PERFORMANCE EVALUATION OF RURAL HEALTH DELIVERY SYSTEM UNDER NATIONAL RURAL HEALTH MISSION: A CASE STUDY OF HIMACHAL PRADESH

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Abstract

National Rural Health Mission was launched in April 2005 by Government of India to provide effective, affordable and accessible health care to rural population especially to disadvantaged section which includes women and children. The targets and strategies of the mission were designed keeping in view the Millennium Development Goals formulated by the United Nations and the objectives enshrined in health policies framed by Central Government. Himachal Pradesh has been included among the 18 states of the country for the implementation of NRHM. These states have week health infrastructure and week health indicators. The mission aims at bringing architectural correction in health care delivery system by taking some new initiatives. The present paper seeks to evaluate the performance of the mission from 2005 to 2013 in strengthening health infrastructure in public health facilities in the state of Himachal Pradesh and its impact on service delivery. The mission framework and the concept of health is discussed in brief. The challenges impeding the progress of the mission in the rural and remote areas of the state are highlighted and the suggestions to deal effectively with those challenges are given to streamline the bottlenecks in the existing system.

Introduction

India is a signatory to Alma Ata declaration of 1978, in which it was urged upon all the governments to formulate policies, strategies, and plans of action, prioritising primary health care at the core of national agenda. It was also decided that the governments will strive for the attainment of a better level of health for its citizens so that they can lead a socially and economically productive life. This is popularly known by the acronym “Health for All”. National Rural Health Mission in Himachal Pradesh was launched in April 2005. Providing better health care services, proper health infrastructure and effective health delivery services in rural areas which have tough terrain and challenging topography is the challenge the policy framers have faced ever since the state came in to existence. This coupled

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with poor road connectivity and inadequate transport facilities have directly affected the health status of people residing in these areas. NRHM seeks to provide accessible, affordable and quality health care to people living in rural areas.

**National Rural Health Mission: Framework**

The Hon'ble Prime Minister launched the National Rural Health Mission on 12th April, 2005 throughout the country with special focus on 18 states, including eight Empowered Action Group (EAG) states, the North Eastern States, Jammu & Kashmir and Himachal Pradesh.

The NRHM seeks to provide accessible, affordable and reliable health care to the rural population, especially the vulnerable sections of the society. It also seeks to reduce the Maternal Mortality Ratio (MMR) in the country from 407 to 100 per 1,00,000 live births, Infant Mortality Ratio (IMR) from 60 to 30 per 1000 live births and Total Fertility Rate (TFR) from 3.0 to 2.1 within the 7 year period of the Mission.

The key features in order to achieve the goals of the mission include making the public health delivery system fully functional and accountable to the community, human resources management, community involvement, decentralisation, rigorous monitoring and evaluation against standards, convergence of health related programmes from village level upwards, innovative and flexible financing and also interventions for improving the health indicators.

The mission seeks to strengthen and upgrade the public health infrastructure in the country with special focus on EAG and North Eastern States which is based on the assumption that the desired services cannot be provided till the infrastructure is not sufficiently upgraded. The mission also seeks to establish functional health facilities in the public domain through revitalization of existing infrastructure and through fresh construction or renovation where required. The mission further seeks to improve service delivery by putting in place enabling systems at all levels which will involve simultaneous corrections in manpower planning as well as infrastructure strengthening. The mission would give priority to both these aspects.

The issue of availability of critical manpower in the rural areas is proposed to be addressed through initiatives like introduction of a trained Accredited Social Health Activist (ASHA) in every village of high focussed states, additional Accredited Nurse Midwife (ANM) at each sub centre, three staff nurses at Public Health Centres to make them operational round the clock.
and additional specialists and paramedical staff at the Community Health Centres. The condition of local residency is proposed to ensure that the staff stays at their place of posting.

**National Rural Health Mission-The Vision**

- The National Rural Health Mission (2005-12) seeks to provide effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators or weak infrastructure.

- The Mission is an articulation of the commitment of the government to increase public spending on health from 0.9% GDP to 2-3% of GDP, with improved arrangement for community financing and risk pooling.

- It aims to 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 country.

- The key components of the mission are the provision of a female health activist in each village and development of Village Health Plan by the Health and Sanitation Committee and its accountability to community.

- The mission envisages convergence of vertical Health and Family welfare programmes for optimum utilization of funds and health infrastructure.

- Delineating Indian Public Health Standards (IPHS) and strengthening public health infrastructure to its level.

