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Recommendations of the Punjab Governance Reforms Commission

Eighth Status Report

Improving Standards of Public Health Facilities, Medical Education in Punjab and Action Plan on Mother & Child Health

Punjab Governance Reforms Commission

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Preface

Compelling challenges like absence of a state health policy, mismatch between centre sponsored disease control programmess in operation and morbidities in the state and the need to put in place process for ensuring availability of essential drugs, requires the Government of Punjab to refocus on structural determinants and policy direction of the Health sector. With increase in life style diseases communicable health problems still are significant. The culture of medical practice needs to be shifted towards social context of health and ill health. When people fall ill their social position should not determine their access to health services and quality of treatment; health services are one of the channels for reducing inequalities.

The report deals with recommendations for improving standards of Public health facilities and seeks state intervention to reorient public health education /curricula and pedagogy in order to strengthen social determinants and health. It also addresses some of the major challenges facing the health administration such as shortfall of core specialties as well as other staff, recognising limitations of Contractual professionals to meet this shortfall, special incentives for Rural Service and bring back health management and accountability to health professionals.Translating Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) Strategy into Action and Outcomes in Punjab, an action plan that focuses on mother and child health for 2014-17, forms the third section of this submission.

Some of the work in the report deals with similar themes added to the volumes submitted earlier.

Pramod Kumar

Chairman, PGRC

POLICY RECOMMENDATIONS

1.1 The first major challenge for the State is its need to have its own health policy based on its own specificities. At the moment, the State is completely dependent on the Central Government for social sector programs. Consequently, the priorities of expenditure in health are also determined by the Central Government. This is clearly reflected in our discussion on priorities of health expenditure and in our evaluation of Government's policy framework. A small example of this reality is the mismatch between morbidities in the State and the disease control programs in operation here.

1.2 Therefore, on the structure of health delivery there is an urgent need to rethink. The Commission has some initial suggestions in this direction. It is felt that there is a need to bring the first referral unit at the CHC level and lower level health institutions should be available for daily OPD and as centres for implementation of national programs. To improve the utilization of the existing health infrastructure, health providing institutions, should be divided into three basic categories - Primary Care Centres (where basic clinical services will be provided), First Referral Units (FRUs) and Hospitals or Multi-Specialty Hospitals. The existing nomenclature of PHCs, Sub Centre, Mini PHC, SHCs, District hospital and so on should be all merged at different levels into these three categories. A separate exercise needs to be undertaken to decide the location of Primary Care Centres and FRUs. A scientific exercise using the available technology like GIS, evaluation of the available road and transport network and mapping of the existing facilities should be done to make optimal design for locating the health institutions.

1.3 With the advancement of transport infrastructure in the State, the people can move easily to other nearby villages to access quality health services. Hence, it is suggested that centralized, manageable clinical services be created at Sub-Block (mini-PHC) level. SHCs be continued to maintain preventive services only. SHC should continue only as centre for preventive multi-purpose health worker teams which can be monitored by the medical officers from the primary care centre. This will improve the utilization of skilled human resources, improve quality of clinical services and provide better access to primary level care.

1.4 There is a need to consolidate sub-centres. There is need to increase the capacity of ANMs/ MHW/ Supervisor to provide basic emergency services at the sub-centre level. There orientation should go beyond reproductive health and capacity needs to be created amongst them for documentation. It is possible to think of existing PHC or mini PHC as apex institutions for national programs (public health) and documentation. It may be worthwhile posting an administrative officer at PHC, as a documentation head, who reports directly to

Note: This report has been contributed by Task group on Policy Procedures, Resolution & Grievances of NRIs chaired by Advocate, Anil Malhotra.

the head of mini PHC or PHC. Current documentation systems have to be reworked and every attempt should be made to reduce doctors' time in these processes. Currently, there is immense amount of daily reporting whose burden falls on the doctors. The DHS needs to get rid of multiple agencies and become the nodal agency for initiating such a restructuring. A special task force should be formed with a clear mandate and time bound program to initiate such changes.

1.5 Primary Care Centre (at the mini PHC level) can provide clinical services, emergency support 24 by 7 and basic reproductive services (See Box). Elementary diagnostic facility, basic emergency care infrastructure and medicines needed for regular use should be available at the Primary Care Centre. Elementary indoor facility may be provided at these Primary Care Centres. Emergency transportation vehicles, fitted with modern life-saving equipment, will be stationed at these Primary Care Centres to transport patients to FRUs in case of emergency. The primary care centre should meet adequate standards of providing working teams dignified working space. Existing furniture, hygiene and room space for paramedics and doctors at the SHCs, mini PHCs or Sub Centres is in shambles and needs to be immediately attended. As reported in field survey results above, we often found broken chairs, crooked tables, potholed floors as working space of the medical staff. No provision is found for running a basic kitchen so that the staff can arrange for tea/snacks during their duty hours nor any respectable space is made available where the staff can rest during their night shifts. During the visits, we found staff sleeping on tables and converting their working space into makeshift kitchens. Facilities for patients and their attendants need to be substantially improved.

HEALTH SYSTEM IN PUNJAB

Healthcare System in Punjab works at three levels - Primary, Secondary and Tertiary.

a. Primary Health Care: Primary Health Care System is mainly responsible for preventive and promotive healthcare services and consists of:

Subcentres – There are 2951 sub-centres in the State, manned by 4604 MPHW (F).

Primary Health Centres (PHC) - Operational at a population of approximately 30,000, there are 437 Primary Health Centres. Medical Officers are posted at the Primary Health Centres. While most of the PHCs offer only OPD services, some have been identified as delivery points and provide 24x7 services. The PHCs are also vaccine storage points.

b. Secondary Health Care

Community Health Centres/ Block Primary Health Centres – The State has 141 Community Health Centres/ Block PHCs which act as FRUs for the purpose of Maternal and Child Healthcare. The services of Obstetricians, Paediatricians, Anaesthetists and Surgeons are available at these institutions.

Sub-Divisional Hospitals and District Hospitals – There are 22 district hospitals and 41 sub-divisional hospitals in the state. These hospitals work 24x7 and provide all emergency services apart from 24*7 delivery services.

c. Tertiary Health Care

Medical Colleges- The state has 10 Medical Colleges (3 in Government Sector at Patiala, Amritsar and Faridkot and 7 in Private Sector (2 at Ludhiana, 1 at Amritsar, 1 at Bathinda, 1 in district Patiala, 1 in Jalandhar and 1 in Pathankot). These Medical Colleges are providing tertiary level healthcare services.

Other Hospitals - Apart from Medical Colleges, large corporate hospitals like Fortis, Ivy, MAX and Apollo, are also providing tertiary care.

Nursing Homes and Clinics - The cities and towns have large number of private nursing homes and clinics operated by single or multiple doctors, which are providing healthcare, especially MCH services to the community.

d. Subsidiary Health Centres (SHCs)

Once a part of Department of Health & Family Welfare, the Subsidiary Health Centres operational in rural areas have now been transferred to the Department of Rural Development. There are 1186 SHCs, manned by Medical Officers apart from other staff, but their participation in the National Health Programmes is very little.

1.6 Clinical services at the sub-block level (mini PHC) means serving a population of 40,000 to 50,000 people in the radius of 10 to 15 Km. For meeting the human resources needs, lot can be achieved by mere pooling of working hours of human resources from the SHCs of the covering areas. This pooled human resources can also be engaged for evening duties and emergency duties. Working hours of whole clinical team should be pooled at the mini-PHC and should be organized in shifts for 24hrs to run evening OPD. All mini-PHC's, which will now be primary care centre, should have diagnostic facility, X-ray and elementary in-door facilities. In this way, clinical services can be provided at these centres, at ¼ distance from the

present distance of specialized secondary services (CHC). Each mini PHCs should be led by a senior administrative official like an SMO.

1.7 The block PHC serving a population 1,25,000 to 1,50,000 will now supervise three sub-block primary care centres, where mostly clinical service will be provided, and also serve as FRUs for the primary care centre. The administrative head of block PHC could be a doctor senior to SMO, like Deputy Civil Surgeon. This head of the block PHC should supervise all the three sub-blocks and will also be the head of the FRU but the in-charge for day to day functioning of FRU can be SMO.

1.8 FRUs should have a full-fledged diagnostic centre where range of specialties will be made available. Current PHCs and/or CHC's can be converted into FRUs and there is also a need to create additional FRUs. Hence, in present system, CHC, a full-fledged health institution would get a new head with more time for management responsibilities. The FRUs should have extensive residential facilities for doctors and paramedics, developed indoor facilities, adequate supply of medicines, sophisticated emergency care provisions etc. Specialists will be posted at the FRU level. Detailed infrastructure needs of an FRU need to worked out, especially to utilize the services of specialists and also upgrade indoor facilities.

1.9 Time bound plan needs to be initiated for creating a functioning infrastructure in the existing institutions that deal with first tier of care. The focus here has to be on regular power supply; functional vehicle; hygiene and cleanliness in and around first tier institution; regular maintenance of buildings and residential quarters and physical access to users and timely and regular availability of providers. A mechanism has to be set in place for regular feedback between those who do maintenance, supply equipment and design infrastructure with the health providers so as to utilise scarce resources in the most essential manner. The process of making request and mechanism of taking decision on issues of maintenance, supply and infrastructure needs to be simplified and made much more effective.

2.0 To create norms and facilities at FRU, IPHS code should be followed, doctor availability should be ensured, norms for residences be clearly laid out, clear transfer and posting policy be framed, and diagnostics capacity be strengthened in a major way. Most OPD's should be run by MOs. Specialists can be asked to do half of the MO duties. Emergency duty at the CHC level could be given more to MOs. There is a need to prepare a list of programs and initiatives in which doctors are sent on duty and ensure that MOs are utilised for most of these assignments.

2.1 There is a need to enhance the capacity of health workers. Doctors who hold administrative position need to be trained in management and administrative skills. There ought to be

constant in house training programs to train and upgrade the skills of paramedics, nurses and other medical staff. Trauma training and counselling services should be given priority at the moment in the area of training because of high incidence of accidents in the state. The training component should be strengthened in conjunction with the changes proposed by the Task Force in institutional arrangements for medical education.

2.2 The third tier of health care is at the level of hospitals and multi-specialty hospitals. At this level, much needs to be done to improve the standards of health care and build corresponding infrastructure. The first challenge here is to have adequate doctors, in particular, specialists. There is acute shortage of specialists in Punjab. The existing model of bringing private doctors on contract is no solution for the woes of the State. Publically-funded medical education is one area that is closely related with this challenge. In the absence of publically-funded medical education, the supply of well trained doctors in the public health system has become very difficult. Inadequate seats in the existing institutions for super-specialty training is an added problem. The current approach of either getting on contract specialists or creating multi-speciality hospitals with private sector will not be able to meet the demand side features of the State's health sector.

2.3 To ensure the appropriate list of medicines to be supplied, there are lots of process issues that need to be addressed. What the morbidity patterns suggest is that diseases related with conditions of life and living and conditions of work, are very significant in Punjab.

2.4 Significantly, disease pattern within the State shows that still a large portion of diseases are communicable in nature. It is erroneous to assume that Punjab has gone through the epidemiological transition and lifestyle diseases are now the cause of worry. While it is true that the burden of life style diseases is increasing, Punjab's major disease burden is still formed by diseases that are dependent very much on basic water and sanitation and directly related with levels of income at the household level. The National Programs to address specific morbidities might not be enough to meet the State-specific needs. The specific disease patterns make a compelling case for programs and strategies which are designed keeping in mind the specific reality. Which disease control programs should be launched by the State need to be identified and details of the program and mechanism to reduce these morbidities need to be worked out.

2.5 Evidence suggests that Punjab is one of the worst performing states in India, in terms of availability of essential drugs. The issue is availability of drug, timely availability of drug, availability of drugs that are related with morbidity patterns of the State and availability that meets the seasonal patterns of morbidities in the State. There is a need to prepare a list of essential drugs, injections and other related consumables that should be available at the

Primary Care Level; identify the process through which an institution responsible for primary care can acquire these medicines for its usage from the government agency responsible for purchase of these medicines - this will include identifying the delivery chain, and also mechanism to fix responsibility in case of non-availability of essential medicines; and finally, the mechanism through which the essential list will be regularly updated. The process of updating can include a mechanism for regularly creating benchmark information on patterns of morbidity in the State. For improving supply of appropriate medicines, the Task Force felt the need to study more closely diverse experiences across Indian States and restructure the process of supply of medicines along with allocating additional funds.

2.6 Patterns of morbidity, trends in mortality and some of the challenges of life styles in Punjab (drug and alcohol usage) reinforce the understanding that health outcomes are socially determined. The social determinants of health have been completely ignored in Punjab. The usefulness of clean water, the gains from basic sanitation, the significance of safety at work, have all been forgotten in choosing health priorities and making health expenditure in the State. Health is determined not just by medical understanding but other factors have a much greater role. This understanding has to be the foundation for formulating health policy in Punjab.

2.7 Implement processes to make access to public health services in Punjab more fair and unrestricted. Two things need to be achieved here - to identify mechanism to improve access of public health services in urban Punjab by the urban poor and reduce the cost of public health in rural areas for the rural poor. If we look at the expenses incurred on hospitalization, a glaring fact is that in rural areas, in comparison to other States, the average health expenditure in Punjab is very high, in both public and private hospitals. In urban areas also, there is a trend towards increasing expenses in public hospitals and in private health care services as compared to other States. A significant fact for rural Punjab is that, as far as poor people are concerned, the expenditure on medical services in absolute terms is extremely high and they spend a very large part of their incomes on health, much more than the national average. The story is not very different in urban areas. In urban areas, the poor and the SC's use public services less, therefore, the burden of health expenditure is very high for them too. This time because of higher use of private sector. Thus, the poor in Punjab, compared to their better off counterparts, are squeezed by both institutions, public hospitals in rural areas and private hospitals in the urban areas.

2.8 At the level of organisation of Public Health, Punjab faces a very peculiar situation today. There is compartmentalization of health sector. The administrative structure is complex

and unwieldy and there are too many competing and overlapping layers. There is urgent need for realigning. Existing agencies that are in operation are PRI, PHSC, DHS, NRHM, and various special initiatives under national disease control programs. The impression one gets is that their importance and dynamism depends on central funding. The State only follows where the money is available, rather than have their plan of action. Very often, these agencies work at cross purposes, cause confusion amongst employees, leading to absence of control, accountability and a lot of inefficiencies. The inefficiencies need to be addressed at the level of structures. Addressing these inefficiencies is very different from what is currently being remedied through PPP.

2.9 Fragmentation of responsibilities across departments and constitutional entities is a major problem that the administrative structure faces. There is a structural mismatch in the institutional arrangement of Central and State Ministries: into departments of Health, Family Welfare and Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH). Such fragmentation makes inter-programme integration problematic, diluting the technical capacity to think holistically and duplicating resource use. For example, the Reproductive and Child Health (RCH) Programme rarely addresses HIV/AIDS, Malaria or Tuberculosis (TB) programmes. Likewise, the Malaria Control Programme has no indicator focusing on pregnant women, or nutritional deficiencies in the child health programmes.

3.0 On Medical Education, the State needs to change the thrust of public education in health in Punjab. The strategy of creating medical professionals through private institutions is very flawed. It has resulted in fall in standards and has compromised the quality of health care in the State in a very significant way. There is a need to act both on creating more public institutions and also addressing the content of public education. There is a need to explore strategies to reorient public health curricula and pedagogy, so that students gain a better understanding of the inter-relationship between social determinants and health. This will involve realignment, of course, in social and preventive medicine departments of Medical Colleges. The purpose is to positively influence the culture of medical practice and produce socially sensitive physicians, who focus on applying their understanding of the social context of health and ill health rather than focusing exclusively on behavioural modifications at the individual level.

3.1 What emerges from the DLHS Survey is that Punjab is far behind in provisioning and availability of health care at the basic and primary level. The status of available health facilities improves once we move beyond Community Health Centres. However, the perception of users of secondary and tertiary care reflects deep dissatisfaction with the quality of services provided at these institutions. There is also rural urban divide in Punjab.

The provisioning of health care is very inadequate in the rural areas and there is marked improvement at the district level. The implication of this (non) availability of health facilities in Punjab becomes very clear once we associate with it the morbidity patterns and cost of health care in Punjab. The high prevalence of waterborne and communicable diseases, low outcomes for vaccination and other basic women and child health programs and high cost of health care for vast majority of rural and urban poor all seem to be strongly associated with inadequate public expenditure in basic provisioning of water and sanitation facilities and public health programs.

3.2 The current focus of health strategy is to cut the cost of supply and address efficiency issues on the supply side. The demand side (meeting people's needs) is hardly taken into consideration. Health has to be treated as an essential service and mere application of commercial principles will not serve much purpose. Policies ought to be carried out with concern for the views of those who are affected and policies that do not put profits for some over the well-being of the majority. If the yesteryear's health policies did not work, even the recent health reforms have not stopped the decline in the quality of health institutions, over burdening of health workers, and building health institutions that lack basic infrastructure like clean toilets. The recent health reforms have generally demeaned the value, spirit and ambition of the public health. An urgent re-thinking is required on this front. There is a need for increased expenditure in creating quality public health institutions that put greater faith in public health delivery.

3.3 Furthermore, the approach of policy should be such that there is constant willingness to learn and there should be built-in feedback mechanisms. The stakeholders are never consulted (employees are seen as a problem and not part of a solution); unions are never taken into confidence and the ground realities are often missed in designing policy. The current belief that keeping the government staff under constant threat of suspension or transfer is the only mechanism to ensure their presence is simplistic, outdated and ineffective way of looking at a very complex issue. A special Task Force should be formed to address this. Evaluation has emerged as a special field in the recent years and expertise in this area must be tapped to get systematic evaluation of the government programs.

3.4 The picture of drug and alcohol abuse in Punjab is disturbing. There is high incidence of casualties, accidents and social strife from excessive use of alcohol and drug abuse. This brings into the picture the role of ambulance services, emergency care and establishment of a separate initiative for rehabilitation, counselling and social support.

3.5 Initiate steps to improve health status of Punjabi society - increased taxation on products (drugs, alcohol) to bring down their consumption, stringent regulation on food to reduce salt,

fat intake; ensuring universal immunization; rehabilitation of patients who leave hospitals; availability of drugs; and availability of nutritional support. Role of livelihoods and markets cannot be ignored by health policy. There is a need to make the market responsive to the needs of public health. Government has to become a key guarantor of affordable health care. The Government must regulate 'out of pocket expenditure' in private health care. It cannot be the sole provider but the Government should guarantee that no one incurred catastrophic 'out of pocket' expense on health. Quality health services at an affordable price should be a basic entitlement of every Punjabi.

3.6 There are also major regulation concerns in Punjab. RMPs, Diagnostic Tests, food industry, medical education and private health care are completely unregulated in Punjab. We need to ensure, through regulation, that diagnostic services do not work towards misusing the technology. The State can think of using Punjab's NRI capacity to establish norms on advice of tests, medication etc, rather than to privatize health care through NRI investments.

3.7 On the regulation of food, the Central Act may not serve the purpose since it suffers from many lacunae and Punjab needs to create its own legal provisions learning from the short sightedness of the Central Act. The Central Food Safety Bill suffers from fatal provisions regarding governance and administrative design. It is premised on a centralized and a closed structure and is accountable to none. The Bill emphasizes science-based standards, when most international food safety related legislation emphasize the need for health-based standards.

3.8 The State Government must take upon itself the task of enacting laws and framing policies to ensure availability and accessibility of safe drinking water, sanitation, conduction of health impact assessment of all development initiatives, tackle life style related diseases like use of tobacco and alcoholism and other substance abuse, and ensure road and transport safety. Large areas for legislation and rules lie unattended for the State of Punjab, such as, rights related with information and medical records, issue of prior voluntary informed consent, confidentiality, information disclosure, privacy and also the rights of health care providers. Sooner they come on the agenda of policy makers, the better it will be.

3.9 The mantra of Public Private Partnership is invoked to symbolise better access, efficient financing, fulfilment of the needs of the people, assuring good returns to private capital, and in doing all of this, it is assumed that it will simultaneously contribute to the ongoing dynamics of growth. Is this possible? The experience of privatisation of health sector in

Punjab through the formation of Health Corporation has in fact accentuated the opposition towards privatisation. In the absence of competition, when regulation is absent or weak, the pitfalls of privatisation could easily outweigh the inefficiencies of the public sector. It appears that after the wholesome privatisation project failed, the PPP is the next best option of privatisation that is being sold to the people. The key concern with PPP is whether the efficiency gains in a PPP more go to offset the higher private sector borrowing costs. PPP cannot be viewed as substitute for good governance. Rather, good governance is a pre-requisite for the success of PPPs.

