sector health systems.

Donations, introduction of user fees, insurance schemes are methods to augment resources. Contracting out is resorted to when health facilities are either underutilized or non functional while contracting in is used to improve quality of services or improve accessibility to high technology service or to improve efficiency. Contractual appointment of staff aims to reduce the negative impact of vacant positions. Voucher schemes and community based health insurance etc are invoked to reduce the adverse effects of health care costs on poor patients and improve equity in health system. Mobile health schemes, involvement of CBOs, health cooperatives etc are models in improving accessibility, both physical and to the health system. Some of the partnerships are for a short duration while the other is longer. The thrusts of the partnerships also vary. Some focus on service delivery, some to augment resources and infrastructure, some towards organizational and systemic improvements while others are simply advocacy oriented.

Contracting is the predominant model for public private partnerships in India. Some partnerships are simple contracts (like laundry, diet, cleaning etc) others are more complex involving many stakeholders with their respective responsibilities. For example the Yeshaswani scheme in Karnataka includes the State Department of Cooperatives, the Yeshaswani Trust with its almost 200 private hospitals, a corporate Third Party Administrator and the beneficiaries with the eligibility conditions.

It is seen that in most partnerships, the State Health Department is the principal partner with rare stakeholder consultation. In most cases it signs contracts with very few cases of Hospital Management Societies signing the contracts in a decentralized manner.

In terms of monetary value the contracts at Kolkottta's Bagha Jatin General Hospital provided inexpensive dietary services at the rate of Rs 27 per meal for about 30 patients a day and cleaning service at Rs 24000/- per month. The most expensive partnership was the Rajiv Gandhi Super Speciality Hospital in Raichur where the Government of Karnattaka has paid several hundred million rupees to the partner as start up cost plus an assurance to cover future losses.

The above initiatives also show that more than 75% of the projects have been located in backward areas of the states.

However true partnerships in sense of equality amongst partners, mutual commitment to goals, shared decision making and risk taking are rare.

The case studies also bring to fore genuine concerns summarized in terms of absence of representation of the beneficiary in the process, lack of effective governance mechanisms for accountability, non transparent mechanisms, lack of appropriate monitoring and governance systems and institutionalized management structures to handle the task

It is seen that the success or failures of the initiatives are as much dependant upon the above issues as on the political environment, legal framework of the negotiation, the capabilities of the partners, the risks and incentive each party incurs, funding and the payment mechanisms, cost and price analysis prior to negotiation, standardization of norms, performance measurement and monitoring and evaluations systems.

POTENTIAL AREAS FOR PARTNERSHIP

Different models of PPP are useful under different circumstances. The PPP lists have a wide-ranging set of PPP options ranging from options for improved service delivery, augmentation of resources and infrastructure, organizational and systemic improvement, to advocacy.

However any mechanism of PPP must be based on an assessment of local needs and a situation analysis. For example strengthening the public health structure would be a more viable option in many of the remote corners of the North Eastern states where the presence of private sector is negligible.

On a conceptual level, it is quite clear that the private sector is as much responsible for the health of the nation, therefore all health establishments, must provide some critical services, i.e. family welfare, accidents and trauma and emergencies within their geographical areas and manage infectious diseases of epidemic proportions.

However no health system can work through only a network of tertiary care hospitals. The remedies for most of the deficiencies of the health system largely fall within the ambit of Primary Health Care – whether they are promoting, preventive or curative. Therefore at least in the next five years the focus should be on augmentation of the primary health care services in terms of focus on better service delivery options, including ancillary services like ambulance services and radiology services.

However to fulfill the requirement of additional manpower in terms of requirement of 3 lakh nurses and 12,000 Specialist doctors under NRHM, it is essential to explore a range of partnership options in terms of private sector support to nursing institutions and medical schools and colleges to make available the human resources required for NRHM. There would also be massive requirement of managerial capacities under NRHM, which may be obtained through partnerships.

The potential areas may be as follows:

- Services, disease control and surveillance, diagnostics and medicines.
- Infrastructure
- Health manpower
- Behaviour change communication
- Capacity building including training and systems development.
- Managerial service and auxiliary activities of the health sector

In the initial phase caution should be exercised against expanding into too many sectors. Government funding should not exceed an overall cap of 15% of the budget allocation.

Super specialty care is not the goal. The intention is to provide basic health care to all citizens of this country so that they do not face distress and duress in meeting health care needs.

RECOMMMENDATIONS FOR A PRACTICAL AND COST EFFECTIVE MECHANISM

Framework For Regulation

As is evident Partnership mechanisms do not work without quality assurance and an enabling environment. Government must ensure that providers are accredited, at least essential standards are set and followed, guidelines and protocols for diagnosis and treatment are developed and used, and providers are kept updated through continuing medical education. System must monitor and correct such important aspects of quality as infection prevention, client satisfaction and access to services. For enablement the government must understand the

advantages, disadvantages and requirements of partnership. They need to understand that partnerships are based on common objectives, shared risks, shared investments and participatory decision-making.

Since there is an element of contradiction in the objective of strengthening of the public health system by the private sector in which the private sector apparently is the ultimate looser, therefore it is essential that the framework for the whole process of partnership is not ad- hoc. **Equity, Quality and Regulation** should underline the entire deliberation and apply not only to the Private Sector but also to the Public Sector.

Primary goal of any health system should be assurance of health care professional competence to the public. For a minimalist regulation system that may be feasible in the current socio-political environment it is suggested that:

1. Any Health Care Professional, practicing in any area / institution, should register with the Primary Health Officer of the Area or the Institution as the case may be. For this purpose an appropriate officer in the Primary Health Centres / Urban Health Centres may be identified as the Primary Health Officer. Every Health Care Institution may be required to designate an officer as the Institution's Primary Health Officer. The Registers maintained by Primary Health Officers should be accessible to public. The Register will also help Primary Health Centres and Public Health Officials to manage public health emergencies and for epidemiological surveillance.
2. Clinical Establishment Act, requiring registration of Health Care Institutions and Hospitals with appropriate Health Authority. Clinics, Nursing Homes and Small Hospitals of less than 100 beds may register with Local Health Authority, to be designated for about 5 lakh population (Revenue Division / Sub Division), larger hospitals may register with District Health Authorities and Tertiary Referral Hospitals may register with concerned State Health Authority. The Act should also provide for registration at the district level with the Zilla Parishad or the DHA wherever capacities of PRIs are wanting and include redressal mechanism for health institutions (Example diagnostic Centres) owned by a non-medical person.

The registers of professionals practicing in an area or within an institution should in the public domain available for public use and scrutiny. This would eventually lead to setting up of a national database on professionals practicing in different areas and institutions in different parts of the country and will also help in the judicial process. Therefore it is important that Registration should be in the Government domain and not with an autonomous body

The need for regulation should not only be for providers but also for training educators and training facilities. There is also a need for a regulatory framework for the proposed Rural Medical Practitioners as they would be key players in the primary health delivery systems.

Since managerial issues and governance capacities within the public health system are key issues in determining the effectiveness of registration therefore, in the initial phase, self registration should be encouraged followed by an interim accreditation mechanism developed with the help of FOGSI/IMA before a fully e-governed registration system could be institutionalized.

"Accreditation" as a voluntary process with set standards, provision for external review etc. must also be supported and incentives for accreditation must be encouraged. The accreditation initiatives in India at the National level (QCI, NABL) and at the State Level (AP, Karnataka, Tamil Nadu, Kerela and Maharashtra) are progressive steps.

A range of Accreditation Systems ranging from compulsory accreditation, accreditation by independent agencies, and facilitation of establishment of State Accreditation Councils to a blue print developed by the Ministry of Health & Family Welfare may be explored. It is however important to involve the stakeholders, build capacity, have different bodies at different levels, and collect evidence base for the whole process. Accreditation should have synergy with Regulation.

The process of accreditation of Mother and Child Hospital specifying certain minimum standards had already begun in Tamilnadu for the Janani Suraksha Yojana (JSY) Scheme.

However, in the process of accreditation there should be no fallback to the License Raj. There should be a single window for registration/accreditation of health institutions.

Framework Of Partnership

It is a prerequisite to make the partnership a publicly driven process in order to improve its legitimacy in the eyes of the common citizen. It is also important that there is clear articulation of responsibility, an open process and meticulous detailing to avoid suspicions and apprehensions in the minds of all. Therefore the power relations in the partnership also needed to be understood.

There is a need for defining the specific elements of the partnership from both sides as many a time the private provider feels that the Government itself does not undertake any guarantee in the Partnership.