- It seeks to revitalize local health traditions and mainstream Ayurveda, Yoga, Unani, Homeopathy and Sidha (AYUSH) into the public health system.

- It aims at effective integration of health concerns through decentralized management at district level, with determinants of health like sanitation and hygiene, nutrition, safe drinking water, gender and social concerns.

- It will define time bound goals and report publicly on its progress.

- It aims to improve access of rural people, especially poor women and children to equitable, affordable, accountable and effective primary health care in the country.

**II. Goals, Strategies and Outcomes of the Mission**

The National Rural Health Mission (NRHM) has been launched with a view to bringing about dramatic improvement in the health system and the health status of the people, especially those who live in the rural areas of the country. The Mission seeks 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 stabilization, gender and demographic balance. In this process, the Mission would help achieve goals set under the National Health Policy and the Millennium Development Goals. To achieve these goals NRHM will:

• Facilitate increased access and utilization of quality health services by all.
• Forge a partnership between the Central, state and the local governments.
• Set up a platform for involving the Panchayati Raj institutions and community in the management of primary health programmes and infrastructure.
• Provide an opportunity for promoting equity and social justice.
• Establish a mechanism to provide flexibility to the states and the community to promote local initiatives.
• Develop a framework for promoting inter-sectoral convergence for promotive and preventive health care.

The Objectives of the Mission:

• Reduction in child and maternal mortality
• Universal access to public services for food and nutrition, sanitation and hygiene and universal access to public health care services with emphasis on services addressing women’s and children’s health and universal immunization
• 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 & mainstream AYUSH.
• Promotion of healthy life styles.

The core strategies of the Mission

The framers of the mission document have formulated certain core strategies to achieve the outcomes of the mission in a given timeline.
• Train and enhance capacity of Panchayati Raj Institutions (PRIs) to own, control and manage public health services.
• Promote access to improved healthcare at household level through the female health activist (ASHA).
• Health Plan for each village through Village Health Committee of the Panchayat.
• 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 Multi-Purpose Workers (MPWs).
• 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 vertical Health and Family Welfare programmes at National, State, District and Block levels.
• Technical support to National, State and District Health Mission, for 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 non-profit sector particularly in underserved areas.

**Major Initiatives undertaken in Himachal under NRHM**

Himachal Pradesh has been grouped along with the Empowered Action Group (EAG) States for the implementation of NRHM. These states have weak health infrastructure and weak health indicators. In order to improve the health infrastructure in the rural areas and to make health care system more responsive and accessible to the poor and vulnerable, the state government has taken following major initiatives under the mission.

**Strengthening of Health Infrastructure**

National Rural Health Mission (NRHM) envisages strengthening public health infrastructure to improve public health care and delivery system. Himachal Pradesh is a hilly state with a very difficult geographical terrain and there are many pockets in the state which are either un-served or underserved on account of their geographical locations. Presently the health services are being provided in the state through 2065 Sub Centres,
489 Public Health Centres, 78 Community Health Centres and 50 General Hospitals. As per the Annual Administrative Report of department of Health and Family Welfare, Himachal Pradesh 2013-14, the average population covered by each Sub Centre, Public Health Centre and Community Health Centre is 3107, 13,140 and 82,380 respectively in the state as on 31-3-2014. The year wise comparison of increase in health facilities in the state is given in the table below:

Table-1 Year wise details of Health institutions and beds available since 2005.

<table>
<thead>
<tr>
<th>Year</th>
<th>Gen. Hospital</th>
<th>Community Health Centres</th>
<th>Primary Health Centres</th>
<th>Sub Centres</th>
<th>Civil Dispensaries</th>
<th>Beds available</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>50</td>
<td>66</td>
<td>439</td>
<td>2069</td>
<td>22</td>
<td>8824</td>
</tr>
<tr>
<td>2006-07</td>
<td>51</td>
<td>71</td>
<td>443</td>
<td>2071</td>
<td>22</td>
<td>8674</td>
</tr>
<tr>
<td>2007-08</td>
<td>52</td>
<td>73</td>
<td>449</td>
<td>2071</td>
<td>22</td>
<td>9174</td>
</tr>
<tr>
<td>2008-09</td>
<td>52</td>
<td>73</td>
<td>449</td>
<td>2071</td>
<td>23</td>
<td>9174</td>
</tr>
<tr>
<td>2009-10</td>
<td>52</td>
<td>73</td>
<td>449</td>
<td>2071</td>
<td>23</td>
<td>9174</td>
</tr>
<tr>
<td>2010-11</td>
<td>52</td>
<td>77</td>
<td>453</td>
<td>2067</td>
<td>23</td>
<td>9173</td>
</tr>
<tr>
<td>2011-12</td>
<td>53</td>
<td>76</td>
<td>472</td>
<td>2067</td>
<td>10</td>
<td>9702</td>
</tr>
<tr>
<td>2012-13</td>
<td>53</td>
<td>78</td>
<td>474</td>
<td>2065</td>
<td>11</td>
<td>9702</td>
</tr>
<tr>
<td>2013-14</td>
<td>61</td>
<td>78</td>
<td>489</td>
<td>2065</td>
<td>11</td>
<td>9889</td>
</tr>
</tbody>
</table>