4.0 The field visits of the Task Force members and the results of the field survey reported in this paper clearly outline the limitations of many of the recent initiatives like the introduction of user charges - average of Rs 150 per day for indoor and Rs. 100 for outdoor; the challenges and limitation of hiring contractual workers; un-thoughtful application of privatisation principle, for example, anaesthetist or surgeon are being empanelled for government hospitals rather than hiring specialists, private specialists get paid Rs. 1000 per hour sometimes amounting to more than 50 percent salary of a regular doctor but only quarter of availability of a regular doctor; ad hoc norms for staff with no clear terms of reference for the lab technicians; specialists, cleaners, and drivers; absence of resources for maintenance at almost all institutions for - ambulance running, washing, minor repairs, petrol for generators, X ray films, water, sanitation, cleanliness, patient infrastructure and medicines. Medicinal availability at many places was completely at the mercy of the local philanthropists or was managed through user charges.

4.1 Finally, the Task Force strongly urges the Government to take leadership of provisioning of health in its own hands and implement the various suggestions made above. It does not see private health insurance or private health care as an option for the vast number of people. In addition, it urges the Government to immediately form the various Task Forces or Working Groups suggested above for a time bound implementation of the recommendations.

SUMMARY RECOMMENDATIONS:

HEALTH, DRUG CONTROL, FOOD SAFETY AND INFORMATION SYSTEMS

4.2 Department of Health

4.2.1 Registration of births and deaths

a) Notifier – At present Village Chowkidar notifies birth and death to the Local Registrar. ASHA workers should be declared as notifier.

b) Local Registrar – ANM may be declared as Local Registrar.

c) Delayed registration – ANM (new Local Registrar) should be authorised to make registrations after taking the approval from the Senior Medical Officer of PHC (in place of District Registrar who is Civil Surgeon).

d) Delayed registration – after one year – Registration within 10 years, there is little possibility of misuse and therefore for such cases the process adopted for registration within one year should be adopted.

e) Entry of names in time barred cases – Entry of names should be permitted without any limitation.

f) Digitisation of records – The Commission has suggested three points:

g) Digitisation should be linked from the e-governance project.

h) Suvidha Centres be authorised to digitise the records.

i) To declare the incharge of Suvidha Centres as Additional Registrar for the purpose of maintenance of digitised record and issuance of copies.

j) Fees- The Commission has suggested that no fees should be charged upto one year and the notional liability should be carried by the State Government.

4.2.2 Emergency medical response system

The department should place a network of ambulances and central control facility in place and upgrade medical emergencies in all FRUs.

4.2.3 Regulatory Mechanism for Private Medical Facilities

a) To put in place regulatory mechanism for private nursing homes and hospitals. RMP, Diagnostic tests, private health care is completely unregulated in Punjab.

b) Quality of health service in terms of setting up basic minimum service standards. Need to work out a treatment protocol.

c) Regulating Cost since health is an essential service and needs to treated as a 'right' of citizens. No monopoly or unreasonable gains be permitted for those who provide this service as 'business'.

d) Grievance redress - establish the balance between critical and timely care from the service provider and protecting the rights of the consumers. Address the problems of asymmetric information.

e) Establish the framework of 'social responsibility' for the service providers based on the belief that health is a service.

4.2.4 Restructuring of Health Providing Institutions in Pubic Sector

a) Health providing institutions, should be divided into three basic categories

b) Primary Care Centre's (where basic clinical services will be provided)

c) Primary care centre (at the mini PHC level) can provide clinical services, emergency support 24 by 7 and basic reproductive services. Elementary diagnostic facility, basic emergency care infrastructure and medicines needed for regular use should be available at the primary care centre.

d) Elementary indoor facility may be provided at these primary care centre. Emergency transportation vehicles, fitted with modern life saving equipment, will be available to transport patients to FRUs in case of emergency.

e) First referral units (FRUs)

f) FRUs should have a full fledged diagnostic centre where range of specialties will be made available. Current PHCs and/or CHC's can be converted into FRUs and there is also a need to create additional FRUs

g) To create norms and facilities at FRU IPHS code should be followed, doctor availability should be ensured, norms for residences be clearly laid out, clear transfer and posting policy be framed, and diagnostics capacity to be strengthened in a major way. Most OPD's should be run by MOs.

h) Hospitals or multi Specialty hospitals.

i) The third tier of health care is at the level of hospitals and multi specialty hospitals.

j) The first challenge here is to have adequate doctors, in particular specialists.

k) The administrative structure is complex and unwieldy and there are too many competing and overlapping layers. There is urgent need for realigning. Existing agencies that are in operation are PRI, PHSC, DHS, NRHM and various special initiatives under national disease control programs.

l) There is a structural mismatch in the institutional arrangement of Central and State Ministries: into departments of Health, Family Welfare and Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH). Such fragmentation makes inter-programme integration problematic, diluting the technical capacity to think holistically and duplicating resource use.

m) There is a need to enhance the capacity of health workers.

Doctors who hold administrative position need to be trained in management and administrative skills. There ought to be constant in house training programs to train and upgrade the skills of paramedics, nurses and other medical staff. Trauma training and counselling services should be given priority at the moment in the area of training because of high incidence of accidents in the state.

4.2.5 Framing Punjab State Health Policy

The first major challenge for the state is its need to have its own health policy based on its own specificities. A small example of this reality is the mismatch between morbidities in the state and the disease control programs in operation here.

4.2.6 Enhance Resource Allocation of Public Health

Initiate steps to improve health status of Punjabi society - increased taxation on products (drugs, alcohol) to bring down their consumption, stringent regulation on food to reduce

salt, fat intake; ensuring universal immunization; rehabilitation of patient who leave hospitals; availability of drugs; and availability of nutritional support.

4.2.7 Formulation of Food Regulation Act including State Level Advisory Committee

On the regulation of food, the Central Act may not serve the purpose since it suffers from many lacunae and Punjab needs to create its own legal provisions learning from the short sightedness of the Central Act. The bill emphasizes science- based standards, when most international food safety related legislation emphasize the need for health-based standards.

4.2.8 Health Policy

a) Punjab Health Policy to take into consideration morbidity patterns in the State.

b) Health policy must address Public health concerns. There is an urgent need of framing policing to ensure availability and accessibility of safe drinking water, sanitation, conduct of health impact assessment of all development initiatives, tackle life style related diseases like use of tobacco and alcoholism and other substance abuse and ensure road and transport safety.

c) To ensure the appropriate list of medicines to be supplied there are lots of process issues that need to be addressed. Punjab's major disease burden is still formed by diseases that are dependent very much on basic water and sanitation and directly related with levels of income at the household level. The National programs to address specific morbidities might not be enough to meet the state specific needs. The specific disease patterns make a compelling case for programs and strategies which are designed keeping in mind the specific reality.

4.3 Drug Control

4.3.1 Licencing and related activities

a) Information and facilitation

i) Develop a separate website

ii) Display of rules, check lists, forms on the drug controller website.

iii) Facility for downloading the forms.

iv) Client charter/standards of response, time lines and clear access systems.

v) Maintaining electronic data base of all licensees in a form convenient for MIS/analysis.

b) Information Systems

c) Approval of additional drugs

Display all drugs already approved for manufacture on the State Drug Department website alongwith check list for new additions and service standards. Online acceptance of applications could follow in due course.

d) Inspection and sampling

i) Guidelines to be issued for inspection and sampling:

ii) Separating intelligence based and routine inspection the latter should be on a purely random basis.

iii) Based on ABC analysis, develop guidelines for inspection and random sampling of manufacturers/other licences and review annually in consultation with the State Advisory Committee.

iv) **Intelligence based inspection and sampling:** mostly for spurious drugs to be left to local initiative.

v) **Team based sampling and inspection system:** for routine random inspections and sampling.

4.3.2 Contents of suggested guidelines

a) Random sampling:

i) Should broadly be in the ratio of:

ii) consumption of drugs in Punjab of State and out of State manufactured drugs;

iii) consumption in rural and urban areas.

iv) Priority to sampling of expensive drugs which provide much higher incentives for violation (these can be suitably classified).

v) Define percentage of sampling for misbranded drugs/other categories (in case felt necessary).

b) Feedback on and review of Guidelines

i) Get operational feedback by setting up district level committees to be convened by the drug inspectors. Nominees of state level associations apart from NGOs could be members of the district committee.

ii) Feedback from the state level committee for annual review.

c) Information and data systems

i) The district and state health statistical units should be reorganized to function as information systems division of the health department including drug control wing.

ii) The department should make use of the district data centres and the state data centre facility for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

iii) Drug control and similar units should be allowed and encouraged to make use of the district and state information systems units of the health department for this purpose.

iv) Laptops/ note books should be provided to the drug inspectors.

d) Enforcement through information

Place on the website, a list of licences from whose premises samples are taken, along with the results and action taken.

e) Control of NDPS Drug Abuse

i) Maintain data for different classes of drugs manufactured/imported in the State and available for trade/consumption in the state.

ii) Track the sale, trade and consumption by:

iii) prescribing **monthly returns** to be filed with the department by distributors/

whole sellers regarding; (a) receipt by of NDPS drugs; (b) sale within the State, with details of the licences to whom sold;

iv) requiring retailers to maintain a monthly abstract of NDPS drugs/received/sold/ in stock, in addition to records already provided for under law.

v) Compile the data, analyse and incorporate findings in the annual guidelines for the Drug Inspectors for inspection of licensee premises.

vi) Based on this analysis, prepare strategy for demand management.

4.3.3 Resources

a) Two posts of SDC/Joint Controller testing to be created and post of drug analyst to be filled up.

b) Adequate budget for payment for sample costs.

c) Adopting PPP model for providing lab testing services.

4.3.4 Performance Indicators

a) Rate of failure of samples – overall/specific issues of concern such as spurious drugs.

b) Annual comparison inter district.

c) Ratings to be given (above average, average, below average).

d) Annual change in the failure rate - for the State and the Districts.

4.4 Food Safety

4.4.1 Licences

a) The process needs to be streamlined as per law and confusion regarding jurisdiction should be removed - (Civil Surgeons vs local Municipal Committees) immediately and implementation of whatever decision is taken ensured.

b) A sub-site/website to be developed for food safety giving procedure for issue of licences, the application forms, fees and service standards etc. on the lines suggested for the Drug Control Wing.

c) Promotional publicity and inter action with the trade highlighting the legal obligations of dealers to get a licence and penalties for violation to ensure 100% coverage of food trade as per law.

d) Digitizing the licencee records, if necessary by out sourcing and updating periodically. **Make a start by borrowing the client data base from the sales tax department.**

e) **Inspection & Sampling**

f) Guidelines to be issued for inspection and sampling.

g) Separating intelligence based and routine inspection – the latter should be on a purely random basis.

h) Based on ABC analysis, develop guidelines for inspection and random sampling of manufacturers/other licences and review periodically in consultation with the State Advisory Committee.

i) Focus on manufacturers and wholesalers rather than retailers (the share of the latter is reportedly 60% at present.

j) **Intelligence based inspection and sampling:** mostly for adulterated food to be left to local initiative.

k) **Team based sampling and inspection system:** for routine random inspections and sampling.

4.4.2 Contents and review of guidelines

a) The department should issue annual guidelines after discussion with the field officers and a State level advisory committee (to be set up) regarding inspection and sampling of food items on the lines being done already.

b) The focus at present could be on; (a) milk and milk products; (b) use of toxic colours for food items especially sweets; (c) cold drinks; (d) pulses and (e) loose sale of spices etc.

c) District level advisory committees should be set up and their feedback should be taken note of while issuing/renewing annual guidelines.

d) Integration of public health and sanitation functions

e) Sanitation- hygiene and public health at the licencee premises - should also be the responsibility of the food inspectors and they need to be empowered under the appropriate law, till the time Food Safety ACT COMES IN FORCE.

f) Licensing should incorporate conditions regarding licencee' liability for food hygiene at the premises, especially regarding storage and disposal of waste.

4.4.3 Enforcement Staff

a) Single line professional authority and control, at all levels, without waiting for the new Act to be enforced- for the present senior staff can be given district in charge duties in addition to their field duties.

b) Information and data systems

c) District and state health statistical units should be reorganized to function as information systems division of the health department.

d) The department should make use of the district data centres and the state data centre facility for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

e) Food safety and similar units should be allowed and encouraged to make use of the district and state information systems units for this purpose.

f) Laptops should be provided to the food inspectors through interest free loans.

g) On line/IVRS/ SMS systems to encourage whistle blowers and flow of information with some built in reward systems.

h) **Enforcement through information**

Place on the web, a list of food licencees from whose premises samples are taken, along with the results and action taken.

i) A**ssessment of Performance**

i) Rate of failure of samples – overall and for areas vital areas such as toxic colors, milk products etc.

ii) Annual comparison inter district.

iii) Ratings to be given (above average, average, below average).

iv) Annual change in the failure rate – for the State and the Districts.

4.5 Data and Information Systems

4.5.1 Reorganization of statistical units

a) The district and state health statistical units should be reorganized to function as information systems division of the health department and should service all divisions and wings including drugs, food safety etc.

b) The health department should make use of the district data centres and the state data centre facility set up by IT Department for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

4.5.2 Nature of data/information to be compiled by the Information Systems Division

a) NRHM proforma - to be continued as required by Government of India.

b) Communicable disease proforma - to be continued as required by Government of India.

c) Non-communicable disease proforma - to be continued as required by Government of India.

d) Morbidity/Mortality proforma – to be discontinued for reasons indicated.

e) Registration of deaths and related data

f) As already recommended ASHA to be declared as the notifier under the act so as to ensure that information especially regarding infant and maternal mortality is provided as prescribed in form-2.

g) Form-2 regarding information about deaths to be modified to classify causes of deaths on the following lines:

- Accident/homicide

- Suicide

- Natural causes - sub classified- water borne diseases, cancer, chest infections/all other diseases not specifically indicated.

h) The data to be digitized starting with current entries and analysed at district, regional and state levels, to devise policy and programme interventions in regard to IMR, MMR, cancer, other diseases as per priorities of the State.

i) Information required by Drug control, Food Safety and other wings such as Malaria control, TB etc. to be compiled as required by different wings.

4.5.3 MIS and Data Analysis

a) Considering that the hospitals and health institutions do not have any defined jurisdiction, the district should be the unit for comparison of results and performance.

b) Result/performance indicators should be developed and data compiled and assessed district wise for the indicators.

c) District performance should be assessed under the traffic light system – Green (+ Avg.), Amber (Avg.) and Red (- Avg.). It will be more appropriate than a ranking system, AND provide pointers for improvement, without necessarily indulging in a blame game.

d) All data needs to be assessed annually for performance – a month or a quarter is not a long enough period except for purely quantitative items like family planning measures.

4.5.4 Performance and Outcome Indicators

Suggested performance and outcome indicators, the data and sources thereof and criteria for assessment are indicated below:

a) Performance and Outcome Indicators

Indicator
Data and source
Assessment criteria

b) MMR
Birth and Deaths Registers

[as proposed by the PGRC (2nd Report), ASHA & ANM will have direct control of the data]
Annual change
District and State level
Institutional & home delivery percentage
As per present system- ASHA/ANM reports/ Institution data
Annual change
District and State level

c) IMR

Births and Deaths Register - (as above) Annual change
District and State level
Sex Ratio at Birth
Births and Deaths Register - (as above) Annual change
District and State level
Common/ major diseases-Prevalence (e.g. water borne diseases) Percentage of patients in each category of major diseases; Total number (indoor and outdoor) patients
Information about number of patients and deaths –av. in proformas and village death register abstracts
Annual change
District and State level

4.5.5 Urban Hospitals-effectiveness/efficiency

a) Number of outpatients per MO

b) Inpatients per MO/Nurse

c) Average number of lab tests per technician

d) Average number of X-Rays per unit

e) ECG etc. per unit machine

f) Average bed occupancy ratio

g) Costs-maintenance cost, raw material cost per laboratory (optional)

IMPROVING THE STANDARDS OF PUBLIC HEALTH FACILITIES

4.6 Perspective

Punjab, home to the Green Revolution, is striving hard to achieve the Millennium Development Goals. It is at a more advanced stage of human development than many other states of India. In terms of the Human Development Index, it ranks 5th among Indian states. Education and health are important areas focus in the state. During the 1970s and 1980s, reasonable funds were allocated to develop public health services. Since the mid-1980s, growth slowed and the state got pushed into a financial crisis. Since then, several Indian States have achieved GDP growth rates higher than Punjab. It now ranks 8th in terms of per capita GDP (Rs. 91,575). Punjab is among the three major debt-stressed states in India. Consequently, state allocation of funds to the social sector, especially the public health sector, has stagnated. The implementation of the National Rural Health Mission, a flagship programme of the Government of India, has given a fresh impetus to health sector activities in Punjab as has also happened in other states.

4.7 Structure and Functions

4.7.1 Punjab's Department of Health and Family Welfare is responsible for providing public healthcare services in the state. In 1973, the Department of Medical Education and Research was separated and DoHFW, through the Directorate of Health Services, is now responsible for primary and secondary healthcare. In the year 1995 the Punjab Health Systems Corporation (PHSC) was set up through a special Act. At present, PHSC provides healthcare in over 176 Health Institutions which include 19 District Hospitals, 2 Special Hospitals, 43 Sub-divisional Hospitals and 123 Community Health Centres. The Directorate of Health Services continues to manage Primary Health Centres (PHCs) and Sub-Health Centres (SCs). It is also responsible for the administration of centrally funded health and family welfare programmes.

4.7.2 Since 2005, Punjab is also implementing the National Rural Health Mission funded by the Union Ministry of Health and Family Welfare. Mission Director NRHM is responsible for administration of the Mission, which is implemented largely through the health institutions of PHSC and DHS with some involvement of subsidiary health centers/rural dispensaries. Industrial workers are served by the ESI Corporation through a separate directorate in DoHFW with fund sharing between Ministry of Labor, GOI and State Govt.

4.7.3 The State of Punjab has also devised an additional healthcare delivery system in the rural areas wherein since 2006 health care in 1310 Subsidiary Health Centres (SHCs) is provided by the Rural Development Department through Zila Parishads by engaging doctors and paramedics on a 'service contract' basis. In urban areas, Municipal Committees/ Corporations have a rudimentary public health service. Several thousand private medical practitioners in the formal and informal sector (including quacks) provide medical care for a fee in urban and rural areas.

4.7.4 In all, four government departments are involved in the delivery of public health and medical care in Punjab namely, the Department of Health and Family Welfare, Department of Medical Education and Research, Department of Rural Development and Panchayats and Department of Local Bodies. The Health Department has a separate administration for Directorate of Health Services, PHSC, and NRHM. Coordination for strategic planning, monitoring and evaluation of the health system in terms of infrastructure, human resources, logistics, governance, service provision and quality of care is vital for the smooth functioning of the health system. Hence, a coordination mechanism needs to be set up in the state for the development of a responsive health system that can meet the needs of public health and healthcare in the foreseeable future.

4.8 Current Health Scenario

4.8.1 Health indicators in Punjab are better than many other states. It ranks third in the country in terms of birth rate (16.2 per 1000 population) (Sample Registration System Bulletin 2012). The infant mortality rate of 30 per 1000 live births places it at fifth rank (Sample Registration System Bulletin 2012). It has a maternal mortality ratio of 172 per 100,000 live births (Sample Registration System MMR Bulletin 2007-09). The percentage of fully immunised children is 83% (Coverage Evaluation Survey 2009). Around 61% of deliveries are conducted in health institutions; the share of government and private institutions stands at 22% and 39% respectively (Coverage Evaluation Survey 2009). On the other hand, only 52% children under the age of five years with diarrhea receive oral rehydration therapy (ORT) (Coverage Evaluation Survey 2009) and only a few receive zinc (National Family Health Survey-3). Only 13% of under-five children with acute respiratory infections receive antibiotics (National Family Health Survey-3) (Annexure 1).