All PPPs should meet at least two basic criteria, namely (a) Value for Money and (b) Clearly defined sharing of risks. There is need to develop skills within the government for assessment of the Value for Money and Risk sharing characteristics of PPPs. One common requirement for assessment of Value for Money proposition is existence of good comparators. For example; NGO Management of PHCs uses current budgetary allocations of PHCs as a comparator to make financial allocation. Similarly average out patient consultations or such other therapeutic procedures, and public health activities in other PHCs can be used to assess the performance of PHC under PPPs. CAG should be requested to develop specialised skills for assessment of Value for Money and risk sharing characteristics of PPP projects. Auditing of government expenditure through PPPs requirement would be different from traditional audit of expenditure directly made by government departments. Unless the CAG develops capacity for auditing of public expenditures through private partnerships, large scale expansion of PPPs would be difficult.

Transparency, Accountability, Trust, measurable efficiency parameters and Pricing remain vexatious issues in the partnership process.

The framework of partnership should also provide for the costing of services to ensure that common citizens can get/buy cost effective services.

The governmental system of fixing rate is fraught with difficulties and it is better to adopt public costing with moderation and states need to work out the cost effectiveness very meticulously. It may be noted that no serious effort at costing of services and standard treatment protocol has been attempted in the government domain. The National Commission on Macro-economics and health (NCMH) is the first attempt to document the cost of services in the public sector. Attempts at costing under various PPP schemes like the Yeshaswani scheme of Karnattaka and the Chiranjeevi scheme in Gujrat have been attempted. However more work is required to be done in this area and the initiative should be taken by the Ministry and the States. (Examples of a few cost effective options are at Annexure 1)

Decentralization should be the key in dealing with partnerships as centralized models suffer from failings enumerated in the aforesaid sections. The challenge under the NRHM is to operationalise partnerships at the District level. Therefore there is also a requirement for district level skills and managerial capacity for making the process accountable, affordable and accessible to common citizens.

The resource support and technical assistance for the PPP mechanism may come from the National Health Systems Resource Centre (NHSRC), State Health Systems Resource Centre

(SHSRC) and the District Health Systems Resource Centre (DHSRC) being set up under NRHM at the National , State and the District level respectively.

The National Institute of Health & Family Welfare (NIHFW) can be the nodal agency for guiding PPP Policy at the National level. A PPP Cell at the NIHFW can also function as the Documentation and dissemination Centre for PPP initiatives in the States. Resource support may be provided under NRHM to fund this Cell. These Cells may be replicated in the States and the Districts within the overall umbrella of the State Health Society and District Health Society under NRHM.

District level Health Resource Centres, can help in developing transparency in PPP and provide the much needed managerial capacity to manage processes like Accreditation and Standards.

Public Private Partnership needs to be mutually beneficial to both the parties so that there is encouragement of enterprises and element of pragmatism. It is important that the health professionals also earn in the process to sustain the partnership. However, the earning should be commensurate to the health services provided specially to the poor. This is possible through the volumes of patients, which the private sector would be getting from the public sector.

There is a need for further documentation of the ongoing experiments in PPP and evaluation of their impact. The evaluation mechanism should highlight the issues of access, utilization, sustainability, cost effectiveness and pricing, equity, transparency, audit etc.

Models For Partnership

It is essential to appreciate the diversity in terms of regional variations in the health status across the country. Therefore, generic models of existing PPP practices like contracting in, contracting out, social marketing, and social franchising may be modified to suit local variations. The assumption here is that a homogeneous prescription would not work and therefore the challenge is to develop the nitty-gritty of a framework allowing for diversity of models esp. at the District Level.

Public-Private-Partnership Models (Details at Annexure 2)

- Contracting :
  - Contracting out
  - Contracting-in
- Franchising :
  - Partial franchising
  - Full franchising
  - Branded clinics
- Social marketing
- Joint ventures
- Voucher schemes
- Hospital autonomy
- Partnership with corporate sector/ industrial houses
- Involving professional associations
- Build, operate and transfer
- Donation & philanthropic contributions
- Involvement of social groups
- Partnership with co-operative societies
- Partnership for capacity building
- Partnership with non-profit community-based organizations
- Running mobile health units
- Community based health insurance

PRINCIPLES 0F PPP

Although the approaches are different for each typology to resolve the health crisis currently in hand, there are certain common underlying principles guiding each of such partnerships, which are enumerated below:

1. Setting up of common goals and objectives, which are committed by all the partners.
2. Outcome based planning
3. Joint decision-making process
4. Creation of a social good by improving the health situation of the poor and underserved as well as standardization and uniformity of quality health service delivery
5. Accountability and responsibility set out vividly for each partner
6. Sharing of costs and resources are done on the basis of equity. The same principle is followed for sharing risk and rewards. Central to any successful public-private partnership initiative is the identification of risk associated with each component of the project and the allocation of that risk factor to the public sector, the private sector or perhaps a sharing by both. Thus, the desired balance to ensure best value (for money) is based on an allocation of risk factors to the participants who are best able to manage those risks and thus minimize costs while improving performance.
7. Regular meetings among the partners to discuss issues at hand and planning and coordinating for the future
8. A clear understanding of the strengths and weaknesses of the partners among themselves is essential to understand their roles and responsibilities clearly
9. The monitoring mechanisms are made sound in order to address the diversity of the partnerships
10. Financial sustainability is an all-pervading factor, which forms the backbone of all partnerships. There has to a regular flow of funds in order to meet the personnel and operating costs. Some programs have become self-sustainable only by involvement of the people. Such schemes do not require regular funds from the Government
11. Partnerships could be full substitution of the provision of health services, or managing the operations or monitoring or provision of infrastructure (equipments, manpower, etc.)
12. Any vested interest in such structures could destroy the base, and lead to the failure of the whole institution. Thus, a high level of trust and confidence is required in all the PPP initiatives.
13. Effective communications are key to the public's understanding of public-private partnerships. Communications are required to be planned and carried out as an integral part of the management process for any project. It involves timely sharing of information, accurate and consistent messages conveyed to key audiences, realistic messages from trusted sources that set realistic expectations.

14. PPP involves a long term relationship between the public sector and the private sector. While the collaboration between the two may take various forms like buyer seller relationship, donor recipient relationship, the most stable partnership is in the form of "contract" binding on both the parties. The contract mirrors the basic objective of the programme/project, the tenure of agreement, the funding pattern and of sharing of risk and responsibilities. The need to define the contract very precisely, therefore, becomes paramount under PPP.

Project/Programmes under PPP may, however, broadly be classified under three heads namely (i) service contract (ii) operations & maintenance (management) contract and (iii) capital project, with operations & maintenance contract.

Selection of Service Provider

Transparency in 'selection' is an essential feature of PPP. Selection of the developer or the service provider may be done in any of the following three ways.

(i) Competitive Bidding

This involves it well publicized and a well designed bid process to ascertain financial, technical and managerial capabilities of the service provider or the developer. Either of the two

formats for bidding, namely single round sealed bid auction or multiple round open entry (ascending) bid auction could be adopted. The appropriate biding process depends on the nature of the valuation that the bidders place on the concession, that is, on the right to do the job.

In some cases the valuation of the project depends on factors that are within the bidder's control, such as construction and maintenance cost of a building or a road. These are also known as 'private value items'. In other cases, the valuation does not depend just on the bidders own assessment, but also on certain unknown factors that need to be anticipated. These unknown factors are common to all bidders and each bidder may update his/her own assessment based on the assessment of other bidders. These are know as 'common value items' and include factors such as the size of market, willingness to pay of consumers and future behaviour of regulatory etc.

For private value items, a single round auction is appropriate since bidders do not need to learn from the revelation of information of other bidders and a sealed bid auction is preferable since that has the least potential for collusion. Concessions with common value characteristics on the other hand, are best awarded through multiple round bids since this facilitates the process of value discovery by bidders, allowing bidders to observe and respond to quotations/prices as they emerge. Multiple round bid can also be sealed bid but there is opportunity to rebid after the bids are opened. Moreover, wherever the bid process is characterized by a two stage process involving for instance, mega infrastructure projects, the bidders are required to obtain from their prospective lenders the financial terms, expectations regarding state support as well as their comments on the concession agreement etc.

The final selection of the developer/service provider depends upon one or a combination of the following (a) lowest capital cost of the pr0oject (b) lowest operation and maintenance cost (d) lowest bid in terms of the present value of user fees (c) lowest present value of payment from government (d) highest equity premium (c) highest upfront fee (f) highest revenue share to the Government and or 9g) shortest concession period.

Under situations of only a sole bid being received, the authorities have the choice of either accepting or rejecting the sole bid. In the case of rejecting the sole bid, or when no bid is received, the project/programme proposal its3elf may be modified and the bid process restarted. Alternatively the selection of the developer/service provider is done through competitive negotiation with the private sector participants.

(ii) Swiss Challenge Approach

The Swiss Challenge approach refers to suo-moto proposals being received from the private participant by the government. The private sector thus provides (a) all details regarding its technical financial and managerial capabilities (b) all details regarding technical, financial and commercial viability of the project/programme (c) all details regarding expectation of government support/concessions.