Source: Directory of Medical and Public Health Institutions in Himachal Pradesh, published by Department of Health and Family Welfare, Himachal Pradesh, Shimla, showing the status as on 31-3-2014.

Table shows the number of General Hospitals, Community Health Centres, Primary Health Centres, Sub Centres, Civil Dispensaries and Beds available on 31-3-2014 as compared to those reported in 2005. As is clear from the table, there is an increase of 11 in General Hospitals, 12 in Community Health Centres and 60 Primary Health Centres, at the state level as compared to those existing in the year 2005-06. However the health Sub Centres have shown a decrease of 4 and Civil Dispensaries have come down to 11 as compared to 2005-06. The increase in General Hospitals, Community Health Centres and Primary Health Centres is a significant increase which is resulting in better health care and access to people. Similarly, the availability of beds has increased from 8824 in 2005 to 9889 in 2014 which implies a significant improvement in health infrastructure in the state.

Formation of Rogi Kalyan Samiti

One of the stated objectives of the mission is to form Hospital Management Committees popularly known as Rogi Kalyan Samitis (RKS) at the secondary and tertiary health systems in the state to provide more
autonomy to hospitals. Rogi Kalyan Samiti is a registered society and is constituted in all district hospitals, community health centres, and public health centres in the state. It is an autonomous body which is free to generate and use the funds with it as per its judgement for smooth functioning of the health facility. Members of RKS act as trustees to manage the affairs of these health facilities and are responsible for day to day operations of the hospital, improve functioning of hospitals with focus on patient satisfaction and improved service delivery. Apart from this, RKS ensures better up keep of the facilities to ensure better health facilities to patients in health institutions. Financial assistance is being provided to RKS by the government annually through untied grant to enable them to undertake activities for the welfare of patients. Presently 628 RKS are registered and functional in the state. RKS have generated funds in all the health facilities through user charges. Funds are spent on appointing medical, paramedical and technical staff, purchasing medicines, medical equipment’s and for upgrading health facilities. By providing free medicines to poor people has resulted in reduction of out of pocket expenses.

**National Ambulance Service**

To facilitate increased access to health facilities, National Ambulance Service is an emergency response to deal with critical cases. Due to geographical conditions and tough terrain, many precious lives were lost and people suffered disabilities due to lack of timely medical care for pregnant women, infants, and persons in acute emergencies like stroke, heart attack, poisoning, burn and snake bites in the state. To address this, state is running Emergency Response System through Public Private Partnership (PPP) agreement with GVK-EMRI an experienced entity in the country. National ambulance service-108 is the most important initiative under National Rural Health Mission which facilitates transportation of people from home to health facility. In fact it is a measure to improve the access of people to health facilities and reduce out of pocket expenses of patients accessing these facilities. Free ambulance services are being provided to transport the patients from every nook & corner of the state under National Rural Health Mission. The government of Himachal Pradesh introduced referral transport service no-108 from 25-12-2010. All the districts of the state are covered under the scheme. National ambulance service in the state is connected with a toll free telephone number ‘108’. All the districts have set up call centres for effective patient transport system. At present 172 ambulances and 12 backup vehicles are providing emergency response services to patients in all the districts of the state. Apart from this 125 vehicles are also empanelled in the state to transport pregnant women & sick children from residence to health facility & from health facility to.
Table-2 Performance of NAS-108 in H.P. from 25-12-2010 to 30-11-2014