4.8.2 A major concern is the rising cost of medical care. Average expenditure for hospitalization in Punjab is Rs. 15,431 which is one among the highest across the country (Prinja S et al. Indian J Med Res 2012;136(3):421-31). Even in government health institutions, average out-of-

pocket expenditure is Rs. 270/- per OPD consultation and Rs. 7,700/- per hospitalization (Prinja S et al. Indian J Med Res 2012;136(3):421-31) (Annexure 1). User charges, inadequate supply of medicines and other surgical supplies and lab reagents has led to escalation in the cost of medical care in government health institutions. The state does not allocate adequate budget for medicines and supplies. User fees collected by Rogi Kalyan Samitis and NRHM funds allocated by the Government of India are used to partially meet expenses related to medical and surgical supplies. At least 20% of the health budget should be allocated for medical and surgical supplies. Clearly, declining outlay on social sectors is responsible for a cut on soft items in budget such as medicines.

4.8.3 The public health share out of the total budgetary expenditure has plummeted from around 9% during 1980-81 to 6.97 per cent during the 1989-90, 5.46 per cent during 1992-93, falling to 4.35 per cent during 2004-05. Within the health sector, the share of medical education, research and training has consistently gone down. This has adversely affected teaching and training of medical personnel and the development of clinical skills leading to deterioration in tertiary, secondary and primary health care. The population served per bed in rural areas has increased from 1276 during the early 1980s to 1555 during the last decade. In this scenario, an overwhelming majority of services are sought from private health care practitioners at high cost leading to catastrophic health expenditure which pushes many families to live below the poverty line. Allocation of Rs. 1700 per capita per year is needed to provide basic health care to every citizen of Punjab.

4.9 Status of Health Facilities

4.9.1 Methods

Two teams were constituted for visiting a sample of health facilities in Fatehgarh Sahib, Mansa and Tarn Taran District (Annexure 2). The teams were comprised of faculty, resident doctors and other public health workforce from the School of Public Health, PGIMER Chandigarh. A list of health facilities in Fatehgarh Sahib, Mansa and Tarn Taran District was obtained. Ten health facilities were visited initially to cover all the blocks in the Fatehgarh Sahib District as well as different levels of health facilities. However, three more health facilities were later also visited, making total of 13 health facilities covered. In Mansa District, 12 health facilities were visited to cover all the blocks as well as different levels of health facilities. In Tarn Taran District, seven health facilities were visited to cover all the blocks as well as different levels of health facilities (Annexure 3). The teams visited the selected health facilities and review the functioning of the facility in terms of its service provision, human

resources, logistics, supplies, infrastructure etc. The teams also visited few households to look into the utilization of health services and quality of care. Following methods were used to review the health facility functioning.

1. Record reviews

2. Interviews with the service providers

3. Exit interviews with the patients coming to the health facility

4. Interviews with the community members

A rapid review of a sample of health facilities revealed that the capacity of health services is low, the administration and supervision mechanism is weak, human resources are inadequate, medical and surgical supplies are irregular and inadequate, as are laboratory and investigation facilities. However, the status of buildings and equipment is at a satisfactory level. The Information system is also functioning well. The Free Emergency Response Service has made its presence felt contributing to trauma care, maternal and neo-natal services and overall accessibility of healthcare facilities. Health services are serving large number of people despite constraints (Annexure 4a-d). NRHM has activated most of the peripheral health institutions such as Sub-centres and Primary Health Centres. With right direction and support, health services can perform better. The salient features of key elements of health services are described below.

4.9.2 Physical Infrastructure

a) Most of the health facilities are easily accessible thanks to motorable roads. The building and general infrastructure at most health care facilities are reasonably well constructed but need proper annual maintenance. Residential quarters, in particular, need major overhaul.

b) The number of functional beds in a health facility is below the standard for that set up. Arrangements for continuous electricity and water supply are in place at most of the health care facilities. However, at some facilities, power cuts are a major worry. Despite having inverters or generators, the problem persists because the use of generators is a costly affair due to consumption of diesel. There is proper signage in most health institutions; list of health services are available; notice boards on duty days and timings; doctors on duty are available. Health education material in the local language is also on display.

4.9.3 Human Resources

a) Most of the hospitals are plagued with the problem of vacant posts of medical, paramedical and support staff. There is an acute shortage of specialists, in particular, Gynaecologists, Paediatricians, Radiologists, and Anaesthetists (Annexure 4a). The vacancy position ranges from 26% (general doctors) to 38% (specialists), and 31% posts were lying vacant for nurses. Twelve percent posts for paramedics involving pharmacists, lab technicians, radiographers and operation theatre technician were also vacant. A separate cadre for General Medical Officers and Specialists does not exist; as a result, OPD services suffer since specialist doctors have to handle emergency duties and administrative duties as well. Frequent transfers of doctors are a cause for concern in most health facilities. Also, recruitment and appointment of specialists takes a while and it is a long time before a specialist can actually be appointed at the health facility. This forces patients to look towards private health institutions.

b) Due to acute shortage of paramedical staff, particularly staff nurses, laboratory technicians and support staff, all beds available in an institution are not utilised. To overcome the shortage of specialist doctors in the State, a new recruitment policy has been initiated in which monthly walk-in interviews are held and campus placement is being done. The recruitment of medical, paramedical, technical and other support staff also needs to be fast-tracked.

4.9.4 Medicines and surgical supplies

a) In most of the health facilities, less than half the quantity of medicines required is available. The supply of drugs from DHS and PHSC is irregular. Most of the health facilities have to buy medicines from user charges or Rogi Kalyan Samiti funds. Despite this most patients are required to purchase the medicines from outside. Non-availability of drugs at the health facility promotes dissatisfaction within the health services staff and among patients.

b) In the Budget for 2012-13, Government has announced that essential generic drugs will be provided free of cost at all public health facilities. A list of 277 medicines and consumables has been finalized. It has been decided to follow a single rate contract for the procurement of medicines, consumables and material at the State Head Quarter which can be used for purchases at the hospital level. Rate contracts for 159 essential drugs, 24 consumables, X-ray films, etc, have been finalized and flow of medicines started with effect from Jan 1, 2013. Sufficient funds have been provided in the

Programme Implementation Plan of the NRHM for the year 2012-13 for providing essential drugs free of cost to all patients visiting Public Health Facilities in the State. However, sustained and adequate provisions need to be made in the state budget each year to ensure the sustenance of this excellent endeavour.

4.9.5 Equipment

Most equipment is available, but inadequate supply of reagents affects the performance of laboratory services at most of the health facilities. X-ray facility is available at most places, whereas in some places X-ray machines are not fully utilized due to the absence of X-ray technicians. Ultrasound facilities are not available in many centres due to non-availability of radiologists. Due to the shortage of surgical specialist/anaesthesiologist, equipment in operation theatres remains unused at certain centres.

4.9.6 Ambulance Service

The Emergency Response Service ambulance network (Dial 108) is operational. Medical, para-medical staff and beneficiaries have confidence in this service. The catchment area for referral institutions needs to be worked out so as to ensure optimum utilisation of all kinds of government health facilities. However, the ambulances need to be equipped with trained staff to take care of emergency during transportation.

4.9.7 Health Management Information System

Most of the registers/records are updated regularly. All reporting formats are being maintained properly and are sent to higher institutions on time. HMIS initiated by NRHM is also operational. Pooling of all types of information into a repository could be helpful in streamlining planning.

4.9.8 Financing

Funds made available under Rogi Kalyan Samiti are insufficient and were provided very late to the institutions. Funds are utilized for improving health services e.g., for maintenance of infrastructure, purchase of drugs and surgical materials, purchase of inverter, maintenance of generator etc. Delay or non-availability of funds hampers routine service delivery. A large proportion (45%) of user-charges is spent on drugs and other consumables due to their short supply.

4.9.9 Governance

Monitoring and evaluation is also weak since Medical Officers do not get time to supervise the work of their subordinates and field staff. Paramedical supervisors are not available in the system. Keeping in view the above mentioned observations, the following steps need to be taken by the Government of Punjab so as to prepare itself to deliver universal health care.

5.1 Recommendations

5.1.1 Health Financing

a) Increased budget allocation to health sector: Presently state is spending about Rs. 1200 crores (0.46% of GDP) as compared to 0.9-1.2% of GDP at National level. We may require raising health sector budget to national level and then progressively increase to achieve a target as suggested for provision of health to all (Annexure 5). State budget should be increased to provide health care initially to women, girls and the elderly and in due course, to all. In particular, the state non-plan budget on drugs, consumables and equipments should be raised. This will certainly reduce household out-of-pocket expenditure and provide relief to poor households

b) Effort should be made to identify unproductive expenditure and idle resources eg some of equipments were observed to be not in use. There is need for optimal utilization of existing resources.

c) A rapid review of the Rashtriya Swasthya Bima Yojana that was implemented a year ago, should be carried out so as to assess the poteintial for scaling up universal health care.

5.1.2 Governance

a) There is urgent need to regulate private clinics, nursing homes and laboratories. A Committee has been constituted to give recommendations for the draft of a Punjab Clinical Establishment Act. This effort should be taken forward on priority.

b) State Health Authorities/ Municipal Committees/ Panchayati Raj Institutions should be empowered with a Public Health Act for preventing the spread of diseases and protection, promotion and maintenance of public health. Although there are a number of legal mechanisms to support public health measures in an epidemic situation, they are not being addressed under a single legislation. There is an urgent need to assemble

all the provisions in one over-arching public health legislation, so that the implementation of the responses to an epidemic can be effectively monitored. A sound Public Health Act infrastructure is important because it establishes the powers and duties of government to prevent injury and disease and promote the population's health. It empowers the government to take special measures and prescribe regulations that are to be observed by the public to contain the spread of the disease. It ensures broad legal framework for providing essential public health services and functions and powers to respond to public health emergencies through effective collaboration. The act will cover environmental health hazards, health promotion and behavior change, housing, food hygiene, communicable disease control, water safety and sanitation, vector control, measures during fairs and festivals, waste management etc.

5.1.3 Human Resources

a) Urgent efforts should be made to fill up all the vacant positions as per State norms initially and should be increased as per Indian Public Health Standards in phased manner. Rational human resource deployment policy should be adopted. Specialists should be paid more than the general doctors and rural medical officers. This will attract more specialists to serve on public health institutions.

b) The sanctioned staff strength is inadequate to provide the requisite service level. An assessment should be done for the State to find out how many staff positions need to be created for all categories of health personnel including doctors for up-gradation of health facilities to the IPHS. This will help in planning and recruitment of the required specialists and Medical Officers in future.

c) Separate administrative cadre/ public health cadre may be developed for administrative posts at State, District, Sub-division and Block level.

d) Proper and well maintained residential accommodation for doctors and other staff may be provided at all levels of health centres as per requirement.

e) To overcome the shortage of Radiologists and Anaesthetists, efforts should be made to involve Radiologists and Anaesthetists in private sector by giving appropriate financial incentives, so as to ensure uninterrupted service delivery at public health institutions.

5.1.4 Health Care Delivery

a) The District Hospital should be adequately suitably staffed with specialists in Obstt & Gynae, Medicine, Surgery, Paediatrics and Anaesthesia, and equipped with laboratory and radiology facilities to provide comprehensive health care services.

b) Rationalisation of emergency services in select predesignated institutions so that say in a radius of 30 km one institution is fully equipped to handle 24x7 emergencies and there is no overlapping.

c) Community Health Centres should be strengthened as per IPHS standards. Anesthetist should be posted at a CHC.

d) Networking of district level health care facilities with the Medical Colleges in the State

e) Citizens' participation in healthcare is desirable and must be encouraged to attract donations/resources from philanthropic groups. Maintenance is a problem with hospitals and they must be encouraged to look for local partnerships in the maintenance of supportive services so that funds being spent on them currently can be used for patient care. Similarly efforts can be made to attract donor interest in hospitals through imaginative techniques that may appeal to NRIs, local industry and so on.

5.1.5 Drugs & Technology

a) Ensure continued supply of essential drugs and other consumables, lab reagents etc. at all public health institutions. A framework for monitoring and supervision should be set up to resolve the procurement and supply issues that may arise from time to time. There should be a regular practice of prescription audit to discourage doctors from overprescribing or prescribing drugs from outside. An online system of inventory control and monitoring of the procurement and supply chain should be developed to know the lead time status and to keep an eye on the entire mechanism.

b) With the current trend of rising incidence of non-communicable diseases, the list of common ailments, essential drug list and drug dispensing policy should be modified if the budget permits. The drugs for monthly supply should be provided to patients with chronic diseases like hypertension, diabetes etc.

c) Efforts should be made to ensure that all the required reagents and equipment in the laboratories are available in functional condition. For those special investigations, which cannot be carried out at the public health facilities due to various reasons, the authorities should tie up with private laboratories at pre-negotiated consessional rates so that patients can be referred to these laboratories and they do not end up paying a higher price for investigations.

d) The facilities of MRI, CT scan, Mammography and other advanced investigations are under consideration to be provided at District Hospitals in Public-Private Partnership mode. The same should be extended for provision at Sub-divisional Hospitals.

5.1.6 Information System and Monitoring:

a) Pooling of all health related information into a repository.

b) External monitoring and evaluation of service/performance of the Public Health Institutions in the State of Punjab should be done by an independent agency like School of Public Health, PGIMER Chandigarh. This will provide inputs for better performance of health services.

c) State Bureau of Health Intelligence(SBHI) on the pattern of CBHI

i) Will produce health intelligence for policy and planning

ii) Think tank for strategic initiatives

iii) Monitoring of health indicators and recommendations

iv) Publication of annual Health Profile of Punjab

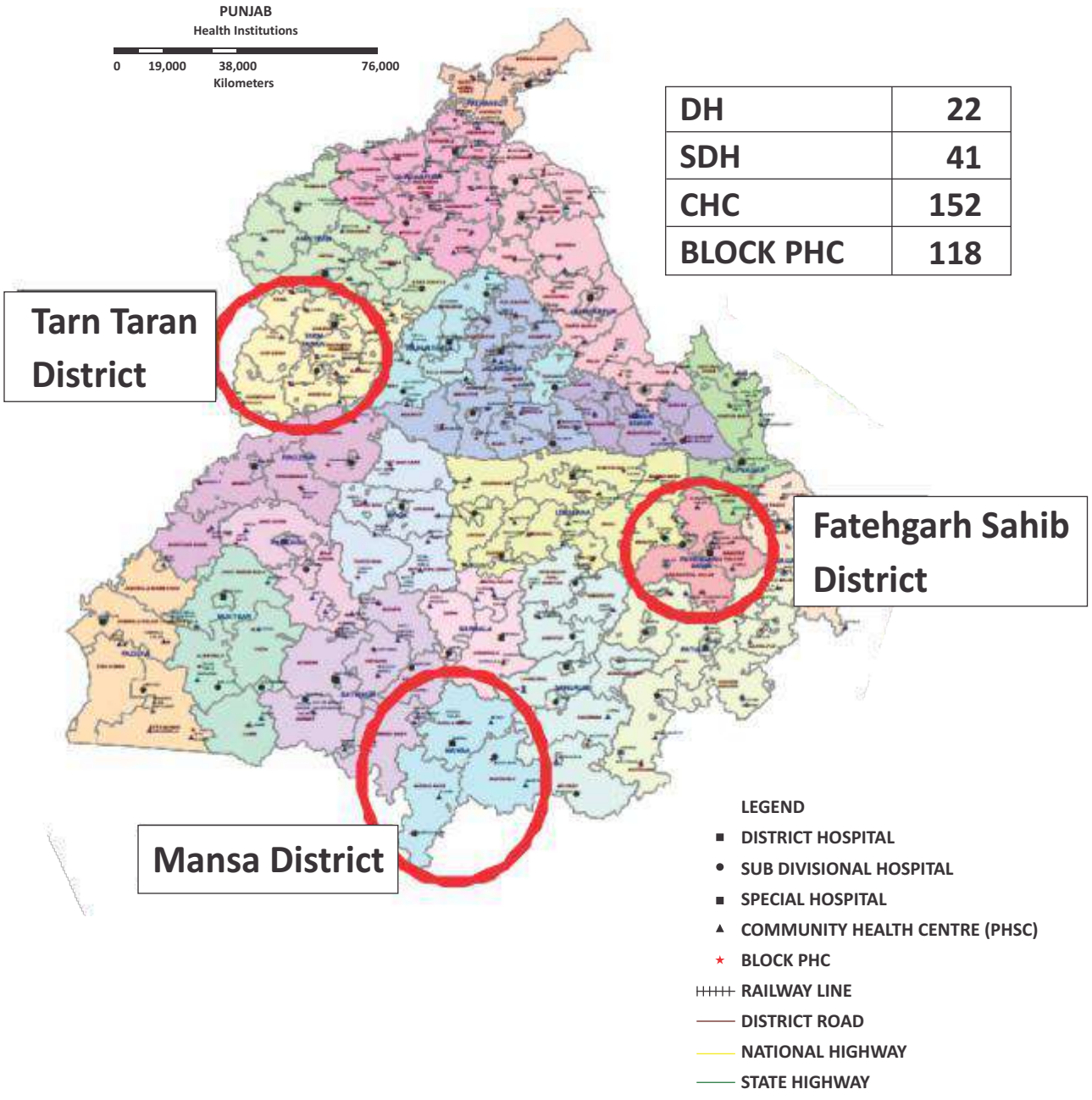
d) A system of showcasing good practices may be set up so that hospitals and individuals who perform better on monitorable indicators are rewarded with more facilities and incentives to boost morale.

COMPARISON OF HEALTH INDICATORS

Health Indicators	India	Punjab	Source
Birth rate	21.8 per 1000 population	16.2 per 1000 population	SRS Bulletin (2012)
Death rate	7.1 per 1000 population	6.8 per 1000 population	SRS Bulletin (2012)
IMR	44/1000 live births	30/1000 live births	SRS Bulletin (2012)
MMR	212/1000 live births	172/1000 live births	SRS Bulletin (MMR) (2007-09)
Full Immunization %	61%	83%	CES 2009
Child under 2, with Diarrohea, received ORT	43%	52%	CES 2009
% of Institutional deliveries	73% (Public = 47%, Private = 26%)	61% (Public = 22%, Private = 39%)	CES 2009
OPD public sector	20%	16%	NSSO (60 round) Prinja S. Health Care inequities in North India : role of public sector in universalizing health care. UMR 2012
IPD public sector	40%	30%	
Out of Pocket Expenditure	OPD Rs. 201, IPD-Rs. 5695	OPD Rs. 348, IPD-Rs. 9000	

HEALTH FACILITY REVIEW

Fatehgarh Sahib, Mansa & Tarn Taran Districts



HEALTH FACILITIES : SAMPLE

Type of Health Facility (Population)	Fatehgarh Sahib (6 Lakh)		Mansa (8 Lakh)		Tarn Taran (11 Lakh)		All (25 Lakh)	
	Number	Sample	Number	Sample	Number	Sample	Number	Sample
District Hospital	1	1	1	1	1	1	3	3
Sub-Division Hospital	1	1	1	1	1	1	3	3
ESI Hospital	1	0	0	0	0	0	1	0
CHC	4	2	4	2	9	1	17	5
PHC*	14	4	17	4	28	2	59	10
Rural Dispensary	23	3	37	2	59	1	119	6
Urban Dispensary	6	0	1	0	0	0	7	0
Sub Centre	73	2	101	2	153	1	327	5
Total	123	13	162	12	251	7	536	32

*PHC include Rural Hospital, Block PHC and Mini-PHC

No. of functional beds : 678
(203 in Fatehgarh Sahib, 192 in Mansa & 283 in Tarn Taran District)
(includes beds at District Hospital, Sub divisional Hospital and CHCs)

STAFF

Staff Categories	Fatehgarh Sahib	Mansa	Tarn Taran	Total	Vacancy (%)
	Posted (Sanctioned)	Posted (Sanctioned)	Posted (Sanctioned)	Posted (Sanctioned)	
Specialist doctors	37 (52)	27 (50)	36 (60)	100 (162)	38
General doctors	33 (38)	27 (55)	63 (74)	123 (167)	26
Nurses	53 (61)	39 (57)	67 (112)	159 (230)	31
Paramedics*	52 (64)	63 (73)	150 (164)	265 (301)	12
Supervisors **	28 (31)	29 (51)	86 (93)	143 (175)	18
Health Workers (F)	92 (96)	102 (106)	252 (281)	446 (483)	8
Health Workers (M)	28 (73)	50 (103)	113 (147)	191 (323)	41

*Pharmacist, Lab Technicians, Radiographer, OT technician
**LHV, Sanitary Inspector, Food Inspector, Drug Inspector, Block Extension Educator