The government may examine the proposal and if the proposal belongs to the declared policy of priorities, then it may invite competing counter proposals from others (in the spirit of 'Swiss Challenge' approach) giving adequate notice. In the event of a better proposal being received, the original proponent is given the opportunity to modify the original proposal. Finally the better of the two is awarded the project/programme for execution.

(iii) Competitive Negotiation

Competitive negotiation (direct or indirect) is considered a variant of competitive bidding. The Government thus specifies the service objective and invites proposals through advertisement. The government then negotiates/finalise the contract with the selected bidders.

The government agency (or the local authority) may select the service provider/developer through competitive negotiation in the following cases:

a) Social sector projects and programmes involving VOs/NGOs/Local Community.
b) Project involving proprietary technology or a franchise;
c) Linkage project related to a mega project or a major activity.
d) Projects and programmes which failed to solicit any response to a bidding process.
e) Su-moto proposal from private participants.

Negotiation may, however, be 'simple' (direct) or 'complex' (indirect). In the second case, the government negotiates through a master contractor/mother, NGO. In other words, contracts for (public) services are contracted out and the master contractor handles all dealings with sub-contractors/franchises. While the government reviews the works of the master contractor through its monitoring (officials) who may visit the site of programme implementation and meet the beneficiaries, the master contractor may monitor the programme (run by sub-contractors) through collecting information from the beneficiaries selected randomly, based on questionnaires/interviews.

Advantage of Master Contractor

Some of the advantages mentioned about master contracting are: (a) government has administrative convenience, and better control in dealing with less number of service providers (b) funds can be raised from other public and private sources, other than the government (c) decision can be taken more quickly despite political pressures and (d) training programmes can be organised for the sub-contractors/service provider/vendors by the master contractor more innovatively.

However, master contract is not always relevant and negotiation vis-à-vis the contract ought to be done directly with the community/beneficiaries as for instance, in the case of wild life protection with the residents living in the vicinity of the forest. Competitive negotiations are, however, less transparent than competitive bidding. With a view to ensure fairness nonetheless, it is recommended that the government auditor may audit such contracts.

16. Payment mechanism: Payment to the private sector could take the form of (a) contractual payments (b) grants-in-aid and 9c) right to levy user charges for the asset created/leased in. Contractual payment may be in the form of advance payment, progress payment, final payment annuities and guarantees for receivable etc. Annuities, in turn could be with respect to recovering the fixed cost or for recovering both variable cost and the fixed cost of the project. In the form case, both the government and the private partner share the risk of running the project.

Grant-in-aid in turn can take different forms such as a block grant, capital grant matching grant, institutional support etc. Lease agreement license similarly may allow the concessionaire to recover the cost of construction/operation & maintenance through levying user charges. Moreover, in the case of lease agreement, the asset reverts to the government after the expiry of the contract. The agreement ought to also provide for the condition of asset that would be returned at the end of the contract.

17. Monitoring & Evaluation: It is quite often, thought that the job is over with the signing/finalizing the contract. Payments have to be, however, linked to performance, which in term requires monitoring. Performance measurement can be done with respect to measuring efficiency or measuring effectiveness. While measurement of efficiency entails comparing the unit cost of providing the service from amongst the various alternatives, measurement of effectiven3ess involves comparing the desired outcomes from amongst the various alternatives.

Monitoring may be done in either of the following ways (i) by government departments authorized to do so, based on a standardized scale (ii) by independent agencies/regulators based on a standardized scale (iii) by the department or independent agencies, based on the simple criteria of pass and fail by the department or independent agencies, based on the feed back received from the beneficiaries.

Involvement of third party/independent agencies for monitoring appears to be preferable as they leave the government hassle free over the project and minimize government control. A certain percentage of the cost of the project needs to be, therefore, earmarked for contract management. The government and the developer/service provider could mutually decide the third party. The third party involvement could be further supplemented with provisions for adjudication by the highest judiciary.

The following would be useful parameters in monitoring and evaluation of the initiatives:

- Profile of implementing agency: history, organizational structure, management board, business, service provided
- Procedures followed in signing the partnership- decision making process, competitiveness and transparency in selection process, criteria for selection and time taken
- Cope and coverage of services under agreement
- Eligibility conditions for the private agency-minimum investment, proper experience
- Specific clauses in the **MOU**-maximum duration of the contract, pricing and service specification, billing and payment mechanism, managerial flexibility, supervision and monitoring, quality control, employment service conditions of the staff, physical infrastructure support, subsidies and incentives, penalties and fines, exit clause, grievance redressal system
- Performance evaluation, renewal of contract
- Public health objective clause- specific services and subsidies to poor, women and children
- Feedback of stakeholders-state and central bureaucrats, public health facility managers, private agency managers, beneficiaries, staff in both public agency and private agency, community leaders

Conclusion

The Government plays a predominant role in any PPP. Hence it has to follow certain successful strategies in order to become a better partner. The key elements of a successful PPP are as follows:

1. The Government should look at the long-term value in a partnership
2. Selection of the right partner becomes imperative for the government to achieve tangible outputs and create the 'best value'. A partner's experience in the specific area of partnership being considered is an important factor in identifying the right partner.
3. By aligning the stakeholders' interests, the Government could endeavor better value creation
4. The Government could a adopt a more strategic approach by stepping back from the day to day management of public enterprises, and instead focusing on the drivers of long term value, setting targets and encouraging alliances and partnerships with the private sector.
5. The Government should introduce greater transparency. Greater openness about the financial performance and service delivery of public enterprises will be a useful discipline on managers within those organizations. Focusing on a few strategic targets will be a start.
6. The Government could introduce greater shareholder expertise by ensuring an appropriate mix of skills and experience among the partners to help carry out the health objectives more efficiently.
7. However, if PPPs are genuinely going to deliver better quality services, it is vital that they are designed with the focus on outputs and performance. The private sector partner or partners need to be clear about what is expected from them and the implications if they fail to deliver.
8. The Government must recognize that it has a continuing role in the public service element of essential services. In some cases, this may mean retaining some elements of service delivery in

the public sector. Therefore it becomes critical to decide on retaining the control over certain services, rather than contracting them.
9. The Government could adopt the following approaches to deliver partnerships:
(a) Undertaking appropriate partnerships by understanding what works best in a given situation, the circumstances in which they are to be implemented and the objectives which they are intended to serve
(b) Creating innovative and imaginative partnerships and creating new ways of working - learning by doing - is key, particularly where there is no existing best practice
(c) Designing a holistic approach PPPs by joined-up thinking, reflecting the needs of customers, potential partners and providers, as well as joined-up Government initiatives rather than the narrowing the objectives to the departmental territory.

The performance of any PPP in the health sector could be evaluated based on the following building blocks:
1. Beneficence or public health gains
2. Non-malfeasance or not leading to ill health
3. Autonomy enjoyed by each partner
4. Shared decision-making
5. Equity or distribution of benefits to those most in need

However it may be reiterated that the private partnerships are not sufficient to resolve the dilemma of inadequate health care for the people. The focus of Public policy in the context of the11th Five Year Plan should be the flagship march for strengthening the public health sector.

Annexure-1

MOST PRACTICAL & COST EFFECTIVE MODE OF PPP FOR IMPROVEMENT IN HEALTH SERVICES DELIVERY

PROBLEM AREAS AT VARIOUS LEVELS IN HEALTH SERVICES DELIVERY	TYPE OF SUGGESTED PARTNERSHIP	WORKING MODELS	COST EFFECTIVITY	REMARKS
		HOSPITAL SET-UP		
SHORTAGE/ ABSENCE OF SPECIALISTS	APPOINTING SPECIALISTS ON CONTRACT BASIS ON WEEK ENDS OR SO.	GOVT OF GUJARAT IMPLEMENTED THE PARTNERSHIP IN SEP 2002 IN NARMADA DISTT. AND LATER EXTENDED TO RAJKOT DISTRICT	FUND POOLING FROM UNUSED BUDGET DUE TO VACANT SPECIALISTS POSITION TO USE FOR CONTRACTING PRIVATE PRACTITIONERS	PARTNERSHIP IS ON CONTRACT BASIS AND RS 500(LATER EXTENDED TO RS. 1000 PER VISIT) PER VISIT TWICE A WEEK IS PAID. EVALUATION SHOWED THAT ARRANGEMENTS ENSURED ACCESS TO SPECIALIST SERVICES AT HOSPITALS. HOWEVER, PER DAY HONORARIUM SHOULD BE KEPT EQUIVALENT TO ONE DAY SALARY OF SPECIALIST WITH CONVEYANCE CHARGES OF RS 500/-
ABSENCE/ POOR QUALITY OF RADIO DIAGNOSTIC MACHINERY	INSTALLATION OF RADIO DIAGNOSTIC MACHINERY (CT,USG,X-RAY) BY PRIVATE SECTOR ON CONTRACT IN BASIS IN THE PREMISES OF THE HOSPITAL	CT MACHINES HAVE BEEN INSTALLED AND ARE BEING RUN BY PRIVATE AGENCIES IN 7 GOVT HOSPITALS IN WEST BENGAL .	SERVICES ROUND THE CLOCK AT REDUCED PRICES, FREE SERVICE FOR BPL PATIENTS & SENIOR CITIZENS, A FIXED NO. OF INVESTIGATIONS/MONTH /HOSPITAL AFTER WHICH THEY CAN CARRY AS MUCH AS THEY WISH BUT THEY WILL HAVE TO PAY COMMISSION PER PATIENT	TERMS & CONDITIONS STATE THAT FREE SERVICES SHOULD BE GIVEN TO AT LEAST 35 PATIENTS/ HOSPITAL AND TO NOT MORE THAN 615 CASES/ HOSPITAL/ MONTH AT APPROVED GOVT RATES. 25% COMMISSION AFTER THE SPECIFIED CASES TO BE PAID TO STATE GOVT. MODEL RESULTED IN OVERALL COST REDUCTION ACROSS THE CITY. PATIENTS FEEDBACK IS MUST FOR COMPLIANCE OF CONDITIONS