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Key Performance Parameters</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Population Covered (as per Census-2011)</td>
<td>6856509</td>
</tr>
<tr>
<td>2.</td>
<td>Area Covered(In Sq. Kms)</td>
<td>55673</td>
</tr>
<tr>
<td>3.</td>
<td>Total No. of Ambulances</td>
<td>184</td>
</tr>
<tr>
<td>4.</td>
<td>Operational Ambulances</td>
<td>172</td>
</tr>
<tr>
<td>5.</td>
<td>Average Population/Ambulance</td>
<td>39863</td>
</tr>
<tr>
<td>6.</td>
<td>Average Area/Ambulance (Sq. Kms)</td>
<td>324</td>
</tr>
<tr>
<td>7.</td>
<td>Emergency/Lakh Population/Day</td>
<td>5.21</td>
</tr>
<tr>
<td>8.</td>
<td>Emergency/Ambulance/Day</td>
<td>2.42</td>
</tr>
<tr>
<td>9.</td>
<td>Total Emergencies Handled</td>
<td>513201</td>
</tr>
<tr>
<td>10.</td>
<td>Police Emergencies</td>
<td>14364</td>
</tr>
<tr>
<td>11.</td>
<td>Fire Emergencies</td>
<td>3169</td>
</tr>
<tr>
<td>12.</td>
<td>Medical Emergencies</td>
<td>495668</td>
</tr>
<tr>
<td></td>
<td>a) Pregnancy Related Cases</td>
<td>92545</td>
</tr>
<tr>
<td></td>
<td>b) Trauma Vehicular Related Cases</td>
<td>27474</td>
</tr>
<tr>
<td></td>
<td>c) Cardiac Related Cases</td>
<td>22096</td>
</tr>
<tr>
<td></td>
<td>d) Respiratory Related Cases</td>
<td>2650</td>
</tr>
<tr>
<td>13.</td>
<td>Life Saved In Life Threatening Situations</td>
<td>25613</td>
</tr>
<tr>
<td>14.</td>
<td>Delivery assisted by EMTs in Ambulance</td>
<td>2562</td>
</tr>
<tr>
<td></td>
<td>a) Delivery assisted by EMTs in scene</td>
<td>1470</td>
</tr>
</tbody>
</table>

centre level. The committee members are involved in awareness programmes organised at panchayat level under N.R.H.M. It was perceived under the Mission that VHSC will reflect the aspirations of the local people and poor households living in that area and serve as a powerful tool of community participation at grass root level.

**Accredited Social Health Activist:**

The Accredited Social Health Activist is called by the acronym ASHA under National Rural Health Mission. ASHA is perceived as a first port of call for any health-related demands of the deprived section of the population, particularly women and children, who find it difficult to access health services. ASHA acts as a link between the local community and health system and caters to the health needs of 1000 population. Imparting periodic training, retraining and on the job training for 23 days in a year as per module and equip her with essential drugs Kit is the responsibility of the state. In 18 high-focused states, the cost of training and drug kit to ASHA is supported by the centre. She will also act as a mobilizer, facilitator, and a link between Accredited Nurse Midwife (ANM) at sub centre, Anganwari worker and community and play a major role in forging ownership of the community for the effective implementation of the mission. She will ensure better access to universal immunisation, safe delivery, new born care and prevention of water-borne diseases and other communicable diseases, nutrition and sanitation. ASHA will be fully accountable to panchayat and will be entitled to receive performance-based compensation for providing health services. Apart from this she would also provide immediate and easy access to rural population to essential health supplies like ORS, contraceptives, a set of 10 basic drugs and a health communication kit and other IEC material developed for villages. ASHA scheme has not been implemented in the state and Anganwari workers are declared as link workers who assist in outreach immunisation camps, motivate pregnant women for institutional deliveries, and distribution of IFA tablets to pregnant mothers and children. Himachal Pradesh has 17495 inhabited villages and 18336 Anganwari workers.

**Upgradation of Health Institutions:**

Facility improvement and upgradation of health institutions is one of the core objectives of the mission. Upgradation of health institution to the next level strengthens the primary health care and delivery system. 95 Public Health Centres have been upgraded to 24x7 basis health facility, which will provide round the clock services. Out of 95 Upgraded PHCs 13 are in Kangra, 12 each in Mandi and Shimla, 8 each in Bilaspur, Hamirpur, Chamba, Sirmaur and Solan, 6 in Una, 5 in Kullu, 4 in Kinnaur, and 3 in
Lahaul and Spiti district. The selected institutions are located in remote and farflung areas. Similarly, 61 health institutions have been declared as First Referral Units (FRU) in the state since the launch of the mission. FRU declared units are located in all the districts and comprises of CHCs, Civil Hospitals and District Hospitals. Upgraded health institutions have really enhanced the access and service delivery in rural areas as these health facilities are equipped with better diagnostic and investigative facilities.