Resource in District Fatehgarh Sahib, Mansa & Tarn Taran

Health Personnel	Norms	Fatehgarh Sahib	Mansa	Tarn Taran	Total
Doctor : Nurse	1 : 3	1.3	1.4	1.5	1.3
Doctor : Population	1 : 3500	8,569	14,237	11,773	11,364
Nurse : Population	1 : 5000	11,317	19,713	17,396	15,938
Pharmacist : Population	1 : 10000	16,662	15,376	14,389	15,175
Lab Technician: Population	1 : 10000	1,19,963	85,423	24,799	41,544
ANM : Population	1 : 5000	6,520	7,537	4,625	5,682
Bed : Population	1 : 3333	2,955	4,004	4,118	3,738

Services in Fatehgarh Sahib & Mansa District

Service output	Fatehgarh Sahib	Mansa	Tarn Taran	Total
OPD Patients	4,09,183	4,49,572	7,40,650	15,99,405
IPD Patients	17,499	25,288	23,914	66,701
Surgeries	18,836	12,694	16,814	48,344
Deliveries	2,723	4,854	5,260	12,837
Lab Tests	1,93,176	2,27,106	3,32,861	7,53,143
X-rays	20,151	37,777	29,701	84,629
Bed Occupancy (%)*	75.1	69.1	51.9	65.3

*Bed occupancy = [In patient Days/ (No. of functional beds *365)]*100

Service outputs / Staff / Day
Fatehgarh Sahib, Mansa & Tarn Taran Districts

Output indicators	Norms
OPD patients Doctor	39
Caesareans / OBG Doctor	1
Surgeries / Surgeon*	6
Deliveries / Nurse	1
Lab tests / technician	74
X-rays / radiographer	20

*includes Departments of Surgery, Orthopedics, Eye, ENT

Utilization of Health Services for Illness Treatments & Hospitalizations

Parameter	Fatehgarh Sahib	Mansa	Tarn Taran	Total
Population	4,09,183	4,49,572	7,40,650	15,99,405
Estimated No, of ailments*	17,499	25,288	23,914	66,701
No, of ailments attended by Health Service	18,836	12,694	16,814	48,344
Estimated No. of hospitalizations/year*	17,994	23,064	34,966	76,025
No, of ailments attended by Health Service	17,499 (-3%)	25,288 (-3%)	23,914 (-32%)	66.701 (-13%)

*As per NSSO60th round, figure in parenthesis are estimated gap in service utilizations

Status of Health Facilities : Fatehgarh Sahib District

5 = Very good, 4 = Good, 3 = Satisfactory, 2 = Poor, 1 = Very poor

Health Facility Blocks of Health System	District Hospital	Sub divisional hospital	CHC	Block PHC	Mini PHC	SHC	Sub Centre	OVER ALL
Building	3	3	3	2	3	3	4	3
Human Resources								
• Specialist	3	3	2	2	2	-	-	2
• Medical personnel	3	3	4	4	2	3	-	4
• Para medical personnel	2	2	2	2	2	3	3	3
• Support Staff	2	2	2	3	-	-	-	2
Drugs	2	2	2	3	2	2	3	2
Equipments	3	3	3	3	3	2	4	3
HMIS	3	3	3	3	3	3	4	3
Financing	3	3	2	3	3	2	4	3
Governance	3	3	3	2	2	2	3	2
OVERALL	3	3	3	2	2	2	4	3

Status of Health Facilities : Mansa District

5 = Very good, 4 = Good, 3 = Satisfactory, 2 = Poor, 1 = Very poor

Health Facility Blocks of Health System	District Hospital	Sub divisional hospital	CHC	Block PHC	Mini PHC	SHC	Sub Centre	OVER ALL
Building	3	3	4	4	4	3	4	3
Human Resources								
• Specialist	2	1	1	3	1	-	-	2
• Medical personnel	3	1	2	3	1	1	-	2
• Para medical personnel	2	2	3	3	1	3	4	3
• Support Staff	2	3	3	3	-	-	-	2
Drugs	3	2	2	3	2	4	4	3
Equipments	3	3	3	3	3	2	4	3
HMIS	3	3	4	3	3	3	4	3
Financing	3	3	3	3	3	3	4	3
Governance	3	2	3	3	3	2	3	3
OVERALL	3	2	3	3	2	3	4	3

Status of Health Facilities : Tarn Taran District

5 = Very good, 4 = Good, 3 = Satisfactory, 2 = Poor, 1 = Very poor

Health Facility Blocks of Health System	District Hospital	Sub divisional hospital	CHC	Block PHC	Mini PHC	SHC	Sub Centre	OVER ALL
Building	3	3	3	3	3	2	3	3
Human Resources								
• Specialist	3	3	2	2	-	-	-	2
• Medical personnel	3	3	4	2	3	3	-	3
• Para medical personnel	3	2	3	2	3	3	4	3
• Support Staff	2	2	2	2	1	-	-	2
Drugs	3	3	3	3	3	3	2	3
Equipments	3	3	3	3	2	3	4	3
HMIS	4	4	3	3	3	3	4	4
Financing	3	3	3	3	3	3	4	3
Governance	4	3	3	2	2	2	3	3
OVERALL	3	3	3	2	3	3	3	3

FINANCIAL ESTIMATIONS FOR PUNJAB

Health Budget	Current Allocation	Proposed Allocation		
		Scenario 1	Scenario 2	Scenario 3
Percent GDP (%)	0.46	1.50	2.50	3.80
Per Capita (Rs)	433	1404	2341	3558
Overall Allocation (Crore Rs.)	1200	3891	6485	9858

IMPROVING THE STANDARDS OF MEDICAL EDUCATION

5.2. Perspective

5.2.1 Punjab is among prosperous states in India with its health indicators better than many other states and the national average. It ranks as third state in birth rate (16.2 per 1000 population) and ninth in death rate (6.8 per 1000 population). The infant mortality rate is 30 per 1000 live births which places it at fifth rank. It has maternal mortality rate of 172 per 100000 live births. However, there is a lot which still needs to be improved and this can be achieved through a multipronged strategy which should include building-up the capacity and competence of health care professionals. Medical Colleges play an important role in the training and development of health care professionals, besides providing the much needed tertiary level medical care. The Government Medical Colleges in the State have been the major tertiary level medical care providers and have produced highly competent doctors and medical scientists. However, a need has been felt to maintain the high standards set in the past and to further improve the quality of medical education and patient care in the government run medical institutions of the State.

5.2.2 Government Medical Colleges in Punjab work under the administrative control of the Department of Medical Education & Research, Government of Punjab. Headed by a Minister of cabinet rank, the Department has an Administrative Secretary and subordinate functionaries. The Directorate of Research & Medical Education was established in the Year 1973 by bi-furcating the Directorate of Health Services. The main function of this Directorate is to facilitate development of quality medical facilities in Government and Private medical institutions and to provide for high quality medical and paramedical manpower in the region. Hospitals attached to the Medical colleges cater not only to the health and family welfare needs of the adjoining areas but also cater to the specialized services and as referral hospitals providing secondary and tertiary health care facilities.

5.2.3 Special clinics like Diabetic, STD, Leprosy, Antenatal, Family Planning and Well Baby Clinic have also been established in these hospitals for the benefit of the patients. De-addiction Centers have been started in all the State Medical Colleges.

5.2.4 To give impetus to the development of quality medical education, Baba Farid University of Health Sciences was established under B.F.U.H.S. Act 1998. At present, there are 10 medical colleges affiliated to Baba Farid University of Health Sciences. These are Guru Gobind Singh

Note: The report was prepared and submitted by the Task Group on Health and Medical Education chaired by Prof. K.K. Talwar.

Medical College, Faridkot; Govt. Medical College Amritsar; Govt. Medical College Patiala; Christian Medical College Ludhiana; Dayanand Medical College Ludhiana; Sri Guru Ram Das Institute of Medical Sciences & Research, Amritsar; Adesh Institute of Medical Sciences & Research, Bathinda; Gian Sagar Medical College & Hospital, Patiala; Punjab Institute of Medical Sciences, Jalandhar; and Chintpurni Medical College & Hospital, Pathankot.

5.2.5 Government Medical College at Amritsar is the oldest medical college of the State and among the oldest medical institutions of the northern India. The college is training 150 MBBS graduates every year. Government Medical College at Patiala is the second oldest medical college of the State. It was started in 1953 with the intake of 50 students for MBBS and at present 150 students are admitted every year for the MBBS course. Guru Gobind Singh Medical College, Faridkot was established in 1973. Since then the college has trained over 50 MBBS doctors every year. Besides MBBS graduates, these institutions train postgraduates (MD/MS) in various disciplines. These Institutions have provided brilliant doctors and medical scientists not only to prestigious institution of India like Postgraduate Institute of Medical Education & Research, Chandigarh and All India Institute of Medical Sciences, New Delhi but also to many other prestigious medical institutes in the world.

5.2.6 In order to keep pace with the advances in medical care and education that is taking place elsewhere and to improve the academic environment of these medical colleges, the Task Group concerned itself with the up-gradation of standards of patient care services and medical education in these institutions. Two sub-groups were constituted for visiting Govt. Medical Colleges at Amritsar and Patiala for taking stock of the condition in these medical colleges in terms of the personnel and facilities etc.

5.3 Situational Analysis

5.3.1 Faculty at Government Medical Colleges

a) In the recent past, some senior level faculty members have left government medical colleges and joined private medical colleges. Higher financial remuneration offered by these private sector medical colleges could be a major reason for this attrition. However, working conditions and environment conducive for growth and development can reverse this trend. The faculty at present in government medical colleges felt a need for professional development programmes to improve their skills in the research methodology, writing research papers, teaching skills, etc. The agencies like Indian Council of Medical Research, Department of Science and Technology; and

institutes like PGIMER Chandigarh and AIIMS, New Delhi could be requested to conduct professional development programs for the Faculty.

b) Most of the power centered around the Heads of Departments. Other faculty members in the Departments were not consulted sufficient enough to improve training of graduate and postgraduate students; or to improve working conditions of the Departments. A need was felt to hold regular faculty meetings in the Departments for appraisal of needs and development of the Departments.

c) Medical colleges were found facing shortage of Senior Residents. One of the main reasons was considered to be the current practice to recruit Senior Residents from the Punjab Civil Medical Services (PCMS) cadre and that has created its own set of difficulties. After completion of MD/MS, a PCMS doctor is needed to serve for one year in the parent department before becoming eligible to join Senior Residency. This time gap of one year de-motivates many to pursue Senior Residency. In super-speciality departments, candidates with only post-graduate qualifications (MD/MS) were appointed at some time as faculty members and they have not received till date three-year training in super-specialty. This has created quite an anomalous situation. Medical Council of India has formulated a plan to designate the faculty in medical colleges as per three tier system. However, the faculty positions are placed in multiple tiers in these medical colleges. This affects their relative position vis-à-vis faculty members in medical colleges elsewhere and also affects their promotional and financial prospects.

5.3.2 Teaching and Training of Students at Government Medical Colleges

a) The information presented during lectures in classes often contains the central concepts of the course. Traditionally, transfer of knowledge via handwritten lecture notes or didactic lectures was an essential element of academic life. Modern learning methods generally incorporate additional activities, e.g. group exercises, group discussions and even student presentations etc. The use of audio-visual aids has changed the format and content of learning sessions. The lectures delivered during theory classes in these medical colleges of the State were didactic, boring and continuous without any break. In addition to regular theory classes, students also need evening bed-side classes/rounds to improve knowledge which is not done at present. The exposure to community-based teaching was also deficient. The medical college

requires urban and rural field centers under their administrative control for smoothly conducting community-based training of students and interns.

c) For postgraduate students, the rotation in various departments is required not only to enhance but also to enrich their knowledge and practical skills in various disciplines related to their area of specialization. However, such practice is not followed in these medical colleges. There is an urgent need to appoint Faculty Coordinators for undergraduate and postgraduate studies. A plan of teaching activities and methods for every six months must be prepared in advance for each discipline. Inter departmental collaborations are woefully lacking.

5.3.3 Infrastructure at Government Medical Colleges

a) Library provides physical or digital access to study material for references or borrowing. It should contain catalogue, books, periodicals, newspapers, journals, computer with internet facility, thesis database etc. In government medical colleges of Punjab, the library infrastructure and facility was found inadequate e.g. the books were old, only limited journals were available, 24 hours services were lacking. The lack of provision of separate annual funds for library is the main reason for such appalling conditions.

b) The infrastructure particularly of hostels and dissection halls also requires attention. The hostel buildings are very old and students often face problems of water and sanitation facilities. The limited number of cadavers force many students to work on single cadaver only which hinders their learning. Alternative methods like computer simulations are very much needed to overcome such shortages. There was lack of critical facilities like clinical photography department, medical education and research cells and even the provision of MRI facility in one of the medical colleges.

c) Telemedicine uses information technology and telecommunication in order to provide clinical health care at a distance. It permits communications between medical personnel and experts with convenience and fidelity, as well as transmission of medical, imaging and health informatics data from one site to another. Telemedicine can be used as a teaching tool by which experienced medical staff can observe, show and instruct medical staff in another location, more effective or faster examination techniques. The medical colleges in Punjab are linked with district hospitals and

PGIMER, Chandigarh via telemedicine. But telemedicine link with PGIMER Chandigarh is underutilized. All the medical colleges have been provided with connectivity through National Knowledge Network which should be used for transmission of teaching sessions and case discussions.

5.3.4 Administration at Government Medical Colleges

The local administration of medical colleges is carried out by the Principals of respective colleges. The administration of the hospitals attached to medical colleges is under the control of Medical Superintendents. However, for a long time there is no appointment of the regular Principal and Medical Superintendent in these Colleges. There is no sanctioned substantive post of Principal and Vice-Principal. Principals have very limited financial powers. It was told to be pathetically low as Rs. 500/- . The user charges generated in hospitals are sent to State Treasury rather than being utilized for the improvement of facilities and services at medical colleges.

5.4 Recommendations

The availability of talented medical faculty and bright students in the Government Medical Colleges of Punjab is a cherished desire. Appropriate attention is required to be paid to enhance their knowledge and skills. Administrative support and access to latest technology and gadgetry for optimal patient care is critically needed. In addition effective governance and accountability is also desired to revamp the medical education and services in these medical colleges. There are actions which can be taken at the local level i.e at the level of Medical College Administration itself. However, there are actions which are required at the level of higher State administration. Accordingly, following recommendations are being made to improve the standards and conditions of medical education and patient care at the Government Medical Colleges of the State of Punjab.

5.4.1 At the level of Medical Colleges:

a) To constitute a College Council comprising HODs and 10 senior most Professors of the medical college and this should meet every two months.

b) To constitute Academic Committees and Hospital Management Committees at respective Government Medical Colleges.

c) To take steps to document department wise staff shortages, faculty vacancies and the need to create new posts. The medical college administrations should apprise higher authorities of the need to bridge the gap.

d) To submit proposals for creation of super-specialities with adequate justification for the man power and the equipment.

e) To hold regular faculty meetings in the Departments.

f) To prepare a list of facilities/equipment that is critically required for the optimal functioning of respective Departments and for academic training.

g) To appoint Faculty In-charge/Faculty Coordinator for UG and PG studies and to establish/energize Medical Education Cell at each college.

h) To prepare a plan of teaching activities and methods for six months including schedule for evening teaching and rotation in superspeciality departments and this needs to be appraised at three months interval.

i) To improve medical record keeping for educational and research purposes

j) To constitute Research Cell for facilitating extra mural research, to facilitate inter departmental research collaborations and to provide fora for sharing of research activities of the departments.

k) To hold Annual Convocations of the College for symbolism and identity.

l) Each college should make a mission statement on its vision and core values.

5.4.2 At State level

a) Short term:

i) To have regular appointments for the posts of Principal and Medical Superintendent; and to revive the posts of Vice Principal and Deputy Medical Superintendent.

ii) Strengthening/initializing various super-specialities in the medical colleges to meet the demands for specialized medical care and improve the standards.

iii) Anomaly created because of appointing MD/MS candidates in super-specialty departments needs to be corrected.

iv) To resolve the issue of shortage of Senior Residents by streamlining appointment of fresh eligible candidates and change in quota for PCMS candidates in MD/MS courses and Senior Residency positions.

v) To plan professional development programs for the Faculty emphasizing teaching skills, research methodology etc.

vi) To increase the working hours of Govt. Medical Colleges in State after having consultation with faculty.

vii) To provide latest technology like MRI/CT scan and other necessary facilities, to ensure effective patient care, and training and research activities.

viii) Medical record section should be strengthened.

ix) Telemedicine and Tele-education link with PGIMER, Chandigarh (and similar other institutions) should be strengthened for improving patient services and education and training of residents.

x) Library facility should be modernised.

xi) User charges should be spent for improving facilities in the college instead of being transferred to central treasury.

xii) The financial powers of the Principals and the Medical Superintendents must be enhanced for their optimal functioning of day to day need of the institution.

xiii) The faculty of medical colleges should be entitled to fellowships, academic allowance, and academic leave for attending conferences etc.

xiv) There should be a separate provision annually for research funding and attending conferences (one National conference every year and one International conference every two years with active participation such as presenting a paper being the basic requirement).

xv) Visiting faculty from other institutions such as institutes of national importance and ICMR institutions should be invited to medical colleges at regular intervals to

share their knowledge and experience and mentor the local faculty.

b) Long term:

i) To have urban and rural field centers under the administrative control of medical colleges for training of students in preventive medicine.

ii) Improvements in conditions of hostels for UG and PG students, dissection hall facility, lecture theatres etc.

iii) Expansion of UG seats should only be done after adequate infrastructure has been created to meet the demands.

iv) In order to improve engineering services in medical colleges and to professionalize procurement, greater synergies should be built with Health department, especially Punjab Health Systems Corporation.

v) It should be strictly enforced that faculty and the staff working in medical colleges do not indulge in private practice.

5.5 Conclusion

5.5.1 Implementation of the above recommendations will definitely improve the standards of medical education, research and patient care at the level of Govt. Medical Colleges of Punjab.

5.5.2 This will help not only to create competent health professionals but also provide for State of the Art health care facilities and services for the people of Punjab.

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CHAPTER 1

MOTHER AND CHILD HEALTH ACTION PLAN

5.6. Introduction

5.6.1 The Mother and Child Health Action Plan (2014-17) aims to improve the health of women and children in Punjab, and in so doing, to improve the lives of all people in the State. The health of women and children is critically important to almost every area of human development and progress, and directly impacts our success in achieving the development aspirations of the country, in particular, the XII Plan targets, as well as the Millennium Development Goals (MDGs).

5.6.2 Experience from across the globe has demonstrated that the health of women and children is the fountainhead of public health. Equally important is the adolescent health which bridges the flow of health from childhood to adulthood. A healthy population is the foundation upon which the nation builds a successful economy and a welfare state. Prosperity and wellbeing is essential to political stability, creative society and social harmony.

5.6.3 The State of Punjab has been consistently performing better than the rest of the country in reproductive and child health. High per capita income, high literacy rate, community development enterprise together with healthcare programs have led to the attainment of impressive indicators of health in the State. As per the SRS data of 2012 (released in September 2013) Infant Mortality Rate (IMR) of Punjab is 28 per 1000 live births as against 42 at the national level. The State's total fertility rate (TFR) at 1.8 has already reached the replacement level. The Maternal Mortality Ratio (MMR) stands at 172 (per 100,000 live births) against the national average of 212.

5.6.4 Since 2005, the National Rural Health Mission has resulted in an unprecedented strengthening of the public health system with focus on health infrastructure, human resources, service delivery, program management, monitoring and communitization. Deployment of ASHAs across rural areas has changed the paradigm of the way services are delivered at doorstep of the people. The Government of Punjab has effectively harnessed the resources of NRHM and scaled up initiatives such as the Universal Immunization Programme, skilled care at birth, Emergency Obstetric Care, IMNCI (Integrated Management of Neonatal and Childhood Illnesses), NSSK (Navjat Shishu Suraksha Karyakram), FBNC (Facility Based Newborn Care), and referral transport services. Demand side financing initiatives such as the

JSY (Janani Suraksha Yojna) and JSSK (Janani Shishu Suraksha Karyakaram) have helped in reducing out of pocket expenses on healthcare of women and children. Indeed, the Government of Punjab has gone beyond the provisions of NRHM for maternal and child health by introducing the MKKS (Mata Kaushalya Kalyan Scheme) and the free treatment of all girls up to the age of five years in public facilities.