				IN CASE OF SMALLER UNITS, GOOD AND BAD LOCATIONS SHOULD BE AWARDED TOGETHER TO COMPENSATE FOR POSSIBLE LOSSES
ABSENCE OF 24×7 LAB SERVICES	ON THE BASIS OF CONTRACTING IN PARTNERSHIP WITH THE PRIVATE SECTOR	PARTNERSHIP BETWEEN M/S THUKRAL DIAGNOSTICS CENTRE LUCKNOW & BMC AND PG ALIGUNJ IMPLEMENTED IN MARCH 2003 IN 1994 IN SWEDEN A FOR PROFIT LABORATORY CALLED MEDANALYZE WAS AWARDED A CONTRACT TO HANDLE LAB TESTS FOR PRIMARY CARE PHYSICIAN IN A DISTRICT OF STOCKHOLM COUNTY.	NO EXTRA COST ON STRETCHING THE LAB SERVICES TO ROUND THE CLOCK, FREE SERVICES FOR BPL PATIENTS WHOSE FEES CAN BE REIMBURSED FROM THE HOSPITAL WELFARE COMMITTEE	SELECTED DIAGNOSTIC CENTRE PROVIDES 3 DIFFERENT PACKAGES AT REASONABLE COST FOR EMERGENCY INVESTIGATIONS. THE ARRANGEMENT ENSURES THE PREGNANT WOMEN AND CHILDREN HAVE THE ROUND THE CLOCK ACCESS TO LAB INVESTIGATIONS AT AN AFFORDABLE COST THE STOCKHOLM MODEL FAILED AS THE COMPANY WAS UNABLE TO HANDLE THE LARGE VOLUME OF SAMPLES AND BEGAN MISHANDLING SPECIMENS AND EVEN FABRICATING RESULTS AS A MEAN OF COPING. EXIT POLICY MAY BE CONSIDERED. ONLY ACCREDITED AND TRUSTED LABS IN HEALTH SECTOR SHOULD BE CONSIDERED. GOVT MAY EXEMPT RENT, WATER CHARGES ETC FOR REMOTE AREAS
DIFFICULTY IN ACCESS TO SUPER-SPECIALIST HEALTH SERVICES IN REMOTE AND HILLY AREAS	SETTING THE TELE-MEDICINE & TELE-HEALTH SYSTEM ON CONTRACTING OUT BASIS WITH THE PRIVATE SECTOR	KARNATAKA INTEGRATED TELE-MEDICINE AND TELE HEALTH PROJECT, IN KARNATAKA DISTT HOSPITAL, NARAYANA HRUDAYALYA BANGALORE IN COLLABORATION WITH	REDUCED TRAVEL AND ELIMINATION OF UNNECESSARY PATIENT TRANSFER, LOW CAPITAL INVESTMENT FOR ESTABLISHING A CARE PRESENCE, TRAINING AND RE- TRAINING AT THE LEAST COST POSSIBLE	THE 27 TELEMEDICINE CENTERS IN INDIA ARE THE LARGEST E-HEALTH CENTERS IN THE WORLD. SO FAR 16000 HEART PATIENTS HAVE BEEN TREATED VIA AN

		INDIAN SPACE RESEARCH ORGANIZATION. OPERATIONAL SINCE 2002.		'E-WAY'. GOVT MAY OFFER TAX INCENTIVE OR SOME OTHER RELIEF IN LIEU OF WORKING IN REMOTE AREAS. PENALTY CLAUSE FOR NON FUNCTIONING OF FACILITY. FACILITY CREATED MAY ALSO BE OPEN TO OTHER PYT PRACTITIONERS IN SURPLUS TIME.
LOW AVAILABILITY OF DOCTORS AND MEDICAL SERVICES	PARTNERSHIP WITH THE CORPORATE/ BOT FOR MEDICAL/ DENTAL EDUCATION & SERVICES	VARIOUS PRIVATE MEDICAL/ DENTAL COLLEGES ACROSS THE INDIA.	NO EXTRA BURDEN IN CORPORATE AND NO RUNNING COST IN BOT	POLICY FOR PRIVATE SECTOR PARTICIPATION IN MEDICAL/ DENTAL EDUCATION SEEKS TO ATTRACT PRIVATE SECTOR TO SET UP COLLEGES IN THE STATE. CRITERIA IS LAID DOWN BY THE STATE GOVT, MCI & DCI. FINAL DECISION IS BASED ON THE AVAILABILITY OF LAND WITH THE ORGANIZATION, AVAILABILITY OF HOSPITAL HAVING MINIMUM 300 BEDS FOR MEDICAL COLLEGE EXISTING EXPERIENCE FAILED IN DELHI. GOVT MAY PURCHASE SERVICE FOR POOR/NHPS ON PREDETERMINED RATES. HOWEVER, GOVT MAY DECIDE THAT NEW PHCS/CHCS WILL BE OPENED BY PYT PLAYERS AND GOVT WILL BY SERVICES ON YESHASVINI MODEL
NON/LOW AVAILABILITY OF MEDICINES & SURGICAL ITEMS	PARTNERSHIP OF SOCIAL MARKETING TYPE CAN PROVIDE CHEAPER MEDICINES & SURGICALS IN HOSPITAL PREMISES	LIFE LINE FLUID DRUG STORE IN SAWAI MAN SINGH(SMS) HOSPITAL, JAIPUR, RAJASTHAN STARTED IN 1996	WITH NO EXTRA COST STATE GOVERNMENT CAN PROVIDE STANDARD STUFF TO THE PATIENTS AT REASONABLE PRICE ROUND THE CLOCK	THROUGH OPEN TENDER , RMRS INVITE BIDS FROM SUPPLIERS TO PROCURE MEDICINES THAT LLFS SELLS TO

				SMS PATIENTS AT THE PROCUREMENT PRICES. RMRS DECIDES THE PERIOD OF THE CONTRACT, WHICH IS RENEWABLE ON THE BASIS OF GOOD PERFORMANCE. WITH FIXED SALARY AND A ONE – PERCENT COMMISSION ON ALL SALES, THE CONTRACTOR APPOINTS AND MANAGES STAFF FROM THE RECEIPTS. WILL BE SUCCESSFUL WHERE HIGHER VOLUME OF SALE EXIST. SMALLER HEALTH UNITS MAY ALSO BE TAGGED WITH BIGGER ONE IN CONTRACT
LACK OF AMBULANCE/ TRANSPORT SERVICES	PARTNERSHIP WITH NGOS/CBO,USER CHARGES/KM SCHEME	EMERGENCY AMBULANCE SERVICES, THENI DISTRICT, TAMIL NADU, PARTNERSHIP IS OPERATIONAL SINCE 2002.	AMBULANCE/TRANSPORT SERVICES CAN BE PROVIDED WITH NO EXTRA EXPENDITURE ON PURCHASING/ MAINTENANCE OF THE VANS	TOTAL COST OF THE PROJECT IS 6,50,000. RS. 5 PER KM AS USER FEE. FREE SERVICES TO 10% CASES,(BPL PATIENTS). MEMBERS OF WOMEN'S SELF HELP GROUP GET 10% CONCESSION. THIS TYPE OF INITIATIVES WILL BE SUCCESSFUL IF LARGE NUMBER OF AMBULANCES ARE CONTRACTED WITH LEAST IDLE TIME AND RATE IS SUBJECT TO REVISION WHEN HIKED BY GOVT
LOW SANITATION AND LAUNDRY STANDARDS	CONTRACTING OUT/NGO PARTNERSHIP	GOVERNMENT OF UTTARANCHAL HAS HANDED OVER LAUNDRY SERVICES IN 9 BIG HOSPITALS TO PRIVATE AGENCIES IN DECEMBER 2001 WHILE THOSE IN DOON HOSPITAL WERE HANDED OVER IN FEB 2003	IMPROVED SANITATION AND LAUNDRY	THESE AGENCIES HAVE BEEN SELECTED ON THE BASIS OF THE COMPETITIVE BIDDING. MANPOWER, CONSUMABLES, EQUIPMENT AND SALARY TO EMPLOYEE