The Way Ahead

National Rural Health Mission has successfully set the new standards of partnership between the centre and state governments wherein both the governments have stakes. There have been concerted efforts on the part of union as well as state government to make health care system more effective and responsive in terms of delivery of health services to the poor people. In its realisation government is facing several difficulties in a hilly state like Himachal Pradesh which has difficult geographical terrain, remote and inaccessible areas, tribal areas and challenging topography. Furthermore, some of the hamlets are sparsely populated, some are remotely located and some of the habitations do not have road connectivity and some are located in snow bound areas. Implementation of NRHM requires the focus on strengthening health infrastructure in rural areas and right institutional structures and trained staff to provide quality health care to every household. Following suggestions can improve the implementation of NRHM in the state

1) It is quite challenging to provide access in low density areas of the state. To strengthen the primary health care services in the sparsely populated hamlet’s, remotely located habitations and in far flung and tribal areas the norms for opening of sub centres and public health centres should be relaxed.

2) Himachal is a hilly state and majority of sub centres, primary health centres and community health centres are located at remote or rural areas where good accommodation to health care staff is not easily available. In order to improve the primary health care facilities in these areas and to encourage the health staff to live in and around health institution premises, residential accommodation for doctors, nurses and other staff be constructed. This will not only encourage the willingness of health staff to serve in rural and remote areas but will also improve the health facilities which will help in in increasing institutional deliveries, reducing the infant and maternal mortality rate.

3) It is recommended that all district level, CHC, PHC and Sub Centre level staff undergo another round of training, focussing primarily on the concepts underlying the Mission, the guidelines issued for its effective
implementation and formulate the ways and strategies to involve the community and PRI members in a meaningful way so that they own this programme and multiply its effect.

4) The health Committee at the village does not have required knowledge and skills needed to recognise the specific health issues of their area to prioritise them and plan appropriate interventions. Village health committee also lacks expertise to decide what is possible, what is technically or financially feasible, or even what actions fit into the existing range of National Health Programmes and priorities. It is self-evident that the health system will have to join in supporting the health committee in rationalizing their health priorities and then drawing up a plan of action to address those needs.

5) The Accredited Social Health Activist (ASHA) scheme has not been implemented in the state under National Rural Health Mission which is a clear deviation from mission guidelines and has directly affected the outcomes of the mission. ASHA is perceived as a first port of call for any health related demands of the deprived section of the population particularly women and children, who find difficult to access health services and to acts as a link between the local community and health system. Aangannwari workers who act as link workers are neither trained nor find adequate time for promoting mission activities as they have to discharge their duties in angannwari centres. Hence the ASHA workers be appointed for the effective implementation of NRHM.

6) Community Health Centres (CHCs) are first referral units for all public health centres under their jurisdiction. In almost all CHCs there are no specialist doctors like paediatrician, anaesthesiologist and gynaecologist to provide obstetric and other health services. There is also acute shortage of doctors in CHCs and doctors from peripheral PHCs are deputed in CHC to provide health services which hamper the health services in their PHCs. The posts of specialist doctors, nurses and paramedical staff should be created as per Indian Public Health Standards to deliver quality health services in rural areas.

6) CHCs are generally required to deliver specialized health care services under NRHM. These facilities should be equipped with suitable diagnostic and investigative facilities. Out of the total sampled CHCs more than 80% of CHCs are not equipped to deliver the intended specialized health care services. CHCs located in the remote areas are having least infrastructure facilities. At the CHCs level there is no blood bank in place, the facilities are dependent on district hospitals for blood requirements. The blood bank facility be started at CHC to enable them to deal with accident and trauma cases effectively.
8) Generally CHCs and PHCs are having no back-up system either generator or inverter for smooth functioning of the facility. All the peripheral facilities should be provided with this back up facility to deal with emergencies and critical cases in time and effectively.

Conclusion: The rural health infrastructure has improved considerably since the launch of the National Rural Health Mission in the state. Up gradation of health institutions to 24x7 basis and First Referral Units across districts have enhanced the outreach of public health care services in rural areas. Increase in peripheral health institutions in the state depicts significant improvement in health infrastructure which have resulted in improved access and better health delivery services. Although these health facilities have resulted in round the clock access, yet they have not attained the desired level as they are short of Indian Public Health Standard (IPHS) norms. It is therefore paramount to upgrade the peripheral health facilities as per IPHS norms and post medical and para-medical staff in these according to its guiding norms to virtually realise the dream of providing quality health services in rural and remote areas at affordable rates.

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