5.6.5 In January this year, the Government of India brought various healthcare initiatives and programs for women, adolescents and children into one strategic framework.1 This strategy document on Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) has emerged as the master driver of accelerated action under NRHM, in particular during the XII Plan period up to 2017.

5.6.6 The Mother and Child Health Action Plan (2014-2017) is a comprehensive effort by the Government of Punjab to translate the National RMNCH+A strategy into a State level action plan for the women, adolescents and children. This document is the outcome of discussions with the key stakeholders to identify gaps and solutions in coverage, quality of care, and health systems components. In addition, there were intense internal deliberations to articulate actionable tasks and timelines. This has indeed been a unique undertaking in program analysis, target setting and in envisioning a realistic work plan toward the avowed outcomes. The Action Plan is thus aspirational, yet deliverable.

5.6.7 Though the State of Punjab has better health indicators as compared to many other states of the country, this is not enough. The Government of Punjab is committed to raising the health status of the people of the State to the levels that prevail in the developed world in not so distant future. The Mother and Child Health Action Plan (2014-2017) is one cogent step in that direction.

1 A Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A): For Healthy Mother and Child. Ministry of Health and Family Welfare, Government of India. January 2013

CHAPTER 2

5.7 SITUATIONAL ANALYSIS

5.7.1 Women's health before and during pregnancy, place of delivery, quality of services for the mother and newborn during and after delivery have a far reaching impact on the survival, morbidity and mortality of a newborn/ child. Furthermore, adolescent health provides the crucial bridge for nurturing both maternal and child health, nutrition and well being.

5.7.2 The Millennium Development Goals (MDGs) 4 and 5, aimed at maternal health and child survival, respectively, gave an impetus for action to all countries towards improving the health of women and children. As India moves beyond the MDGs, it is time to set sights well beyond survival – on quality lives and the realization of the full potential of human creativity and capital.

5.7.3 The State of Punjab has performed better in all the relevant health indicators (Table 2.1). Punjab's MMR stands at 172 (SRS 2007-09) having declined from 192 a few years earlier (SRS 2004-06), while the IMR at 28 (SRS 2012) has decreased from 38 in 2008 (SRS 2008). TFR at 1.8 (SRS 2011) is already at the replacement level.

Table 2.1 Key indicators of the country and the State of Punjab

Indicator	CURRENT	
	India	Punjab
MMR (SRS 07-09)	212	172
U5MR (SRS 2011)	55	38
IMR (SRS 2012)	42	28
NMR (SRS 2011)	31	24

5.8 MATERNAL HEALTH

5.8.1 Antenatal Care

Multiple factors have helped reduce infant and maternal morbidity and mortality in Punjab. High coverage of antenatal checkup of all pregnant women registered at health institutions to identify high risk pregnancies, motivation for institutional deliveries to minimize morbidity and mortality of mothers as well as newborns, and health education to mothers regarding child care are among the main reasons for the same. MCTS (Mother and Child Tracking System) to identify, register and follow up all pregnant women in health institutions for providing adequate services to the mother and child is helping in further reducing MMR and IMR. Interventions for improving health and nutrition of young women during pre-pregnancy (adolescent), pregnancy and childbirth will enhance the survival and optimal health of the woman and her newborn. More than 90% of pregnant women are registered with health institutions, out of which nearly 70% are registered within the first trimester and at least three antenatal checkups are done to identify high risk cases. The quality of antenatal checkup has improved with the ANMs conducting simple laboratory investigations like Haemoglobin and Urine Sugar and Albumin estimation at the sub-centre level. Skilled Birth Attendant (SBA) training to ANMs and Staff Nurses has helped ensure availability of skilled services.

5.8.2 Natal Care

Care of the mother and the newborn during delivery in a health institution significantly contributes in reducing the mortality of both mothers and babies by preventing delivery related complications. The ratio of institutional deliveries has increased significantly (82%) during the past few years due to various interventions. Still, a large number of deliveries occur at home. One hundred government health institutions, including 22 district hospitals, 41 sub-divisional hospitals and 37 Community Health Centres have been strengthened for round the clock services. The status of deliveries in the state over the last few years is as shown below (Table 2.2):

Table 2.2 Deliveries in the State of Punjab:

	2008-09	% age	2009-10	% age	2010-11	% age	2011-12	% age	2012-13	% age	2013-14 (up to July)	% age
Institutional	230436	59	249610	64	273238	69	320757	78	342798	83	100123	85%
Public	96542	25	101804	26	115865	30	157018	38	163646	40	50883	43%
Private	133894	34	147806	38	157373	39	163739	40	179152	43	49240	42%
Home	159335	41	138119	36	125510	31	92993	22	71047	17	17055	15%
Total Deliveries	**389771**		**387729**		**398748**		**413750**		**413845**		**117178**	

(Source: HMIS Data Punjab)

In order to motivate women to undertake institutional deliveries, the State is giving incentives for welfare of the mother and newborn:

5.8.3 Janani Suraksha Yojna (JSY)

Janani Suraksha Yojna is one of the flagship programmes under NRHM. All women belonging to Scheduled Castes (SC) & Below Poverty Line (BPL) are given incentives as follows (Panel 1):

Panel 1

Place of Delivery	Place of Residence	Incentive (in Rs.)
Institutional	Rural	700
	Urban	600
Domiciliary	Rural	500
	Urban	500

5.8.4 Mata Kaushalya Kalyan Scheme (State Scheme)

As a State initiative, the State of Punjab is giving a cash incentive of Rs. 1000/- to each pregnant woman for delivering in a Government Health Institution. During 2012-13, out of a total 413,845 deliveries, 163,490 (39.5%) took place in government institutions.

5.8.5 Janani Shishu Suraksha Karyakaram (JSSK)

All health services to pregnant women and newborn children (up to 1 year of age) are free at government institutions. This includes free drugs, diagnostics, diet, and referral services. The state aims to cover all 517,754 pregnancies (470,686 deliveries) under JSSK.Referral Transport.

The state government is committed to providing free referral transport to all pregnant women, delivery cases and newborn children. They are provided referral transport for travelling to and from a hospital and also for inter-facility transfer, if required. Apart from this, the Senior Medical Officers are provided a budget for arranging referral transport for cases where the official vehicle is not available due to some reason. At present 240 ambulances under the 'Dial 108' Emergency Response System and 180 ambulances of government institutions are being utilized for this purpose. The emergency response system is being operated by ZIQITSA Healthcare under a MoU with the State Government. They also provide general emergency services to the community. The patients transported through the emergency response system during the past two years are as below (Table 2.3):

Table 2.3 Profile of referral transport activities

	Up to March 2012	April –March 2013	April-July 2013
Emergency calls	198162	369230	118369
Availed	153266	306591	97339
Un-availed	39895	62639	21030
Total	198162	369230	118369
Animal & snake bites	210	274	70
Burn & chemical accidents	1041	2251	755
Cardiac emergencies	4541	5543	1617
Farm accidents	2881	5669	1894
Pregnancy cases	49277	84891	28117
JSSK (Pregnancy Cases – Dropped Home) and Neonates Served	1036	80134	24458
Medical emergencies	29289	39306	12267
Others	41602	54558	18857
Road accidents	23144	34431	9732
Suicidal cases	245	384	131
Trauma cases		2879	1257
Total Patients Served	153266	310320	99155

5.9 OTHER INITIATIVES

5.9.1 Mobile Medical Units - Twenty four Mobile Medical Units, well equipped with diagnostic tools along with two doctors, have been operational in all districts since December 2008.

5.9.2 Mother and Child Tracking System (MCTS) - The system has been implemented in Punjab and data is being collected since December 2010 in the MCTS software system provided by the Govt. of India.

5.9.3 Free Medicines - The State has decided to provide all medicines under EDL (Essential Drug List) free of cost in all Government Hospitals.

5.9.4 Incentives - ASHAs are being given incentives for identifying severely anaemic pregnant females and providing iron supplements to these females for treatment of anaemia.

6.1 NEONATAL HEALTH

6.1.1 Neonatal deaths constitute 75% of total infant mortality. Main causes of neonatal deaths are pre-maturity, birth asphyxia, neonatal sepsis and respiratory disorders. Neonatal infections are the consequence of poor status of maternal health and nutrition, poor care at delivery, and inadequate essential newborn care during the postnatal period.

6.1.2 The underlying causes of pre-term birth and LBW are related strongly, although not exclusively, to social, economic and cultural factors such as low maternal age and literacy, under nutrition, inadequate antenatal care, and too frequent pregnancies. Maternal health, birth spacing and age of marriage have a direct bearing on neonatal deaths and still births.

6.2 INFANT AND YOUNG CHILD HEALTH

6.2.1 Punjab has made great progress in infant and newborn care. The infant mortality rate of the State is far below the national average. The State has planned to track each and every child till the first year of age with a view to ensure child survival and hence, further reduce the IMR as per the target for 2015.

6.2.2 The burden of infectious diseases in children is an important determinant of morbidity and mortality among young children. The major contributors to child mortality being pneumonia, diarrhea and malnutrition, the incidence and severity of both pneumonia and diarrhea show a socioeconomic gradient due to exposure to risk factors related to the environment, such as lack of clean water, sanitation, indoor air pollution and overcrowding, and to impaired

immune response caused by inappropriate feeding practices, lack of exclusive breast feeding, artificial feeding and under nutrition.

6.2.3 It is important to keep in mind the three key indicators of optimal Infant & Young Child Feeding Practices, i.e. initiation of breast feeding within one hour of birth, exclusive breast feeding for the first six months and timely and appropriate complementary feeding after six months along with continued breast feeding. Current rate of these practices remains low and is a challenge to increase in the coming five year plan.

6.2.4 Malnutrition is still widely prevalent in preschool children and is a direct or indirect underlying factor in about 60% of the deaths in under-five children. Wasting, stunting and micro-nutrient deficiencies have important consequences on children's susceptibility to infectious diseases and cause development delay which, if continued, is irreversible. Lack of food is not the only cause for deficiency. It can also be due to inappropriate infant feeding and care, poor access to health care, and exposure to insanitary and unhygienic conditions.

6.2.5 From conception to the third year of life, disruption of brain development, caused by illness, poor nutrition or high stress levels can have an important effect on the child's ability to reach its physical, sensory, motor, cognitive, language and socio-emotional potential.

6.2.6 HIV infections in children pose a serious challenge. The incidence of HIV transmission from mother to child is not very alarming (0.12%) (NACO Report, December 2012). Even though the incidence of HIV infection has declined in Punjab, there is a need to strengthen advocacy for prevention of parent to child HIV transmission.

6.3 SCHOOL CHILDREN

6.3.1 Health problems of school children are different from the previous groups. These include refractory errors, dental and dermatological problems, nutritional deficiencies etc.

6.3.2 In female students, the drop-out rate and early marriages are important issues. Though midday meal is being provided to all school going children, malnutrition is still widely prevalent. Prevalence of anaemia in school going children is also quite high.

6.3.3 There are 19,973 Government and Government Aided Schools having 27, 79,645 students. All these students are examined twice a year by the Medical Officers/ RMOs. Treatment of all ailments is free of cost at all government health institutions in the state.De-worming of all school children is done twice a year by administering Tab. Albendazole on the second Friday of May and November which is celebrated as De-worming Day.

6.3.4 Children suffering from heart diseases like RHD/ CHD, Cancer and Thalassaemia are treated free of cost at super-specialty hospitals (PGIMER, Chandigarh, DMC & H, Ludhiana, CMC & H, Ludhiana, Mohan Dai Oswal Cancer Hospital, Ludhiana, Fortis Hospital, Ajitgarh, Silver Oaks Hospital, Ajitgarh and IVY Hospital, Ajitgarh).

6.4 ADOLESCENT HEALTH

6.4.1 Adolescent Health especially in the context of females is an important issue that needs to be addressed separately. Problems of young girls like, menstrual hygiene, regular use of Iron and Folic Acid tablets, and sex education, need to be addressed. Teenagers in Punjab are falling prey to drugs and unsafe sexual practices are making them prone to HIV infection and early pregnancy.

6.4.2 Menstrual Hygiene Scheme has been initiated in five SABLA districts. Adolescent girls are given sanitary napkins through social marketing with the involvement of AHSAs.

6.4.3 Weekly Iron and Folic Acid Supplementation Scheme (WIFS), a community based intervention to address nutritional (iron deficiency) anaemia has been initiated for adolescents in both rural and urban areas.

6.4.4 Access to reproductive and sexual health information services, including access to contraceptives and safe abortion services, delivered in an adolescent-friendly environment are critical to reducing incidences of STIs, unplanned and unwanted pregnancies and unsafe abortions.

6.4.5 Under Adolescent Health Programme, special Adolescent Friendly Health Clinics (AFHCs) have been operationalised at District Hospitals (21), Sub Divisional Hospitals (36), Primary Health Centres (9) & Community Health Centres (23) all over the state. These clinics provide preventive, promotive, curative and referral services. Counselling & Guidance is also provided at these clinics for adolescent health problems. These clinics have 1 day/ week with dedicated & adequately trained staff under ARSH Programme for the above mentioned services where ICTC counselors provide counseling services. District Ajitgarhwas taken as a Pilot project for strengthening of AFHC and the following activities have been taken for strengthening:

a) Display Board, showing time, day & location put up in all schools

b) Specialist services are provided

c) Suggestion box put up in all higher secondary schools

d) Pamphlets & Posters

e) E-mail ID for answering queries of adolescents

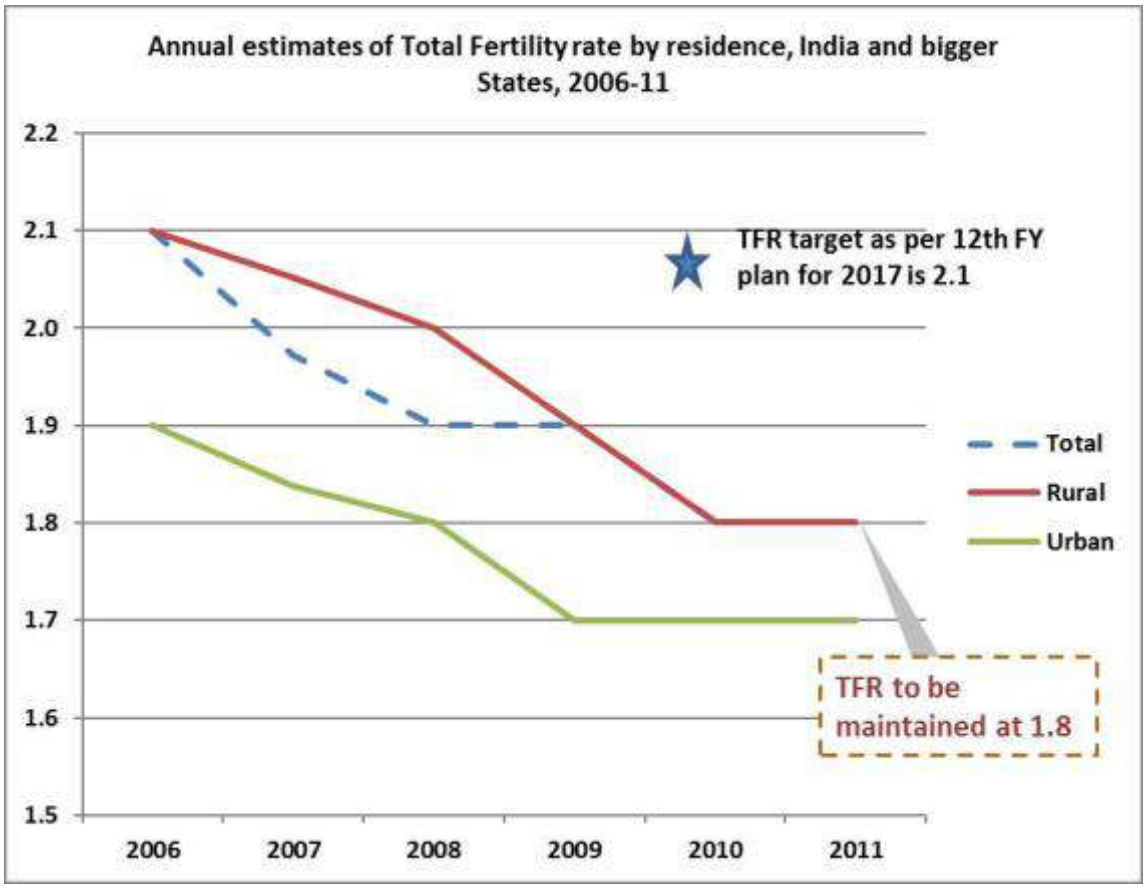
f) Exit interview regarding the services/ drawbacks/ improvement

Suicidal tendencies and automobile accidents amongst teenagers are another cause of concern. They also need to be addressed in this transition period.

6.5 FAMILY PLANNING

6.5.1 Although the state has been able to achieve a TFR of 1.8 (Fig 2.1), the Family Planning Programme needs continuous efforts to ensure child birth after 20 years of age and adequate spacing in pregnancies. This would improve infant and child survival, in addition to reducing maternal morbidity and mortality.

Fig. 2.1



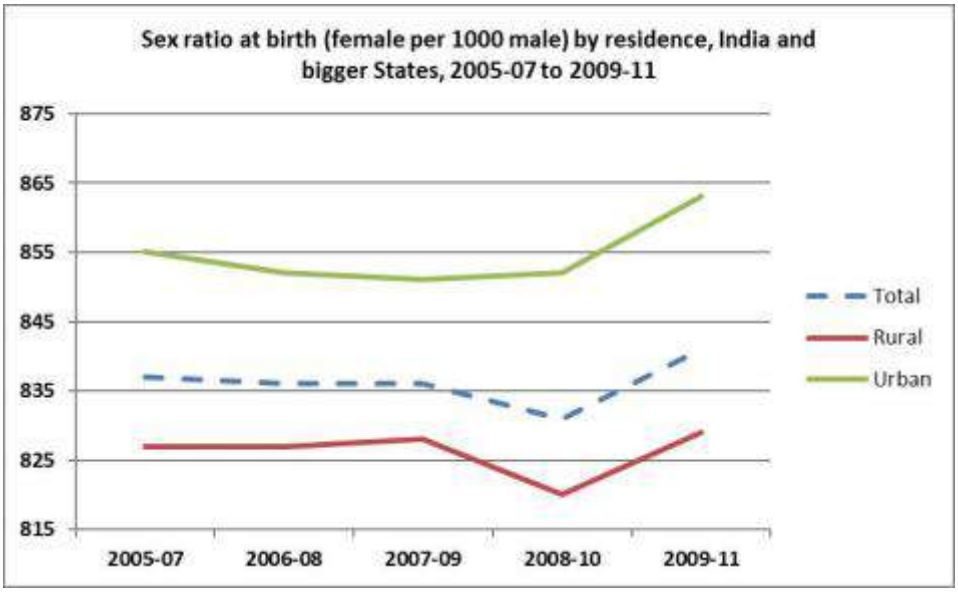
6.5.2 The overall status of Family Planning in the state has been satisfactory due to high literacy. As per NFHS III and DLHS III, the adoption of family planning practices is as below:

	April –March 2013	April-July 2013
Any method	63.0	69.3
Any modern method	56.0	62.9
Female sterilisation	31.0	32.6
Male sterilisation	1.0	0.6
Oral pill	3.0	4.1
IUCD	6.0	6.2
Condom	16.0	19.4
Any traditional method	7.0	6.3
Use of spacing method for more than 6 months	--	23.7

6.6 IMPLEMENTATION OF PC & PNDT ACT

6.6.1 The state of Punjab has been suffering from low child sex ratio. The good news, however, is that there has been an improvement in the child sex ratio in the state as per the 2011 Census (Fig 2.2) which indicates an increase from 798 in 2001 to 846 in 2011. The state is committed to increasing the child sex ratio to 890 by 2014-15. Regular inspections of 1,365 ultrasound centres are conducted and actions taken as per the provisions of the Act. Till 2012-13, 124 court cases/ FIRs have been launched against violators, out of which 26 violators have been convicted.

Fig. 2.1



6.6.2 At the same time the state has started the process of awarding village panchayats which achieve the child sex ratio of 1000 or more during a year. Since 2008, 383 panchayats have been awarded Rs. 1.5 lacs each. During 2013, the award amount has been increased to Rs. 2.0 lacs.