				SHOULD BE CAREFULLY DRAFTED IN AGREEMENT OTHERWISE SITUATION WILL GET WORST
DIETARY SERVICES	CONTACTING IN WITH PRIVATE CATERERS ON COMPETITIVE BIDDING BASIS	ALONG WITH THE LAUNDRY/ SANITATION SERVICES THE GOVT. OF UTTRANCHAL HANDED OVER THE DIETARY SERVICES AS WELL IN THE FOR MENTIONED HOSPITALS	HYGIENIC AND NUTRITIOUS FOOD WITHOUT EXTRA BURDEN ON INFRASTRUCTURE	THE SELECTION OF THE PRIVATE PARTNER WAS ON THE BASIS OF THE COMPETITIVE BIDDING BY THE HOSPITAL AUTHORITY. POOLING OF ANCILLARY SERVICES WILL RESULT INTO BETTER PROFIT TO CONTRACTOR. STRICT CONDITIONS ABOUT COMPETENCE OF CONTRACTOR AND JOB TO BE DONE IS NEEDED
HEALTH INSURANCE COVERAGE TO THE STATE POPULATION	COMMUNITY BASED HEALTH INSURANCE ALSO CALLED SELF FUNDED HEALTH INSURANCE SCHEME. HOWEVER THE SCHEME IS NOT FULLY SELF FUNDED BECAUSE IT REQUIRES GOVERNMENT CONTRIBUTION	YESHASVINI-CO-OPERATIVE FARMER'S HEALTH CARE, KARNATAKA. PARTNERSHIP BETWEEN NARAYAN HRUDAYLAYA BANGALORE & APOLLO HOSPITALS HYDERABAD, TRUST WAS LAUNCHED IN 2002	PROVIDE SURGICAL CARE THROUGH LOW PREMIUM HEALTH INSURANCE. COVER NEARLY 1600 TYPES OF SURGERIES. FREE OUT-PATIENT CONSULTATION. MEDICAL AND DIAGNOSTIC INVESTIGATIONS AT NOMINAL RATES. SCHEME COVERS EVEN PREEXISTING ILLNESSES.	1,600 DIFFERENT SURGERIES COSTING UP TO A MAXIMUM OF RS. 200,000.MEDICAL TREATMENT NOT LEADING TO SURGERY IS NOT COVERED. GOVT. OF KARNATAKA ORIGINALLY CONTRIBUTED 50% OF MONTHLY PREMIUM FOR EACH MEMBER NOW ONLY A CONSOLIDATED AMOUNT (OF RS. 3.5 MILLION IN THE SECOND YEAR AND 1.5 MILLION IN THE THIRD YEAR) . FHPL IS PAID 4% OR AROUND RS. 5.9 MILLION AS THEIR FEE. COMMITTED GOVT CONTRIBUTION ON LONG TERM BASIS AND TIMELY COLLECTION OF CONTRIBUTION IS MUST. RATHER CREATING NEW HOSPITALS, GOVT MAY ENCOURAGE SUCH SCHEMES ON LONG TERM BASIS
AT CHC/ PHC LEVEL				

IMPROPER MANAGEMENT	CONTRACTING OUT WITH THE PRIVATE SECTOR	MANAGEMENT OF PRIMARY HEALTH CENTERS, KARUNA TRUST, KARNATKA A NON PROFIT NGO, FROM 1996 ON TRIAL BASIS , BUT BASED ON FORMAL POLICY DECISION, SINCE 2002	IMPROVED MANAGEMENT WITH THE SAME/LOW BUDGET	GOVT. PROVIDES PHC PREMISES, INITIAL EQUIPMENTS AND SUPPLIES, AND 75% TO 90% SALARIES. STAFFING BY THE NGO. RS. 25000 PER ANNUM AS CONTINGENCY. RS. 75000 PER ANNUM FOR DRUGS/ SUPPLIES. FREE HEALTH CARE TO ALL PATIENTS. SELECTION OF WORKERS SHOULD BE THE PREROGATIVE OF NGO., GOOD WORKING AND POOR WORKING FACILITIES SHOULD BE JOINTLY HANDED OVER. INCREASE IN SALARY OVER TIME MAY BE KEPT IN MIND. APPRAISAL BY THIRD PART IS MUST. GOOD FINANCIAL MGT IS KEY TO SUCCESS
POOR OUTREACH AND REFERRAL SERVICES FOR SLUM POPULATION.	CONTRACTING OUT TO PRIVATE ORGANIZATIONS	ARPANA SWASTHYA KENDRA MOLARBUND, DELHI, IN PARTNERSHIP WITH MCD. PERFORMANCE MEASURES ARE SET FOR THE TRUST, INITIAL CONTRACT IS FOR 5 YEARS.	DISTRIBUTING THE BASIC HEALTH PRODUCTS SUCH AS CONTRACEPTIVES, ORS, CLEAN DELIVERY KITS TO THE SLUM DWELLERS THRU EXISTING COMMERCIAL NETWORK FUNDS POOLED FROM RS. 10 FOR OPD CARDS INCLUDING MEDICINES FOR 3 DAYS, RS. 50 TO 100 FOR EMERGENCY AMBULANCE SERVICES.	PERSONALITY DRIVEN PROJECT. LACK OF CLARITY ON USER-FEE, SHORTAGES OF RESOURCES COMMON. LONG PROCEDURES, OVERCROWDING, LACK OF FOLLOW UP ACCEPTABLE QUALITY OF SERVICES ; COMMITTED STAFF. EXISTING PVT PRACTITIONERS MAY BE TRAINED AND INVOLVED WITH INCENTIVE OF PER UNIT OF SERVICE. EXISTING PPM APPROACH OF RNTCP CAN BE HELPFUL INITIALLY, SOME SEED MONEY MAY BE GIVEN TO START THE

				PROJECT COOPERATIVE SOCIETIES MAY BE ROPED- IN
UNDER STAFFING OF THE MEDICAL OFFICERS/ ANMS	APPOINTING MEDICAL OFFICERS & ANMS ON CONTRACTING IN BASIS	UTTRANCHAL GOVT. HAS MADE EFFORTS IN APPOINTING MEDICAL OFFICERS & ANMS. THIS HAS BEEN DONE IN VIEW TO IMPROVE HEALTH SERVICES IN REMOTE AREAS AND GIVEN THE DIFFICULTY IN RETAINING SERVICES OF PROVIDERS DUE TO LACK OF ACCOMMODATION AND LOW SALARY.	NO EXTRA BURDEN ON INFRASTRUCTURE AS FUNDS CAN BE POOLED FROM THE FUNDS UNSPENT DUE TO VACANT POSITIONS	TO RETAIN THE SERVICES GOVT. HAS INCREASED THE HONORARIUM OF CONTRACTUAL MEDICAL OFFICERS FROM 11,000 PER MONTH TO RS. 13000 PER MONTH W.E.F. FEB 2004.IN ORDER TO PROMOTE INSTITUTIONAL DELIVERIES, 24 HOURS DELIVERY SERVICES ARE BEING PROVIDED IN 85 HEALTH CENTERS AND CERTAIN INCENTIVES ARE PROPOSED FOR SERVICE PROVIDERS WHO CONDUCT DELIVERIES BETWEEN 8.00 PM TO 7.00 AM. LOCALLY PRACTICING DOCTORS AND STAFF MAY BE GIVEN PRIORITY AS THEY MAY FIND THE AMOUNT ACCEPTABLE. REGULAR REVIEW OF SCHEME IS NEEDED
NATIONAL HEALTH PROGRAMMES				
FAMILY WELFARE PROGRAMME	CONTACTING WITH THE NGOS	1459 PRIVATE HOSPITALS ARE APPROVED FOR PERFORMING VASECTOMY, TUBECTOMY, MTP AND OTHER CONTRACEPTIVES.	GOVT. PROVIDES BASIC SERVICES WHERE NGO CAN PROVIDE BEDS, SURGICAL ITEMS TO PERFORM STERILIZATION SERVICES	DRUGS CHARGES AND OPERATING SURGEONS FEES ARE PAID BY THE GOVT. PAYING COMPENSATION TO STERILIZATION ACCEPTOR. OPERATIONAL COST IN GOVT SET-UP MAY BE CONSIDERED AS SERVICE CHARGE TO PVT PROVIDERS. ADVANCE PAYMENT WILL IMPROVE PERFORMANCE
CATARACT	CONTRACTING	CERTAIN NGOS LIKE	NGOS CAN PERFORM	SOME 100 PRIVATE

BLINDNESS CONTROL PROGRAMME	WITH PRIVATE SECTOR (NGOS)	VHS, CHRISTIAN MISSION HOSPITAL, ANDHRA MAHILA SABHA, F.P.A.I. ETC. ARE GIVEN ANNUAL GRANTS BY GOVERNMENT FOR THEIR RECURRING EXPENDITURE. THIS IS APPLICABLE TO CERTAIN DISPENSARIES RUN BY NGOS IN TRIBAL AREAS ALSO.	CATARACT SURGERIES, ARRANGE EYE CAMPS WHERE GOVT PROVIDES FINANCE.	HOSPITALS ARE APPROVED FOR UNDERTAKING MAJOR SURGERIES UNDER THE ABOVE SCHEME. ONLY ACCREDITED NGOS HAVING SKILLED MANPOWER SHOULD BE CONSIDERED.
TB CONTROL PROGRAM	PARTNERSHIP WITH PRIVATE PRACTITIONER TO GIVE IEC ON THE DOTS SCHEME AND FOR IDENTIFICATION AND TREATMENT OF THE PATIENTS, GOVT. LABS ARE OPEN FOR THE USE BY THE PRIVATE PRACTITIONER FOR TB DIAGNOSIS	MAHAVIR TRUST HOSPITAL, HYDERABAD , SEWA AT AHMEDABAD AND, MANAV SARTHAK KUSTHASHRAM, JAIPUR ARE SOME OF THE SUCCESS STORIES	SPREADING AWARENESS THROUGH PRIVATE DOCTORS IS COST FREE, OPENING THE LABS FOR USE BY THE PRIVATE DOCTORS CAN DIAGNOSE MORE TB PATIENTS AND TREATMENT OF THE SAME	HOSPITAL CREATES A REFERRAL CARD , INITIAL DIAGNOSIS , COUNSELING , AND TREATMENT PROTOCOL AND REFERS THE PATIENT TO DESIGNATED DOTS CENTER FOR DRUGS. GOVT PROVIDES FREE DRUGS AND MEDICINES TO THE DOTS CENTERS ALSO TRAIN MEDICAL STAFF, PROVIDES LAB SUPPLIES, PRIVATE MEDICAL PRACTITIONERS REFER PATIENTS MODEL OF RNTCP HAS STRONG POTENTIAL FOR ADOPTION IN ALL NHPS
AIDS CONTROL PROGRAMME	PARTNERSHIP WITH NGOS TO SPREAD AWARENESS ABOUT THE HIV/ AIDS , MAKING FREE CONDOMS AVAILABLE TO THE PEOPLE BY NGOS		WITH NO EXTRA COST GOVT CAN SPREAD HIV/ AIDS AWARENESS AND PROVIDE CONDOMS TO THE PEOPLE	MONITORING IS MUST
PULSE POLIO PROGRAMME	PARTNERSHIP WITH PRIVATE DOCTORS / NGOS. NGOS CAN CONDUCTS PULSE POLO CAMPS, PRIVATE DOCTORS CAN GIVE POLIO DROPS TO THE UNDER FIVE CHILDREN THOSE WHO VISITS THEM AS PATIENTS OR WITH PATIENTS		WITH INVOLVEMENT OF PRIVATE PEOPLE PROGRAMME CAN BE IMPLEMENTED MORE EFFECTIVELY WITHOUT ANY BURDEN ON EXISTING INFRASTRUCTURE	VACCINE PREVENTABLE DISEASES ARE ALSO ISSUED FREE OF CHARGE TO PRIVATE NURSING HOMES FOR THEIR USE
RCH PROJECT	CONTRACTING WITH THE PRIVATE HOSPITAL	UNDER RCH PROJECT	EFFECTIVE AND ECONOMIC RCH & FAMILY WELFARE	FUNDS FOR THE SCHEME WILL BE

	UNDERTAKE LSCS SURGERIES WHERE GOVT SERVICES ARE NOT AVAILABLE. FEES ARE MET BY GOVT. HOSPITAL, OBSTETRICIANS , ANESTHETIST CAN BE HIRED FOR LSCS SURGERIES IN GOVT HOSPITAL WHERE THEY ARE NOT AVAILABLE. MTP SERVICES ARE ALSO PROVIDED IN THE PRIVATE HOSPITALS AGAINST THE VOUCHERS WHICH REIMBURSED AFTER EVERY MONTH FROM THE STATE GOVT.	INNOVATIVE MODEL LIKE VIKALP ARE GOING ON. DELIVERY HUTS MAY BE HANDED OVER TO NGOS ALREADY INVOLVED IN RCH	SERVICES CAN BE PROVIDED TO THE PEOPLE	PROVIDED FROM THE DEPARTMENT OF HEALTH, HARYANA TO THE MOTHER NGO FOR FURTHER PAYMENT. THE PAYMENT WILL BE MADE OUT OF THE FUNDS AVAILABLE VOUCHER SCHEMES UNDER THE RCH Π PROGRAMME. AN AMOUNT OF RS 1.5 CRORES IS AVAILABLE FOR IMPLEMENTING VOUCHER SCHEMES IN THE YEAR 2005-07. THE NORMS FOR PAYMENTS WILL BE FINALIZED AFTER NEGOTIATION BETWEEN MNGOS AND PRIVATE PROVIDERS. ADVANCE PAYMENT IN FIRST QUARTER MAY BE EXPERIMENTED

Annexure-2

MODELS OF PUBLIC PRIVATE PARTNERSHIPS

Various models can be utilized for putting these partnerships into action; some of the possible mechanisms for implementation of PPP are given below:

1. Franchising

Franchise is a type of business model whereby a manufacturer or marketer of a product or service (the franchiser) grants exclusive rights to local independent entrepreneurs (franchisees) to conduct business in a prescribed manner in a certain place over a specified period. Typically the franchiser has developed specialized skills, knowledge, and strategies and thus able to share its blueprint for a successful product line with franchisees. The franchisees contribute resources of their own to set up a clinic and pay membership to franchiser.

Partial Franchising: Most of the social franchising models followed in India are partial franchising models. Franchiser identifies private hospitals and enters into an agreement with franchisee to provide certain services in lieu of payment of fee or commissions from sale of services and goods. These contracts largely confine to a basket of RCH services. However franchisee provides many other services that are not part of the contract. There is no control over quality of services provided by franchisee outside the contract.

Usually one-year subscription fee is given by franchisee to franchiser. In this arrangement, increased performance of franchisee does not lead to increased revenues to franchiser. There is no incentive to franchiser to improve performance through promotional activities. One way to overcome this problem is to have a revenue sharing arrangement between franchiser and franchisee. However many of the hospitals are not transparent about their financial transactions or do they maintain complete record of services provided. One of the innovative aspects of these social franchising efforts is to link rural medical practitioners and/or community based organizations such as SHG to franchisee that has helped to increase the client load for RCH services. The partial franchising efforts in India do not represent public-private partnerships but offer a model and experiences that are highly relevant. Government can have its own model of social franchising with franchiser-franchisee-RMP-CBO linkages. Concentration of private hospitals/ nursing homes in urban areas has to be taken into consideration. In many rural and inaccessible areas where the need for improved access to services is the highest, there are not private hospitals/nursing homes.

Full Franchising: Franchisee provides services defined by the franchiser and expansion of range of services depends on mutual agreement. For existing nursing homes and hospitals, this can mean a considerable revenue loss and this has to be filled in by subsidies till the client load improves and the hospitals start making operating profits. Time required for transition of loss making unit to profit making unit depends on a variety of factors such as location of hospitals, demand for services, perceived quality of services and competition. Not many hospitals may opt for this given the uncertainties in financial returns, unless guarantees are given to sustain the model for a long period of time.

2. Branded Clinics:

A few organizations have started a chain of branded clinics that offer a wide range of reproductive and child health services. There is scope to expand the range of services provided by these clinics and add social mobilization efforts to their functions. These branded clinics can be opened in areas where there is a need with minimum effort. Branded clinics are more sustainable because of their ability to generate more income than social franchising units.

3. Contracting Out

Contracting out refers to a situation in which private providers receive a budget to provide certain services and manage a government health unit. The two parties usually agree on some or all of the following: the quantity and the quality and the duration of the contract.

Common criteria for identifying those government health clinics that need to be contracted out are the first step in this direction. Large number of vacancies for a long period, high absenteeism, and consistent low performance on all RCH indicators could be the critical criteria.

Some states are more prepared for contracting out services compared to others. Fear of losing jobs and perceived shrinking role of government in health sector are the main reasons for resistance. Advocacy efforts are required in those states where resistance levels are high for contracting out services.

There are several levels at which the contracting out can be done depending on the degrees of freedom given to the contractor. Higher the freedom, higher should be the performance levels of key RCH indicators.

Option 1: Government hands over the physical infrastructure, equipment, budget and personnel of a health unit to the selected agency.