6.7 SEXUALLY TRANSMITTED INFECTIONS AND REPRODUCTIVE TRACT INFECTIONS (STI/ RTI)

The diagnosis, treatment and monitoring of STI/ RTI and HIV/ AIDS is being done by Punjab State AIDS Control Society, with inputs from NACO. There are 28 centres in the state carrying out these activities at the district and sub-divisional hospitals. The Medical Colleges are involved in the activity as Sentinel Surveillance Centres. The STI/ RTI Services are to be expanded further to adolescents and pregnant mothers. The IEC/ BCC for STI/ RTI would be included in the educational materials for adolescents under RBSK. The screening and treatment of pregnant women by ANMs through syndromic approach would be taken up. The ANMs would be given refresher training on diagnosis and treatment of STI/ RTIs. The performance of ANMs would be monitored at monthly meetings at the block level. All these activities would be combined with regular and assured supplies of drug kits for STI/ RTI treatment.

6.8 IEC/ BCC

IEC (Information, Education, and Communication) and BCC (Behaviour Change Communication) play an important role in improving maternal and child healthcare. The state has been spreading the awareness for maternal and child health care through various media including print, audiovisual and interpersonal communication. There is need for further improvement in the efforts to reach the community, spread awareness and create an environment for behavior change through advocacy, communication and social mobilization, regarding various health programmes and initiatives being undertaken by the state for the reduction in maternal and child morbidity and mortality.

6.9 URBAN HEALTH

The State is in the process of developing the urban health strategy under the National Urban Health Mission that would incorporate the urban RMNCH+A Action Plan.

MMU Report

	2010-11	2011-12	2012-13	2013-14 (Upto June 2013)
Villages Covered	9938	8964	10440	2616
Patients Examined	477006	391632	392318	94522
X-Ray	9998	6250	10568	1826
ECG	6911	4885	6333	1163
Lab Tests	123751	101982	131434	28210

Mobile medical units have played a crucial role in providing services in many difficult and hard to reach areas, but their output decreased in the financial year 2011-12 as compared to 2010-11. To know the underlying factors and suggested solutions for this decline, a study is proposed in collaboration with the School of Public Health, PGIMER, Chandigarh.

ASHA Incentives

S. No.	Activity Name	Incentive Amount (per case/ session)	Cases 2012-13	Cases 2013-14
Maternal and Child Health				
1.	To register every pregnant woman within three months	Rs. 100/-	254160	90297
2.	To ensure minimum 3 Ante Natal Checkups (ANC), 2 Tetanus Toxoid (TT) immunization and Institutional delivery	Rs. 100/-	137295	40392
3.	If Pregnant Woman is covered under Janani Suraksha Yojna, then for ensuring Institutional delivery	Rs. 200/-	83868	44830
4.	To ensure 100 Iron Folic Acid (IFA) Tablets to Pregnant women	Rs. 50/-	175616	59861
5.	If ASHA worker stays at night in the hospital with the pregnant woman for the delivery	Rs. 50/-	70392	23030
6.	For ensuring treatment/ cure of anemic women (any woman who has been found to be having HB less than 7 gm at the time of ANC is to make it reach 9 gm at the time of delivery	Rs. 250/-	4154	1684
7.	To Conduct Home Visit for the care of the New Born and Post Partum Mother -> Six Visits in the Case of Institutional Delivery (Days 3rd, 7th,14th, 21st, 28th & 42nd) ->Seven visits in the case of Home Deliveries (Days 1st, 3rd, 7th, 14th, 21st, 28th & 42nd	Rs. 250/-	170075	56337
8.	For bringing the children for immunization and for attending the session	Rs. 150/-	152910	46281
9.	For ensuring that Low Birth Weight infants (> 2.5 kg) to gain 2 kg weight in first three months	Rs. 200/-	2424	1403

10.	Reporting death of mother within 24 hrs. of delivery	Rs.100/-	570	86
11.	Reporting death of infant within 24 hrs. (Since Birth up to 1 year)	Rs. 100/-	4910	1276
12.	For child birth registration & issue of birth certificate	Rs. 30/-	100602	31535
13.	Timely referral of dehydrated patients	Rs. 50/-	1938	972
14.	Support screening camp at school under School Health Programme	Rs. 50/-	4652	4376
Family Planning				
15.	For motivating and ensuring male sterilization - Vasectomy	Rs. 200/-	475	113
16.	For motivating and ensuring female sterilization - Tubectomy	Rs. 150/-	5483	2516

CHAPTER 3

7.1 STRATEGIC APPROACH TO RMNCH+A

7.1.1 Goal

The overarching goal of the Maternal and Child Health Action Plan of the Punjab State is to ensure survival, healthy growth and development of mothers, children and adolescents, and achieve the 12th Five Year Plan targets.

7.1.2 Vision

a) This Action Plan promotes a systemic and holistic vision for health of women, neonates, children and adolescents.

b) Using the principles laid out in the national RMNCH+A strategy (2013); the purpose is to move from fragmented programmes and projects to scaling up health interventions for a comprehensive health care across the life stages along the continuum of care.

c) The Action Plan would aim at creating an enabling environment to improve quality of care and address the underlying causes of morbidity and mortality amongst mothers, newborns, children and adolescents.

d) The Action Plan will be a pathway to ensure that health, nutrition and development interventions are equitably implemented across all levels in the State with the active participation of all stakeholders and partners.

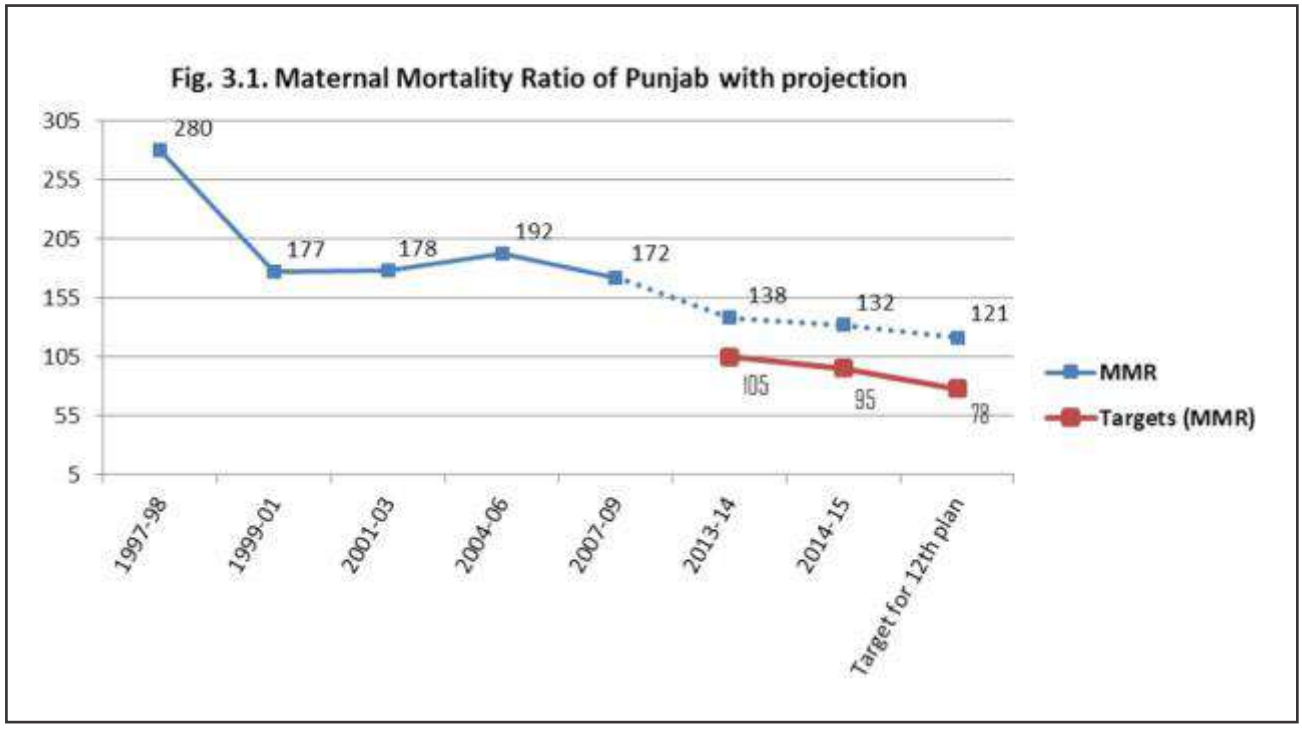
7.1.3 Outcome Targets

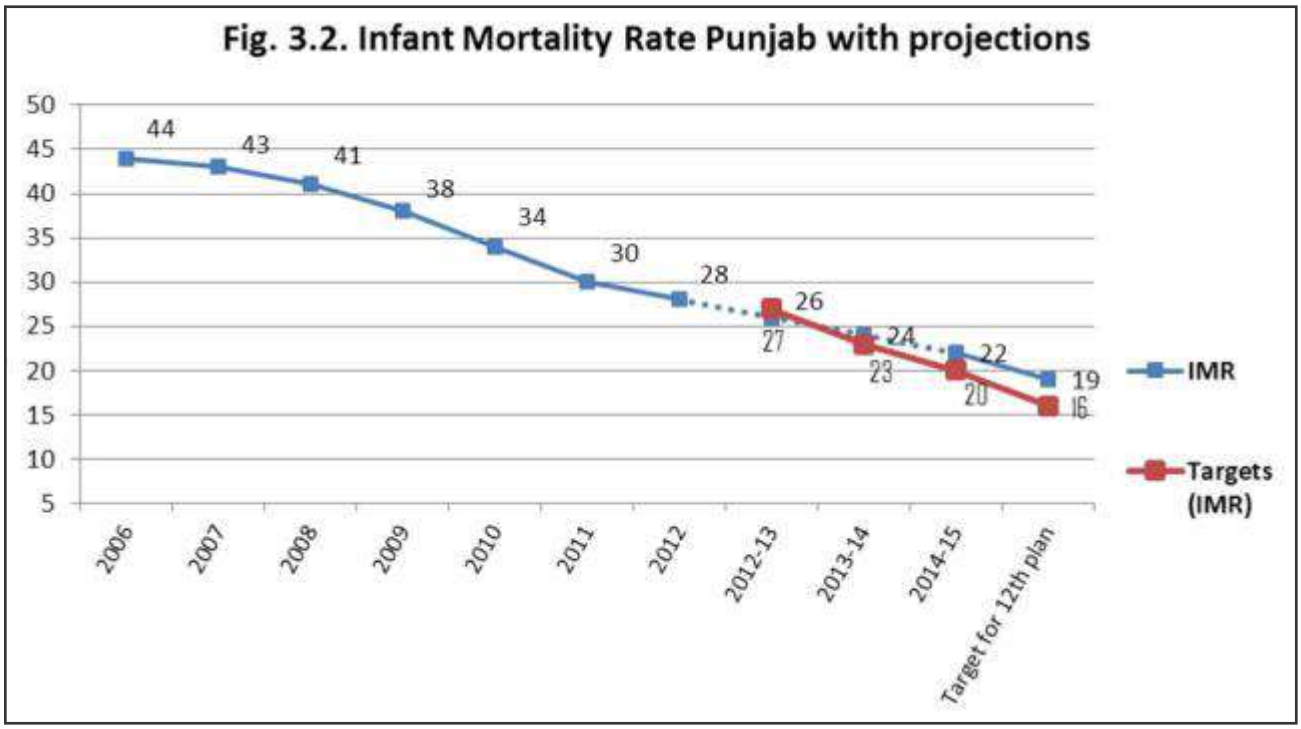
Following are the targets envisaged for coverage of interventions across the continuum of RMNCH+A (Table 3.1).

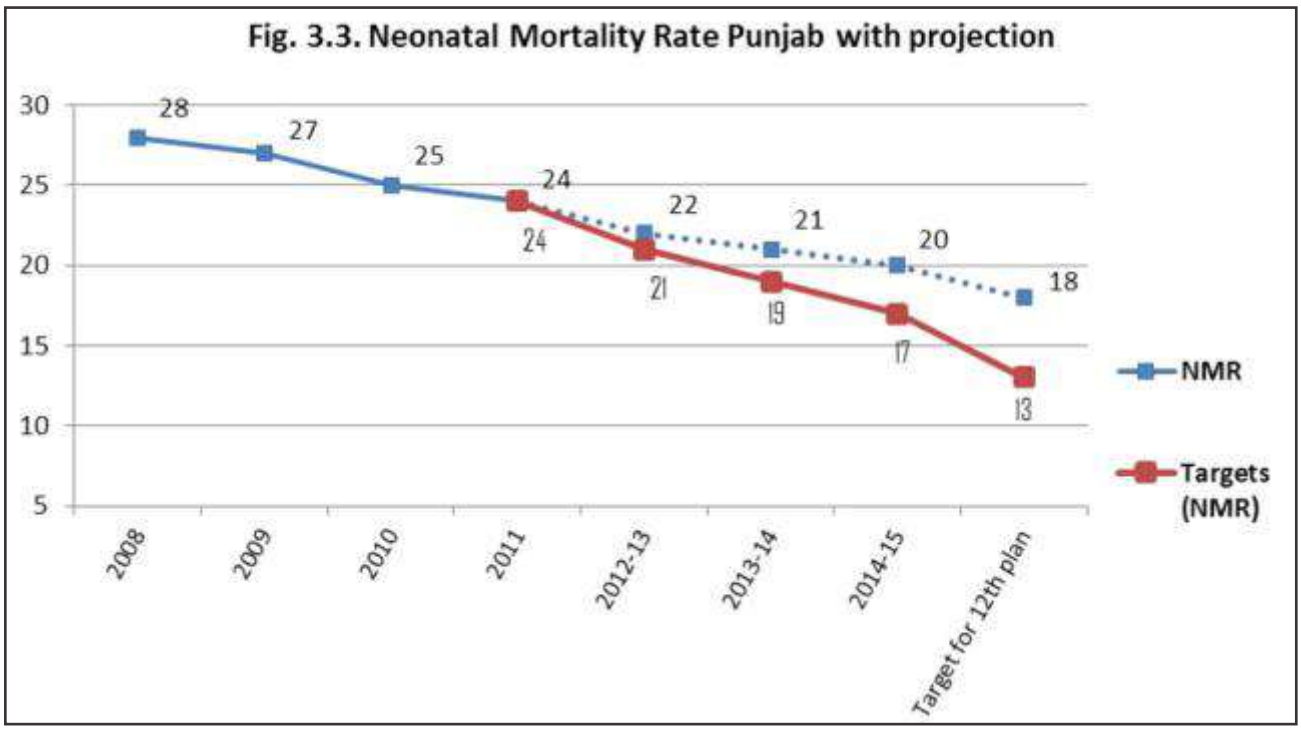
Table 3.1 Current status of key indicators and targets

Indicators	Current Status		Targets for Punjab		
	India	Punjab	2013-14	2014-15	12th Plan 2017
Maternal Health					
MMR	212 (SRS 07-09)	172 (SRS 07-09)	105	95	78
Child Health					
U5MR	55 (SRS 2011)	38 (SRS 2011)	30	26	20
IMR	42 (SRS 2012)	28 (SRS 2012)	23	20	16
NMR	31 (SRS 2011)	24 (SRS 2011)	19	17	13
Family Planning					
TFR	2.4 (SRS 2011)	1.8 (SRS 2011)	To maintain replacement level		

In order to attain MMR, IMR and NMR targets, significant acceleration in action will have to be achieved because the current level of progress is not sufficient. Figures (3.1 to 3.3).







Coverage targets

The Action Plan aims to achieve quality coverage of the following cardinal interventions for women, newborns, children and adolescents (Table 3.2). Only when the interventions reach most of the target beneficiaries that the impact is affected. Endeavour is that every woman, newborn, child and adolescent should receive care.

Table 3.2 Targets for coverage of key interventions

Indicators	Present status	April –March 2013	April-July 2013
Emergency calls	198162	369230	118369
Availed	153266	306591	97339
Un-availed	39895	62639	21030
Total	198162	369230	118369
Animal & snake bites	210	274	70
Burn & chemical accidents	1041	2251	755
Cardiac emergencies	4541	5543	1617
Farm accidents	2881	5669	1894
Pregnancy cases	49277	84891	28117
JSSK (Pregnancy Cases – Dropped Home) and Neonates Served	1036	80134	24458
Medical emergencies	29289	39306	12267
Others	41602	54558	18857
Road accidents	23144	34431	9732
Suicidal cases	245	384	131
Trauma cases		2879	1257
Total Patients Served	153266	310320	99155

7.2 Guiding Principles

This plan strives to:

7.2.1 Implement and scale up evidence-based, cost-effective interventions through effective service delivery strategies across the continuum of care at a high level.

7.2.2 Strengthen Health Systems to ensure affordable, equitable access of good quality healthcare services to all pregnant women/ mothers, newborns and children, with particular attention to the poorest and most discriminated-against population groups.

7.2.3 Promote multi-sectoral approaches to address the determinants of MNCH including Adolescent Health.

7.2.4 Ensure equity and reduce disparities in access to quality health care with a special focus on urban poor, SCs and backwards, minorities and other underserved sections of society.

CHAPTER 4

7.3 INTERVENTIONS ACROSS LIFE STAGES

7.3.1 The continuum of care approach has three dimensions with profound implications for the way in which policies, programmes and interventions are organized and executed.

a) The healthcare must be provided throughout the life-cycle, including the preconception period, pregnancy, childbirth, postnatal period, infancy, childhood and adolescence, since the benefits of some intervention packages straddle across different phases in the course of life.

b) The healthcare must be provided through a process that preserves functional continuity across different levels of health-care delivery including home/ community, first-level health centre and referral hospital.

c) It also implies interventions in health promotion, disease prevention and control, treatment, rehabilitation and reintegration into society (comprehensive health care).

7.3.2 The goal of addressing these continua of care is to guarantee the availability of and access to evidence-based interventions that will make it possible to improve the health of mothers, newborns, and children.

7.4 MATERNAL HEALTH

7.4.1 ANTENATAL CARE

a) Early registration of all pregnant women

Registration of pregnant women early in the first trimester is of utmost importance for early detection of high risk cases and optimum care, and hence to reduce the incidence of pregnancy associated complications. This would be achieved by:

i) Sensitization of ANMs and ASHAs to mobilize communities.

ii) Ensuring haemoglobin estimation and urine examination for sugar and albumin.

iii) Referral of high risk pregnancies to appropriate level and their follow up and monitoring through MCTS.

iv) Ensuring intake of at least 100 tablets of IFA by all pregnant women.

v) Completion of at least 4 Ante-natal checkups for all pregnant women.

vi) Completion of data in MCTS and regular follow up on that basis.

vii) Tracking of all pregnant women irrespective of their place of ANC (public or private sector).

viii) Ensuring one to one skilled counseling on infant feeding to all pregnant and lactating women through skilled counselors.

ix) Massive IEC/ BCC Campaign for awareness generation in the community regarding services and facilities being provided by the Health Department for care of the mother and newborn and to encourage institutional deliveries.

x) Raising awareness regarding Janani Suraksha Yojna and Mata Kaushalya Kalyan Scheme.

xi) Ensuring timely transportation of pregnant women for delivery to the nearest healthcare institution.

xii) Regular monitoring of the programme at the block, district and State level.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
ANTENATAL CARE						
	Rapid assessment of gaps in supplies to ANMs for ANC (BP instruments, Hb estimation system, education material, IFA etc.)	Completed in April System to streamline supplies instituted by March				
	Ensure supplies to all ANMs	July onwards	Supplies ensured Six monthly reviews			Fix responsi-bility Develop ICT based system to monitor supplies
	Strengthened supportive supervision and monitoring of ANMs to ensure quality and ANC service delivery in all aspects	Develop a check list on how to provide supportive supervision– with roles specified for each level of supervisor from PHCMO to Directorate by April Implement stronger supervision and monitoring system	Implement strong supervision and monitoring system			

	Orientation of ANMs to ensure quality and ANC service delivery in all aspects including counseling	Plan a 3 hour orientation program on ANC quality by end of January; Conduct orientation sessions at monthly meetings for all ANMs by May				
	Planning and execution of wide/ effective IEC campaign to generate awareness on benefits of ANC, birth preparedness and institutional deliveries VHND, Mamtadivas, BCC campaigns – with focus on early registration, four contacts and birth preparedness	Plan IEC/BCC campaign to improve awareness regarding ANC, EmOC, JSY, JSSK Implement IEC/BCC campaign Ensure that all villages/ urban areas are covered by August Implement IEC/BCC campaign Ensure that all villages/ urban areas are covered at least once	Implement IEC/ BCC campaign Ensure that all villages/ urban areas are covered atleast once			Align this campaign with IEC/BCC strategy Senior officers to attend VHND meetings to improve quality
	Surveys to assess **1. Quality of care,** **2. Awareness and reach of the services**		In January 2015 Use this information to plug gaps	In January 2016 Use this informati on to plug gaps	In January 2017 Use this informati on to plug gaps	

7.5 BIRTH CARE

Skilled care at birth is the right of every pregnant woman and her baby. Promoting institutional deliveries through motivation, incentives and community engagement would go a long way in reducing the maternal and infant mortality. The proportion of institutional deliveries has been constantly increasing over the years with greater increase in the deliveries occurring at the government institutions. Dedicated MCH Centres for care of the mothers and newborns are being undertaken.