Option 2: Government hands over the physical infrastructure, equipment, budget but gives freedom to the selected agency to recruit personnel as per their terms and conditions but following the government norms such as one ANM per 5,000/3,000 population.

Option 3: Government hands over the physical infrastructure, equipment, and budget but gives freedom the select agency to have their own service delivery models without following the fixed prescribed pattern.

Option 4: Government hands over the physical infrastructure, equipment, budget and gives freedom to the select agency to have their own personnel, service delivery models, freedom to expand types of services provided and freedom to introduce user fee and recover some proportion of costs.

4. Contracting In

Contracting in is done for a variety of services particularly in major hospitals. These include: maintenance of buildings, utilities, housekeeping, meals, medicine stores, diagnostic facilities, transport, security, communications etc. Hospitals are given freedom to choose the services to be given to contractors. In many cases they lack comprehensive plans and sound financial analysis. Nevertheless, contracting in many hospitals has resulted in conservation of resources, improved efficiency and better quality of services. Contracting in services leads to surplus human resources and they need to be transferred to other health units to fill in vacant positions, if any. Resentment of employees and interference of trade unions are some of the major obstacles to this process.

Contracting in does not work in some places for particular types of services. For instance some state governments could not attract private sector participation for diagnostic services in remote area hospitals with low client load. One option is to subsidize the equipment purchased by private agencies and the other is to make services located in government hospitals open to all. Even a person with prescription from private clinic should be allowed to use privately run diagnostic facilities in government hospitals. This increases the volume of transactions and makes the unit financially viable.

Recruiting doctors, technicians and other staff on contractual basis for a stipulated period of time is widely practiced in several states. In some cases the contracted staff performs all duties of regular staff and in other instances, their services are contracted for a few days in a month and to provide services in a particular clinic. In many states, a large proportion of vacant positions were filled in following this process.

5. Social Marketing

One of the earliest efforts at building public-private partnerships is in the area of social marketing of contraceptives. For more than a decade, HLL, ITC, Indian Oil and other large FMCG companies helped the government with social marketing of contraceptives by piggy backing Nirodh to their products. Later private social marketing companies have emerged as a force to reckon with and gained considerable experience in marketing contraceptive products both social and commercial. The increasing trend now is to enlarge the basket of products by including ORS, IFA tablets, and other health products to make the marketing efforts more self-sustaining. Government provides the subsidized contraceptives, and finances brand and point of purchase promotion schemes of selected marketing agencies.

6. Build, Operate and Transfer

Build, operate and transfer (BOT) models are highly successful in infrastructure development sector in India. BOT requires part financing of projects by the government, financial guarantees when needed, subsidized land at prime locations and assurance of reasonable returns on investment. These models could be useful to establish large hospitals and ensure quality services at reasonable rates to poor people. However these hospitals should be able to withstand market competition to survive and sustain themselves.

7. Joint Venture Companies

Joint venture companies are companies launched with equity participation of government and private sector. Proportion of equity of each partner may vary from one venture to another. Joint venture companies, in most cases in commercial sector, have not succeeded in India due to lack of understanding and trust between partners, inordinate delays in decision-making and dominance of government even with low equity. There is even less chance of their succeeding in health sector.

8. Voucher System

A voucher is a document that can be exchanged for defined goods or services as a token of payment (tied-cash"). This consists of designing, developing and valuing health packages for various common ailments / conditions (like ANC package / STI package / Teen pregnancy package / family planning package etc) which can be bought by the people at specific intervals of time. These vouchers can then be redeemed for receiving a set of services (like 1-2 consultations, lab tests, procedures, counselling and drugs for the condition) from certified / accredited hospitals or clinics and are to be used within 2-3 months of buying the voucher. This means that the package can be bought, used as and when required and ensures privacy for the client.

Regular monitoring is required for ensuring quality standards, training of providers and networking with the people to ensure that the proper use of vouchers. The vouchers are redeemed to the clinics for the number utilised depending on the price for each package of service provided. Clinics that fail the quality standards of service and do not do well on patient satisfaction can be removed from the certified services.

9. Donations from individuals

Within a large country like India and with a creditable high income and middle income groups there are many examples of private donors willing to partner with the public sector. Rich philanthropists, individual donations may be the crucial requirement in areas to make the PPP initiative effective in delivering health care. Though in some states mechanisms and provisions are present for utilizing these private donations for improving local health situation, many other states lack these systems. Efforts have to be made to create simple and transparent institutional mechanisms to encourage donations to contribute to the growth and improvement in reproductive and child health services in their area.

10. Partnerships with Social Clubs and Groups (e.g. Rotary Club)
Clubs like Rotary and Lion's played a significant role in immunization campaigns, Pulse Polio campaign and other health care services. Since these clubs have a nation wide network, their involvement ensures better coverage. They also bring in their expertise and resources to the health care services.

11. Involvement of Corporate sector:
The corporate sector has a rich history of being supportive of the health and family welfare interventions for people that work in and live around its premises. Under Corporate Social Responsibility, the corporate sector through the Confederation of Indian Industries (CII) and the Federation of Indian Chamber of Commerce and Industries (FICCI) and several other sector wise business and industry associations have played a significant role in advocacy efforts, funding non-government organizations for innovative interventions, introducing new schemes to encourage service utilization and expending their own resources for promotion of reproductive and child health services particularly family planning services..

12. Partnership with Professional Associations
There are several professional associations such as Indian Medical Association, Gynaecologists federation, nurses associations etc. These association from time to tome extended help in launching new programmes such as Vande Mataram Scheme, Gaon Chalo project and immunization programme particularly pulse polio. They have technical skills and expertise to provide advice on various other matters such as setting standard protocols, quality assurance systems and accreditation. However the managerial capacities of these professional associations have to be strengthened.

Moreover, with widespread chapters/ branches all over the country and huge membership they can play a very important on ethical issues.

13. Capacity building of private providers, pharmacists and informal providers (RMPs)
Several initiatives taken by the government in the past to improve the technical and counselling skills of private medical practitioners particularly rural medical practitioners by providing them training improved quality of services offered by them. Since they have a huge presence in rural areas and urban slums and a significant proportion of population depend on them for services, there is a need to involve them in a significant way to create demand for services and in making referral system effective. Similarly government medical officers and administrator benefited by participating in training programmes conducted by private institutions. Consultancy services offered by private institutions in the areas of communications, systems development etc is another example of public-private partnership. Another area of partnership is contracting out management of training institutions such as ANM Training Centres, Regional Training Centres to NGOs and private agencies.

14. Special "Category Campaigns" with the private sector to improve health
The WHO-ORS campaign and the Goli- ke- Hamjoli campaigns are examples of the use of the commercial sector to advance national health goals. The category campaigns expand use of a health/family-planning product, increases the volume and the users for the product. In India, the Goli ke Hamjoli and WHO-ORS campaigns succeeded in increasing product awareness, availability, sales, and use. At the same time, this entails using a generic promotional strategy, increased private-sector investment and the value of the market, policy change; coordination with partner pharmaceutical firms; affiliation with professional associations; expansion of market channels; and consumer outreach. Initially, the program should use mass media vehicles to improve product awareness and contemplation. But, as the program develops, its emphasis should shift to encouraging product trial, and use interpersonal approaches to reach out to potential consumers.

These special campaigns in partnership with the private sector can focus on demand generation for refurbished and revitalised public sector, generic promotion of health products (life saving ORS, Menstrual Hygiene with Sanitary Napkins etc).

15. Autonomous Institutions

Giving autonomy to public institutions within the system can lead to improvement in quality, accountability and efficiency. It also ensures greater involvement and ownership at the level of the institution, ensuring greater morale and encouragement to the work-force. Many such projects have been implemented and have shown to yield excellent results, as the need for the change in management systems is self-driven. This is also sustainable and easy to replicate.

16. Partnering with CBOs / NGOs

For designing and implementing innovative approaches to RCH services, partnerships with community based organizations and non-government organizations are a significant step. Government for long encouraged participation these grass roots organizations in demand creation and delivery of services. These organizations often worked in remote rural areas where access to RCH services is difficult. Recent NGO Policy of the MOHFW envisages a scheme where each district would have a mother NGO and linked to several field NGOs within the district with greater degree of autonomy and decentralization. Community mobilization efforts yield effective results and community ownership of the programme is sustainable.

17. Mobile Health Vans

In geographical areas with difficult terrain with no transport facilities and poor road connectivity usually the outreach and institutional services of PHCs are not to the expected standards. This has resulted in gross under utilization of services. To overcome this problem, in some states private sector agencies have taken a lead in launching mobile vans. These vans go to clearly identified central points on fixed days and provide comprehensive health services including RCH services to a cluster of villages. While private sector resources were put to use to purchase vans, the government contributed to these services by deputing medical officers and medicines. This approach has significantly helped to improve access to quality services.

18. Insurance and Public-Private Partnerships

In one of the recently planned schemes, the government insures and pays health insurance premium for families below poverty line. These families in turn are insured against expenses on health and hospitalization, up to a certain amount. On similar principle, it is possible to develop sustainable health insurance schemes that are community based. In such schemes, the community members pay a minimum insurance premium per month and get insured against certain level of health expenditure. This protects them from sudden and unexpected expenditure on health. Such community based schemes also ensure that the local needs and expectations of the people are met, by preferentially reimbursing local trained healthcare providers.

CLASSIFYING PPPs

Since public-private partnerships vary significantly, it is necessary to categorize them in order to understand their nature and thrust areas of partnerships. Some of the partnerships are for short duration or one time activity and others are for long term. These partnerships also work in specific thrust areas. Some of the partnerships may cover all thrust areas and others one or more.

Nature of PPP	Examples
One time /Short term Partnership	Donation of land, money, equipment etc Participation in campaigns
Continuous / Long term partnership	Social franchising of service Contracting In and Out Social marketing Capacity building

Thrust areas of partnership	Examples
Service oriented	Social Marketing Social Franchising Contracting healthcare providers Mobile vans
Information oriented/Advocacy oriented	Contracting out IEC activities to NGOs Category Campaigns with Private Partners
Infrastructure oriented	Construction of buildings Repairs to buildings Equipment, Vehicles
Capacity building oriented	Training for skill development and counselling Systems development Managerial capacity

CRITERIA FOR INITIATING PPPs

Types of public-private partnerships relevant for a particular state depend on prevailing conditions, needs and functional requirements. Some criteria by which the public-private partnerships should be selected are given below, as follows:

Form of Partnership	Criteria for initiation
1. Franchising	• The effort to revitalize the complete govt. infrastructure is time consuming and a slow process • Resources required to expand public health infrastructure is enormous. • Need for services is enormous and the government health institutions are not in a position to cater to needs • Availability of vast network of private hospitals in places needed • When objective is to improve access to services on immediate basis. • Improve quality standards of private sector and provide high quality care at affordable prices.
2. Branded Clinics	• Need to expand services rapidly • Provide high visibility to clinics • Offer a package of services selected for the purpose • High quality services at affordable prices
3. Contracting Out	• Difficult to manage government health units in remote and inaccessible areas • Utilization of services and performance levels are consistently low due to non-availability of staff • Aim is to put government health facilities to optimum use • Increase responsiveness of government health facilities to local needs through community involvement

4. Contracting In	• Improve efficiency levels of services provided • Make management of services more effective • Conserve scarce resources by cutting costs • Try out innovative approaches to improve efficiency and effectiveness
5. Social Marketing	• Combine service delivery with demand creation • Availability of products in a vast network of easily accessible retail outlets • Encourage brand choices and competition to improve penetration levels • Perceived value attached to priced products than products distributed free of cost
6. Build Operate Transfer (BOT)/ Joint Ventures	• An enormous number of service delivery points whether hospitals, labs or diagnostic centres have to be constructed within a short span of time. • When the cost of building and maintaining a unit is prohibitive for the govt. to bear alone • When returns on investment are guaranteed. • Government treats health as infrastructure industry.
Voucher System	• Improve access to services and provide choice • Costs act as a major barrier to services • Existing service delivery points do not have provision to all types of services • Inadequate knowledge about the value of service (eg importance of antenatal care) • Generate demand for services particularly among poor and disadvantaged sections
8. Donations from individuals	• Presence of affluent families, philanthropic organizations • Identified needs to improve quality of services • Clear procedures and guidelines to accept donations • Transparent and accountable systems that enhance image of institutions
9. Partnerships with Social Clubs and Groups (eg. Rotary Club)	• Partnerships to popularise revitalized service points, communication campaigns and logistics management • Organization of camps on a large scale • Need for additional resources and also management and technical expertise • Need to step up advocacy efforts
10. Involvement of Corporate sector	• Resources to outreach services through NGOs in remote areas • Effective services to employees in organized sector • Policy advocacy efforts • Adoption of villages or CHCs/PHCs by corporate health sector to improve services.

11. Partnership with Professional Associations	• Presence of active professional associations with clear guidelines • Internal committees to promote ethical practices • Management expertise to implement projects • Need to prepare standard protocols, quality assurance system by building consensus • Improvement of technical skills of professionals in both private and public sectors • Improve professional response to programme needs
12. Capacity Building of Private providers, pharmacists and Informal providers (RMPs	• High dependence of people on private sector for services • Technical knowledge and skill levels are not to a desirable standard • Improve quality standards of providers and increase access to quality services • Put in place an effective referral system • Involve services providers in social marketing efforts
13.Special "Category "Campaigns with the Private Sector to improve health	• When the need to promote a service or health care product is established • Multiple partner involvement is required to promote a product • Advocacy efforts to make product acceptable at all levels
14.Autonomous Institutions	• Need to upgrade quality of services and initiate use of state-of-the-art technology in health care delivery • Provide enough flexibility to health units • Improve efficiency and effective levels of management • Reduce costs and facilitate quicker decision-making • Allow institutions to generate alternate sources of funding
15 Partnering with NGOs/CBOs	• Encourage community involvement • Improve community ownership of programme • Test innovative and cost-effective approaches to service delivery • Cover inaccessible and remote areas
16. Mobile Clinics	• Provide access to services people living in inaccessible terrain • Make services available at central location to reduce travel time and costs of clients • Improve utilization of services in remote areas
17. Insurance Schemes	• Focus on poor and disadvantaged • Provide services at affordable costs • Long term solution to health problems • Improved choice of health units • Reduce indebtedness among poor due to health costs

Annexure 3

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4. NIHFW: ***National Planning Workshop on Public Partnerships in the Health Sector in India,2005***
5. A Venkat Raman and James Warner Bjorkman: ***Public Private Partnership in Health Care Delivery in India***
6. MoHFW: ***The Report of the Task Force on Medical Education, 2006***
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CHIRANJEEVI-THE CONCEPT

- For reduction in maternal and child deaths / access and equity
- In five backward districts
- For EmOC and Em transport services
- With weak Public Health Facilities in Obstetric care
- In Partnership with FOGSI
- For making available private specialists to BPL pregnant woman
- Unit cost Rs 1795/- based on package of services includes:

CHIRANJEEVI-THE CONCEPT-II

- Rs200/- for transport to pregnant mother
- Rs 50/- for midwife or attendant
- Pvt gynaecologist pays above and avails reimbursement
- ANC Registration in a Govt facility a must
- Advance of Rs 15000/- to the pvt gynaecologist
- CDMHO empanels and monitors

DISTRICT-WISE PERFORMANCE OF DELIVERIES UNDER CHIRANJIVI YOJANA, GUJARAT

Progress Dec 05- March06

District	Total number of Private specialists	Number of Private specialists enrolled	Deliveries under Chiranjivi Yojana till	Average performance per Doctors
Panchmahal	29	27	2313	86
Sabarkhanta	73	46	1897	41
Banaskhanta	50	52	1436	28
Kutch	47	20	726	36
Dahod	16	18	1421	79
Total	215	73.6%	7793	48

CHIRANJEEVI-OUTCOMES

- 163 MoUs signed. 76% enrollment
- 87% Normal and 5% Caesarian delivery
- Avg Delivery per specialist is 48
- 31% (2415)of 7793 BPL pregnant mothers have delivered
- No maternal death reported. As per MMR 30 mothers would have died
- 9 infant deaths reported. As per IMR 350-450 infants would have died
- Access of BPL pregnant mothers to institutional delivery

ARUNACHAL PRADESH EXPERIMENT : THE CONCEPT

- Pilot Project: 90% Govt 10% NGO
- State hand over infrastructure of PHC/SC to Agency
- State to provide cost towards personnel, drugs and consumables

THE CONCEPT(2)

- **Agency to engage its own staff and ensure availability 24X7**
- **Staffing Pattern**
  - ⇨ **MO - 2**
  - ⇨ **Pharmacist - 1**
  - ⇨ **Staff Nurse – 2**
  - ⇨ **ANM – 2 (PHC)/ 6 (SC)**
  - ⇨ **LHV – 1**
  - ⇨ **lab tech – 1**
  - ⇨ **Driver – 1**
  - ⇨ **HA (Jr.) – 1**
  - ⇨ **Group D - 4**

THE CONCEPT (3)

- **Agency to provide all services expected of a PHC**
- **PHC Management Committee-RKS**
- **State Steering Committee**
- **National level NGOs**
- **Exit policy for Agency and Govt**
- **Audit and Accounting**
- **Output based performance indicators**
- **Outreach Activity**
- **Implementation of National Programmes**
- **External Evaluation/Concurrent evaluation**

PARTNERS IN AP

- Karuna Trust : 9 Districts
- VHAI :5 Districts
- JAC(Prayas) : 1 District
- FGA, Itanagar : 1 District