7.5.1 Following measures are planned to improve natal services:

7.5.2 **Identification and strengthening of delivery points:** Fully operational PHCs, CHCs, Sub-divisional and District Hospitals are the key to provide good intra-natal and postnatal care. Developing CHCs and PHCs for **CEmOC** (Comprehensive Emergency Obstetric Care - 7 doctors undergoing training) and **BEmOC** (Basic Emergency Obstetric Care – 31 doctors trained) services, respectively, is an important intervention aimed at increasing institutional deliveries. Training of adequate numbers of doctors and staff nurses to give skilled birth attendance services at these centres has been in progress. The rational deployment of trained manpower along with regular monitoring and on – the – job training would help in improving the skilled care at and after birth for the mothers and the babies.

7.5.3 **Incentives for Institutional Deliveries:** In order to attract pregnant women to deliver in the hospitals especially the Government Hospitals, the State intends to further propagate the incentives being given to the women. **JSY (Janani Suraksha Yojna)** scheme initiated by the Government of India and implemented by the State Government has helped increase the proportion of institutional deliveries. Linking of JSY with AADHAR, and payment through Direct Benefit Transfer to the account of the beneficiaries, would further improve the institutional deliveries. **MKKS (Mata Kaushalya Kalyan Scheme)** on the other hand will further help increase deliveries in the government institutions.

7.5.4 **JSSK (Janani Shishu Suraksha Karyakram):** The availability of free drugs and consumables, diagnostics and referral transport has already been ensured at all levels for pregnant women and neonates. As mentioned earlier, rate contracts have been finalized for the drugs and consumables at the State level. Ensuring free referral transport for all pregnant women during pregnancy, for childbirth, drop back after the delivery as well as for the transportation of sick newborn from home to hospital and back will further increase the confidence of the community on the public health care system. The efforts will be made to further strengthen the system by ensuring availability of Referral Transport Vehicles (Ambulances) exclusively for the sick neonates.

7.5.5 **Intensified monitoring and supportive supervision:** In order to ensure quality of care a monitoring system will be established. Critical components of obstetric care will be monitored on regular basis by a team consisting of supervisors from district level. A nodal officer at district will be responsible for data compilation and drawing key findings for feedback sharing and necessary action for improvement. The officials deployed for monitoring will also provide supportive supervision for onsite correction.

7.5.6 **Deployment of skilled doctors and nurses:** Rational deployment of trained human resources is a big challenge. The State will prepare a comprehensive list of all the human resources available with their training status. This list will be made readily available to all planning units i.e. from block to State. This will help in mapping the trained human resources and their redeployment according to their training status. Shortage of human resources will be managed by hiring contractual as well as full time staff. The State will take this issue on a priority basis.

7.5.7 **Assessment of the quality of services including client satisfaction:** Tools will be developed to assess the quality of services which will also include the feedback from the beneficiaries. This exercise will be done biennially. The findings will be used during review meetings and for planning activities for the coming years.

7.5.8 **Ensure enabling environment for stay of beneficiaries for at least 48 hours:** The challenge to ensure the stay of beneficiary mothers and babies for at least 48 hours after the delivery will be addressed by counselling of women during antenatal checkups and post-delivery. To provide an enabling environment, beneficiaries will be provided free of cost referral transport, food, medicines, investigations and drop back facility under Janani Shishu Suraksha Karyakaram (JSSK). Utmost attention will be paid to ensure quality services.

7.5.9 **Strengthen capacity of staff for counselling for adoption of postpartum family planning method and on exclusive breast feeding, immunization:** As both mother and baby enter a new life stage, postpartum counselling of mothers is a very important area. Multiple counselling sessions at the health facility will pave the way for a better home care for mothers and newborns. The staff responsible for deliveries and post natal care will be given biannual refresher trainings focused on counselling of mothers. It is proposed to be mandatory at the time of discharge for mothers to be able to recall the knowledge they gained from counselling.

7.5.10 **Ensure referral transport system that reaches the patient within 30 minutes of receiving a call and a health facility within the following 30 minutes:** The referral transport will be restructured in such a way that every geographical location can be reached within 30 minutes

after receiving a call. For this an extensive exercise will be carried out to map all the villages and nearby transportation facility. Clear guidelines will be issued in accordance to JSSK to ensure both referral transport and drop-back facility.

7.5.11 **Service guarantees and elimination of out-of-pocket expenses - JSSK (Janani Shishu Suraksha Karyakram):** The availability of free drugs and consumables, diagnostics and referral transport has already been ensured at all levels for the pregnant women and neonates. As mentioned earlier, rate contracts have been finalized for the drugs and consumables at the State level for the essential drugs and consumables. Ensuring free referral transport for all pregnant women during pregnancy, for childbirth, drop back after the delivery and for the transportation of sick newborn from home to hospital and back will further increase the confidence of the community on the public health care system.

7.5.12 **Operationalisation of FRUs as per the guidelines:** All the FRUs in the State are expected to be made functional as per the guidelines in a phased manner. All the birth attendants and doctors will be trained in BEmOC and/ or CEmOC as per the guidelines. Blood Storage Units will be made functional in all FRUs. The staff posted in FRUs for blood storage units will be trained for necessary skills. All the necessary equipment will be checked for functionality and their maintenance will be ensured through annual maintenance contracts.

7.5.13 **Establishment of Maternal and Child Health (MCH) Wings:** It is important to provide a feeling of safety and privacy to mothers who have delivered at a health facility. At the health facilities where there is a high delivery load, the State government plans to establish maternal and child health wings.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
SKILLED OBSTETRIC CARE/ REFERRAL TRANSPORT						
	Intensified monitoring and supportive supervision	Take an in-depth review of monitoring and supervision system by February	Implement strengthened monitoring and supervision	Take another in-depth review of monitoring and supervision system	Implement strengthened monitoring and supervision	Identify specific roles and responsibilities of supervisors – from

		Launch new, intense system by April		by February Launch more intense system by April		PHC MO to DFW and MD NRHM and up to the PS; improve mobility and communi cation/ reporting
	Assessment of the quality of services including client satisfaction	April - May Plug gaps based on assessment		April- May Plug gaps based on assess-ment		
	Ensure enabling environment for stay of beneficiaries for at least 48 hours	Introduce counseling of families at all delivery points by counselors to be deployed at district and SDHs Track stay of beneficiaries				Link with provisions of JSY and JSSK; link with ASHA's home based newborn care action
	Strengthen capacity of staff for counselling for adoption of postpartum family planning method and on exclusive breast feeding, immunisation	At least one refresher session every 6 months on these key aspects				Medical College Hospitals should also be included in the breast feeding initiatives

	Ensure referral transport system that reaches the patient within 30 minutes of receiving a call and a health facility with in the following 30 minutes. Also system to drop back home under JSSK	Assess gaps in transport system in every district (PGI study) Devise dash board indicators that would be monitored at District and State level Develop integrated system with the medical colleges by March Stream line the transport system. Create an online system for monitoring the performance by May Introduce a system of audit	Ensure high performance; to be the best State in referral transport	Condition for referral of high risk cases from different levels of health institutions should be specified so that unnecessary referrals are avoided and, incase of referral, the patient is referred to the appropriate institution (Triaged transport) Link referrals to the Medical Colleges for emergencies in a structured way
	Service guarantees and elimination of out-of-pocketexpenses: Janani Shishu Suraksha Karyakram (JSSK)	Streamline payment sunder JSY/ JSSK. Set up grievance redressal system by March	Ensure streamlined system for JSY and JSSK	

EMERGENCY OBSTETRIC CARE (BEmOC and CEmOC)					
	Operationalisation of FRUs as per the guidelines including placement of all HR a. BEmOC b. CEmOC	a. 40 total b. 29 total	a.20 new b.12 new	a.20 new b.12 new	Ensure full complement of specialists; ensure adherence to protocols
	Blood storage units(BSUs)	24 already operational 29 BSUs to be made functional till April 2014	BSUs fully operational as per norms	BSUs fully operational as per norms	
	Establishment of MCH Wings at all high load facilities Trainings	6 to be operational by June 2014	17 facilities to be completed by end 2015		To be reflected in training matrix also
	LSAS Training Medical Officers CEmOC Training Medical Officers BEmOC Training Medical Officers SBA Training Staff Nurses LHV/ ANM	93 (74 Certified) 48 to be trained 7 existing 32 additional 31 existing 80 additional 360 staff nurses and LHV/ ANM each	Training of new ANMs/ nurses	Refresher trainings	Training of new ANMs/ nurses

7.6 NEONATAL HEALTH

7.6.1 The period immediately after delivery is the most crucial period for a newborn as it is responsible for nearly 25% of the total infant deaths. It is extremely important to ensure appropriate care to the newborn during this period irrespective of the place of delivery.

7.6.2 Recent trends have shown an increase in institutional deliveries with a shift from domiciliary to institutional deliveries and from private to public institutions. Home Based Newborn Care (HBNC) through ASHAs with support from ANMs is extremely important for reducing morbidity and mortality among newborns.

7.7 Home Based Newborn Care (HBNC)

7.7.1 For effective implementation of Home Based Newborn Care the State of Punjab intends to take following steps:

7.7.2 Completion of training of ASHAs for HBNC: Mop up trainings will be carried out to achieve 100% coverage of HBNC training for ASHAs.

7.7.3 Orientation of Programme Managers on Home Based Newborn Care: In order to effectively implement HBNC, it is imperative for providers and officials to have adequate knowledge and required skills. To ensure proper understanding about HBNC, all the district program managers and CMOs will be oriented in a State level workshop. The workshop will focus on developing understanding on HBNC guidelines, roll-out strategy, supportive supervision, data management and review of the program. The health providers i.e. ASHAs will be trained as per the norms. ANMs and other supervisory cadre will be oriented at block level hospitals (CHC/ FRU). To ensure quality of the trainings, State and districts will form and mobilize monitoring teams. The existing development partners working in the State will be encouraged to participate in the monitoring process along with the government.

7.7.4 **Supplies of kits:** All the trained ASHAs will be provided the kits for implementing the HBNC programme.

7.7.5 Framework for supportive supervision and monitoring, with well-defined roles and responsibilities of various supervisors at different levels – block, district and State:

7.7.6 For an effective supportive supervision it is necessary that supervisors have clarity about their roles and responsibilities. On the other hand the program managers must have the

details of supervisory cadre and the domains they will be supervising. For this, a detailed framework will be prepared for block, district and State level depicting the officials with their designation at each level and the areas they will supervise and at what frequency. During monthly reviews the achievements and areas for improvement will be discussed.

7.7.7 **Operationalize HMIS for HBNC:** The HMIS is operational in the State but it is not being used by some facilities for data updating. The State will identify the gaps and apply appropriate solutions for operationalizing HMIS in all units. The data from HMIS and monitoring system will be used for bottleneck identification and taking targeted corrective actions.

7.7.8 **Orientation of community stakeholders, specifically PRI, WCD etc:** The Health Department will facilitate orientation of officials from PRI, WCD and Education Departments to draw cooperation in implementation of health schemes. It will be ensured that the key messages reach up to the frontline functionaries of these departments to maximize the output.

7.7.9 **Achieve high HBNC coverage:** The State will improve HBNC coverage as per the decided targets in a phased manner.

7.7.10 **Evaluation and mid-course correction of the program:** As the HBNC is currently being implemented in the State, an evaluation of the program will be done. The information will be used to draw the measures needed to improve the current situation.

7.7.11 **Guidelines on permitting ANMs to administer injection Gentamicin in newborns to treat sepsis in selected situations**

The Government of India have recently developed guidelines on allowing ANMs to treat neonatal sepsis with injection Gentamicin and oral Amoxicillin where referral is not possible or is refused. These guidelines will be scaled up in high focus districts backed by close surveillance.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
HOME BASED NEWBORN CARE (HBNC)						
	Workshop of District Program Managers and CMOs on HBNC	January 2014; Quarterly review	Quarterly reviews			
	Training of all target ASHAs	Complete trainings by March Orientation for effective HBNC –at least one orientation for each ASHA	Refresher orientation – at least one session for each ASHA			
	Training of supervisory cadre/ASHA facilitators	Start in February and complete by May				
	Orientation of all ANMs	Start in February and complete by May				
	Ensure supply of kits	Develop SOP for uninterrupted kit supplies and procurement thereof by end of January and complete by June	Ensure regular supply of each component of the kit			
	Create framework for supportive supervision, with well-defined roles and responsibilities of various supervisors at different levels– block, district and State	Ready by end of February; Implement effective supervision system	Implement effective supervision system			
	Develop and operationalize a monitoring framework	Ready by March Operationalize by June	Implement			
	Operationalize HMIS for HBNC	Ready by February; Operationalize by June	Implement			

	Orientation of community stakeholders, specifically PRI, WCD etc.	Orientation of all PRI members and AWWs by September		Re-orientation of all PRI members and AWWs by September		
	Meeting on convergence with WCD	Ready by January; Quarterly meetings with WCD				
	Achieve high HBNC coverage	25% of birth cohort in first quarter, 60% in second quarter and 75% in the remaining period of 2014	90% coverage of the birth cohort	90% coverage of the birth cohort	90% coverage of the birth cohort	
	District, sub-district and block level orientation meetings on HBNC	Completed by July				
	Evaluation and mid-course correction	Second half of 2014				
	Implement guidelines on ANMs administering sepsis treatment with Inj. Gentamicin and Oral Amoxicillin	Train ANMs n High Focus Districts in implementing the guidelines to provide ambulatory treatment of neonatal sepsis where referral is refused or not possible	Implementation			

7.8 Facility Based Newborn Care (FBNC)

7.8.1 For reduction in neonatal mortality (NMR), especially early NMR, facility based new born care is to be strengthened. Care of the newborn including appropriate newborn resuscitation, thermal management, prevention and treatment of neonatal sepsis, jaundice and extra care of low birth weight babies at SNCU and NBSU is to be ensured. Establishment of NBSU (New Born Stabilization Units), NBCC (New Born Care Corners) and SNCU (Special Neonatal Care Units) at relevant levels in the health institutions envisaged as per the NRHM norms.

7.8.2 The State is going to operationalise 20 SNCUs, 78 NBSUs and NBCC at every delivery point soon. Availability and appointment of dedicated pediatricians/ trained Medical Officers and trained Staff Nurses (Human Resources) to handle sick newborns and children is still a matter of concern. Training of doctors and staff nurses in neonatal care would be ensured. The details of these trainings are given in the HR Development section.

7.8.3 The planned actions on perinatal and neonatal health will complement existing policies.

a) **Operationalize FBNC units:** Measures will be taken to complete the establishment of SNCUs, NBSUs and NBCCs as per the stipulated norms and time. Ensuring availability of doctors and staff nurses trained in neonatal resuscitation and care of the newborn would be an important intervention for improving child survival. Management protocols for these units will be prepared and made available.

b) **Training of staff:** A pool of trainers will be prepared for training of newly recruited staff at these units. Measures will be taken for quality assurance of these trainings.

c) **Establish linkages with mentoring institutions:** As these FBNC units deal with sick newborns, it is important to establish a support and mentoring system for the staff to perform optimally. There is a need to establish linkages with Medical Colleges and other institutes of excellence so that the staff posted at these units can get guidance on managing difficult cases and also refresh their knowledge and skills. The mentorship mechanism will be developed in a way so that the faculties from these institutions can visit these units on a periodic basis and assess the performance of the unit and provide necessary handholding of the staff. Besides, the visiting experts will also share their inputs with the health officials at district and State for necessary corrective actions. The mechanism will be evolved so that the mentoring institution can also provide support through telephone and internet.

d) **Establish ICT system for SNCU data management and reporting:** The State will replicate the Madhya Pradesh to implement SNCU data system.

e) **Establishment of follow-up program of SNCU graduates:** To ensure continuum of care, a system will be developed through which all SNCU graduates may be tracked and their wellbeing can be assessed. They will be called for regular checks. For this every time a newborn will be discharged, the concerned ASHA/ ANM will be contacted and will be shared the current clinical status. The data operator at SNCU will track the wellbeing of newborn through telephone to ASHA on a periodic basis as well as call the babies for follow up. In addition, home visits by ASHAs will be ensured and monitored.

f) **Formulation of quality assurance system:** Regular evaluations system will be established. For this, checklists for the use of supervising staff will be developed. The findings from these assessments will be used to identify the gaps for improvement. District and State nodal officers will keep a track on measures taken to improve the situation within the given timeline. Mentoring institutions will play an important role in the process. A comprehensive review of these units will take place on a quarterly basis.

g) As a large population of Punjab receives health care from private sector, it would be important to establish reporting and surveillance mechanisms for collecting maternal and infant mortality statistics separately for private and public institutions. Comparatively higher figures in a particular set-up can help identify the underlying problems and devise appropriate solutions.

h) **External evaluation:** To draw a clear picture of the FBNC units, the State will invite external evaluators from institutes of excellence. This will help in standardization of functioning of the units and will give an unbiased view about the functioning. The nurses trained for specific activities like SNCUs should not be shifted from there as that would adversely affect the working of the SNCUs. They should also be given some incentive for working in the intensive areas.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
FACILITY BASED NEWBORN CARE (FBNC)						
	Fully staffed and operationalized SNCUs as pernorms	Two existing to be strengthened Additional 8 SNCUs (Total 10)	Additional 10 SNCUs (Total 20)			
	Fully staffed and operationalized NBSUs as per norms	Total 78 to be operationalized by May				
	Fully staffed and operationalized NBCCs as per norms	172 already underway Additional 236 to be developed (Total 408 by May)				
	Training of staff	As per training matrix				
	Establish linkages with mentoring institutions	With Government Medical College, Patiala, and other colleges For 10 SNCUs Use telemedicine to link	For all 20SNCUs	Sustain strong mentoring		Link with Amritsar, DMC, CMC & Faridkot Medical Colleges
	Establish online system for SNCU data management and reporting as in MP	Establish system by May and operationalize fully thereafter	Implement fully			System esta-blished also in Haryana
	Establishment of ICT based follow-up program of SNCU graduates	Establish system by May and operationalize fully thereafter	Implement fully			
	Establish a system to monitor newborn care in the private sector	System established by July	Reports generated	Reports generated	Reports generated	

	Formulation of quality assurance system	Develop QA system by August; Start implementation October	Implement	Review, refine. Imple-ment	Imple-ment	
	Review of progress of FBNC	Quarterly review				
	External evaluation	Evaluation in April-August; Introduce improvements		Evaluation in April-August; Introduce improve-ments		

7.9 ROUTINE IMMUNIZATION

7.9.1 Routine Immunization plays an important role in reducing infant morbidity and child mortality. Immunization coverage in the State is good at 83% (CES 2009) but further focus is required to ensure achievement of fully immunized status of children particularly among the unreached children.

7.9.2 Immunization of the children born in the health institutions would be ensured before they are discharged from the hospital. The co-ordination mechanisms between labour room/ postpartum ward staff and immunization clinics/ PP Units would be strengthened. The cold chain in the State is appreciated at the national level which needs to be sustained in order to maintain the quality of immunization.

7.9.3 The State is Polio free since 2009 and the status would be maintained through continuous efforts and AFP surveillance. Measures to avert cross border transmission of Polio Virus will be sustained.

7.9.4 The State foresees following initiatives to further strengthen immunization in the State:

a) Map the migratory population: In order to sustain the immunization efforts the State aims to reach the unreached. Migratory populations pose a great challenge to maintain the immunization coverage. Furthermore, these populations may introduce vaccine preventable diseases in Punjab from other endemic States. The migratory populations will be mapped and updated on regular basis. The plan will be made to link these pockets with a health facility and health provider so that vaccination can be ensured.

b) Hold health camps and campaigns: To raise awareness about immunization and other health services health camps and campaigns will be organized in the targeted populations. These events will be organized at all levels viz. community, hospitals and schools etc.

c) Supportive supervision: The supportive supervision as a part of integrated approach for maternal and child health services will be put in place.

d) Study on limitations and solutions to improve coverage in the unreached population: The State wishes to conduct a study to explore the unreached populations and collect

evidences to devise measures to improve the immunization coverage. The Gap analysis exercise will also add to the knowledge about achievements and gaps.

e) Pentavalent vaccine introduction: The State plans to introduce pentavalent vaccine by the start of next financial year. For this the State will put in place the mechanisms to assess the demand of vaccine and to ensure undisrupted flow of supplies.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
Immunization						
Routine	Map the migratory population		Remap		Remap	
	Hold health camps and campaigns	Implement				
	Study on limitations and solutions to improve coverage in the unreached population	By April				
	Findings from GAP analysis to be taken into account	Introduce improvements	Implement			
	IEC/ BCC to be sustained in VHNDs	Regular campaigns				Link with IEC/ BCC strategy
	Pentavalent vaccine introduction to be requested to the GoI	Develop surveillance system; Introduce	Scale up			
Polio	Sustained efforts	Sustained effort and AFP surveillance				
	Cut transmission of WPV will be sustained	Ensure measures to avert cross border transmission				

8.1 INFANT AND YOUNG CHILD FEEDING

8.1.1 Exclusive breast feeding initiated immediately after birth and continuing up to 6 months of age provides all the nutritional requirements and bonding needs of the infant. The practice of exclusive breast feeding prevents up to 13% of all deaths in under-five children. Early initiation of breast feeding in all newborns would be mandatory for all institutional deliveries.

8.1.2 All district and sub-divisional hospitals would be made baby friendly through breast feeding hospital initiatives by the end of next financial year.

8.1.3 The implementation of Ministry of Health & Family Welfare's Guidelines for Infant and Young Child Feeding Practices (2013), to ensure optimum feeding for all children including those in difficult circumstances such as children infected or affected by HIV/ AIDS and low birth weight (LBW) is one of the major strategies for reducing the incidence of infections and malnutrition. The guidelines on infant and young child feeding need to be ensured at all levels i.e. family, community and health institutions. It would be linked with implementing the IMS Act in its letter and spirit. A State level sensitization workshop followed by district level advocacy meetings would be conducted within next one year with the help of BPNI.

8.1.4 Vitamin A supplementation along with routine immunization is an important strategy. Adequate supply of Vitamin A has been ensured to all health institutions through Rate Contract by the Punjab Health Systems Corporation.

8.1.5 Malnutrition in the infants would be taken care of with the help of skill trained ASHA and Anganwadi Workers by monitoring through growth charts printed in the MCP card. ANMs would also be sensitised in educating the mothers about breastfeeding and monitoring of developmental milestones in children.

8.1.6 Well Baby Clinics integrated with IYCF Counselling Centres or Skilled Lactation Counsellors to be operationalised at all healthcare institutions in the State.

8.2 ADDRESSING DIARRHEA AND PNEUMONIA

8.2.1 The major causes of death in under-five children in Punjab are Acute Respiratory Infection (ARI) particularly pneumonia, diarrhea and malnutrition. All these deaths are preventable through simple measures such as use of ORS/ Zinc and antibiotics. Most of these cases can be managed at the community level. However, severe cases need prompt referral and optimum treatment at the facility level. The treatment of these diseases would lead to rapid reduction in childhood mortality. A major and rapid reduction in childhood mortality is possible in the

State by addressing these diseases as the guidelines and systems are already in place.

8.2.2 To address diarrhea and pneumonia, following measures are planned to be taken:

a) **Ensure supplies:** As per the estimated incidence of diarrhea and pneumonia, State will procure the essential drugs which include ORS kits, Zinc tablets and antibiotics etc. It will be ensured that supplies reach the health provider in time to minimize stock-outs. Utmost care would be taken about the quality of medicines.

b) **Circulation of zinc guidelines:** Zinc guidelines will be disseminated up to the level of ANMs and ASHAs. This will help minimize the wastage and proper utilization of supplies.

c) **Orientation and sensitization of health functionaries:** Trainings and refresher orientation of health workers will be done to develop adequate understanding about management of diarrhea and pneumonia. Special focus would be given to training on usage of Zinc in diarrhea.

d) **Campaigns for pneumonia and diarrhea:** Special drives will be conducted for diarrhea and pneumonia. These campaigns will focus on generating awareness in community about prevention and appropriate treatment. Usage of ORS and zinc in treatment of diarrhea will be promoted. The campaigns will be undertaken in community as well as in institutions like schools, health facilities and Anganwadi centres etc. focused BCC and IEC packages will be developed for maximizing the impact. Before the onset of diarrheal season ORS demonstration session will be done in every village during VHND.

e) **Sensitization of the doctors (IAP, IMA and other professional bodies) for Zinc treatment in diarrhea:** To increase usage of zinc by medical practitioners working in private sector, orientation sessions will be organized. The opportunity of periodic meetings of these professional bodies will be utilized for the purpose. Health department will keep a track of these meetings and prepare focused resource material for these meetings.

f) **Enhance visibility of the program at political level:** Political leaders would be involved in campaign against diarrhea and pneumonia to ensure commitment at all levels.

g) **Enhancing free availability of ORS from non-government sites like places of worship, grocery shops, ration shops and primary schools:** A special needs assessment exercise will be done to identify the non-government sites for free distribution of ORS. This will help the community to have easy accessibility of ORS and will ensure timely treatment.

h) **Supportive supervision and enhance focus in monitoring:** During field visits by health supervisors and officials, management of diarrhea and pneumonia will be at the focus of supportive supervision and monitoring procedures. During block and district level reviews the findings will be discussed for future action.

i) **Pre-service training of nurses and doctors about usage of Zinc:**

Professional training institutions like Nursing Schools and Medical Colleges will include in their curriculum the details about usage of zinc in treatment of diarrhoea. A notification for the same will be issued and compliance will be monitored.

j) **Provision of antibiotics:** Cotrimoxazole and/or Amoxycillin for treatment of non-severe pneumonia at home and supervised treatment of severe pneumonia at a health facility.

k) **Addressing the problem of water and air pollution through IEC/ BCC.**

l) **Child safety:** Safe use of insecticides and pesticides, preventing child abuse specially the girl child.

8.2.3 Collaborate with development partners and other agencies: This will be done to promote the home treatment for ARI, use of Oral Rehydration Therapy, Hand washing and Zinc to reduce mortality and promote health of the children.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
DIARRHOEA AND PNEUMONIA						
	Supportive supervision and enhance focus in monitoring	Plan stronger supportive supervision	Implement			
	Ensure ORS kits with ASHAs	Uninterrupted supply of ORS with ASHAs				
	Campaign for diarrhea	May-June each year				
	Campaign for Pneumonia including community campaigns	October-December each year				
	Public awareness through BCC/IEC	Reflected in BCC/ IEC strategy				
	Enhance visibility of the program at political level	Engage/ involve top political leadership				

	Sensitization of HWs at all levels – ASHAs, AWWs, ANMs	Refresher orientation in monthly meetings May/ June for diarrhoea and September/ Octobereach year for Pneumonia				
	Optimizing and streamlining of supplies					
	Ensure ORS demonstration before diarrheal season in every village during VHND (April - July)	Each village to have a demonstration in diarrhoea season each year Every household to be given 2 packets of ORS by March/ April each year				
	Strengthen facilities for treatment of severe diarrhoea and pneumonia	Review gaps, if any, in treatment (drugs, oxygen, antibiotics, supportive treatment Implement effective care				
	Enhancing free availability of ORS from non-government sites like places of worship, grocery shops, ration shops and primary schools	Make plan by March. Implement	Implement	Evaluate imple-ment	Imple-ment	
Zinc for treatment of diarrhea	Ensure supplies	Ensure uninterrupted supply at SCs and all facilities Check supplies				
	Circulation of Zn guidelines Sensitization of the doctors (IAP, IMA and other professional bodies etc.) for Zinc treatment in diarrhoea	Circulated widely by March				Involve IMA, IAP, etc.
	Orientation of all doctors, ANMs and nurses	By the end of 2014				
	Pre-service training of nurses and doctors must have Zinc included by active participation of Medical Colleges	Introduce in the curricula				
	Special efforts to ensure girl patients access care	Raise awareness of the problem in the Government and among other stakeholders				Monitor admissi on rates of girls in SNCUs, Medical Colleges etc.

8.3 FAMILY PLANNING

8.3.1 Contraceptive Services and Comprehensive Abortion Care

a) With increased institutional deliveries postpartum contraceptive advice to the newly delivered mothers is important to promote spacing between children. This provides a very good opportunity to promote postpartum IUCD. Adequate capacity building of the doctors and staff nurses apart from dedicated counselors for contraceptive advice at the delivery points is required. At the same time contraceptive services would also be promoted through community-based door step distribution by ASHAs and AWWs. The counselling of post natal women for sterilization would also be taken up through counsellors and available manpower.

b) It is well known that unsafe abortions account for 8% of maternal deaths in India. Besides this, women who survive unsafe abortion are likely to suffer long term health complications. Safe and comprehensive abortion care is an essential component of overall pregnancy care. Consistent efforts would be made to expand and sustain safe abortion services in peripheral health care facilities in rural areas. The strategy for providing safe abortion services are provision of Manual Vacuum Aspiration (MVA) facilities and medical methods of abortion in 24*7 PHCs. Comprehensive MTP Services already available in the district and sub-divisional hospitals would be strengthened further by training of doctors (gynaecologists).

c) In order to enhance awareness about family planning and safe abortion services the State will develop good IEC material and conduct campaigns both at community and facility level. A rapid assessment will be done to identify bottlenecks in supplies both in facilities and at field level i.e. ANMs and ASHAs. Measures will be taken to devise appropriate solutions for ensuring regular supplies. The deployment of human resources for birth spacing, sterilization and abortion services will be according to their training status. To ensure counselling of families for birth spacing methods especially interval IUCD, the hospital staff will be provided appropriate orientation.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
FAMILY PLANNING AND SAFE ABORTIONS						
General	IEC/ BCC	Implement stronger BCC/ IEC campaign Mount intensified campaigns on World Population Day etc.				Align with BCC/ IEC strategy
	Rapid assessment of bottlenecks in supplies of contraceptives to facilities and to ANMs and ASHAs	Completed in February Improvements implemented		Repeat assess-ment		
	Supplies of contraceptives to ASHAs and ANMs	Ensure uninterrupted supplies at all levels, in particular, ANMs and AWWs				
Sterili-zation	Skilled manpower	Ensuring availability of skilled manpower for male and female sterilization procedures at all designated facilities				
Abortion care	Manual Vacuum Aspiration (MVA)	Provision of Manual Vacuum Aspiration (MVA) at all 24*7 PHCs, CHCs and DHs				
	Comprehensive Abortion Services	Provision of Comprehensive Abortion Services at all district hospitals				
	Ensuring trained manpower	Assess gaps in trained manpower by May Accomplish training of all the target providers				
Promo-tion of spacing methods: Interval IUCD	Ensure training of manpower	Assess gaps in trained manpower Accomplish training of all the target providers				
	Promote individual counselling in hospitals soon after birth	Develop job aids by June		Imple-ment		

8.3.2 Implementation of PC & PNDT Act

In spite of the fact that there has been an improvement in the child sex ratio in the State, there is further scope in improving it and the State is committed to reverse the trend in female foeticide. Instructions have been issued to all appropriate authorities to enforce the PC & PNDT Act in letter and spirit and take strict action against defaulters. Further, in order to give impetus to reduction of sex discrimination the State had made the entire treatment of girl children free up to the age of 5 years. This would help further reduce the gap in child sex ratio in the State.

8.3.3 Improving care seeking for the girl neonates and children

The care seeking for the girl neonates and children is often delayed or denied. This results in higher probability of complications and mortality among girl infants and children compared to boys. The State has recently made provision for free treatment of girls up to 5 years of age by effectively extending the reach of JSSK beyond 5 years through its own resources. Active campaigns will be undertaken to raise awareness of the public on this issue of great importance.

8.3.4 Focus on development, mental health and substance abuse

The most important groups of disorders that should be taken cognizance of in the planning and implementation of the RMNCH+A are as follows:

a) Mental retardation and other neurodevelopmental disorders

b) Emotional disorders, adjustment disorders and conduct disorders

c) Substance use disorders

8.3.5 These disorders are not mutually exclusive and comorbidities are high. However, at a meta-level, this scheme is useful. This is because these groups of disorders appear in the same chronology as given above, the diagnoses are usually obvious and can be easily differentiated from the other groups and the preventive, treatment and rehabilitative modalities are similar within each group.

The RBSK offers a useful platform to address these challenges.

8.4 SCHOOL GOING/ OUT OF SCHOOL CHILDREN AND ADOLESCENTS

8.4.1 School Health Programme provides for health care of the school going children. The School Health Programme would be strengthened and utilized to screen children for various diseases, deficiency disorders and disability, including visual disorders, congenital cardiac

diseases and most importantly anaemia. Early intervention for childhood disorders under Rashtriya Bal Swasthya Karyakram (RBSK) will be strengthened through addition of more manpower and capacity building of the existing human resources. The opportunity would also be used for counselling of children towards lifestyle diseases.

8.4.2 The most important population group in the community, the adolescents are usually at a loss to have advice on their problems. They usually learn from their peers who are also as ignorant. It is, therefore, important to give appropriate attention to this age group. The situation is much worse for the adolescent girls who are passing through an important phase of their lives but are unable to get any advice due to social setup in the State.

8.4.3 Adolescent health services established at district and sub-divisional hospitals and CHCs are working towards improving adolescent health in the community. There is an urgent need to provide adequate manpower at the State and District levels for the better functioning of School Health and Adolescent Health services. Dedicated counsellors are required at health facilities to cater to the needs of adolescents. Menstrual Hygiene Scheme for adolescent girls would aim at providing them advice and facilitate provision of sanitary napkins through social marketing.

8.4.4 Adolescents constitute 25% of the population in the State. The major issues associated with the adolescents are inadequate knowledge and reluctance to seek help lead to myths and misconceptions. With this limited knowledge about their body they find themselves vulnerable to HIV, STI, Drug Abuse, Sex Abuse etc. Girls particularly are more vulnerable due to socio cultural barriers. Given the above scenario, the Government of India has recognized the need to impact the health seeking behavior of adolescents through Adolescent Reproductive and Sexual Health (ARSH) Strategy. For the proper implementation of ARSH the Government of Punjab will deploy dedicated counsellors for ARSH & outreach sessions in schools and VHND. Furthermore, dedicated Medical Officers for ARSH will be positioned in ARSH clinics. It is very important to improve involvement of adolescents for which social media, SMS, FM radio will be used. Suitable material will be developed for these platforms.

8.4.5 Weekly Iron Folic Acid Supplementation (WIFS) is an important initiative to address iron and folic acid deficiency amongst school going children and adolescents. To bolster the support to districts the State will hire a State level WIFS/ Menstrual hygiene consultant. To give WIFS a fresh impetus re-sensitization and supportive supervision of frontline workers will be done. Male volunteers will be hired at each sub-centre level to ensure services to out of school/ school drop-out boys. Cooperation and coordination with media will be increased to spread the message about benefits of WIFS and allay fears about the side effects.

8.4.6 Menstrual Health Scheme has played an important role in highlighting issues related to health and hygiene of adolescent girls. To improve the reach of services, an assessment will be done for need of additional AWW in urban slums. Resources will be strengthened as per the findings. Further, to support the program, recruitment of program consultant and statistical assistant at State & district level will be done, respectively. For proper implementation of the scheme inter-sectoral coordination especially with education department will be established. To involve a volunteer/ social worker/ mid-day meal worker for MHS, a policy dialogue will be started with education department. The State will develop guidelines for distribution of sanitary napkins in rural areas, urban slums by ASHAs and AWWs respectively. In order to reach out to more girls, WIFS days in schools will be utilized.

8.4.7 The Department of Health would work closely with the Department of Education in this area and would use EDUSAT for its activities.

8.4.8 Punjab is a sports-loving State. Since sports injuries are common, education for their prevention would be disseminated. Seminars on health and fitness of sportsmen will be held in schools.

8.4.9 Initiatives for better lifestyles (prevention of obesity in children in urban and rural areas. education regarding TV viewing, time spent in sports and enhanced physical activity including sun exposure) will be undertaken.

8.4.10 Monitoring of school health programme including the Mid-Day Meal Programme will be done for quality of services.

<table>
<tr><th>Strategic Output</th><th>Actions</th><th colspan="4">Time Frame</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>2014</td><td>2015</td><td>2016</td><td>2017</td><td></td></tr>
<tr><td colspan="7">ADOLESCENT HEALTH</td></tr>
<tr><td>Weekly Iron Folic Acid Scheme (WIFS)</td><td>Re-sensitization and supportive supervision at the grass-root level</td><td>April 2014</td><td></td><td></td><td></td><td rowspan="4">WIFS should be linked with the school health prog-ramme as well as with Mid-Day Meal Prog-ramme</td></tr>
<tr><td></td><td>Increase cooperation & coordination with press/media to highlight benefits and allay fears about side effects of WIFS</td><td colspan="4">Meeting with press/media 4 monthly</td></tr>
<tr><td></td><td>Recruitment of WIFS/MH & consultant</td><td colspan="4">By April 2014</td></tr>
<tr><td></td><td>Male Volunteers for out of school boys</td><td>Recruitment</td><td>Recruitment completed</td><td></td><td></td></tr>
</table>

Menstrual Hygiene Scheme (MHS)	Assessment and mapping of the need for additional AWWs in urban slums	By December 2015				Align with NUHM
	Recruitment of Programme Consultant & Statistical Assistant at State & District level	Start	Completed by May 2015			
	Improved coordination with Education Department	Quarterly meetings with education department at directorate level and at principle secretary level every 6 months				
	Involve a volunteer/ social worker/ mid-day meal worker for MHS	Prepare a concept note Discuss with Education Department in first quarterly meeting of 2014	Implement			
	Distribution of sanitary napkins through ASHA in rural areas	· Policy decision in January 2014 · Guidelines in April 2014 Implementation May 2014 onwards	Implement			
	Distribution of sanitary napkins through AWW in urban areas and slums	· Joint policy decision by Feb2014 · Guidelines by May 2014 Implementation from August 2014 onward	Implement			
	Distribution of sanitary napkins in schools on WIFS day to reach out to more girls	Prepare a concept note by February Discuss with Education Department in first quarterly meeting of 2014	Implement			

Promote healthy habits	Use EDUSAT to promote ADH	Prepare MoU with Education Deptt; Implement	Implement	
	Promote life-long habits for healthy lifestyles	Develop program activities Develop resource materials Plan activities Develop MoU with Education Department	Implement	Prevention ofobesity, drug abuse to be important focus
Gender sensitivity counseling	Counseling adolescents on gender imbalance and sensitivity	Develop approach paper; plan activities	Implement	
Preparing adoles-cents for parent-hood	Preparing adolescents to be good parents; preparing girl adolescents for motherhood (breastfeeding, mother craft, child development etc.)	Develop approach paper; plan activities	Implement	
	Prevent sports injuries in school	Prepare educational material for dissemination by July	Seminars on health and fitness of sportsmen Disseminate education materials	
Link with MDM Prog-ramme	Monitor quality of Mid-Day Meal Programme (food quality)	Develop agreed SOP for monitoring quality of MDM Programme with Education Department	Implement	
Access to Adoles-cent Reproduc-tive and Sexual Health (ARSH)	Dedicated counsellors for ARSH & outreach sessions in schools and VHND Dedicated Medical Officer for ARSH Involve youth by social media, SMS, FM radio on ARSH Establish helpline for ARSH	· Concept note and guidelines April 2014 · Approvals in June 2014 Implemen-tation from August onward	Implement	

8.5 NATIONAL IRON + INITIATIVE

Anaemia is an important public health problem all over the country. The State has taken Iron + Initiative under the NRHM very seriously. As per the strategy, iron and folic acid supplementation is being provided to children from 6 months to 19 years as per the Government of India guidelines as below:

a) 6 months to 5 years – IFA Syrup containing 20 mg elemental iron and 100 mcg Folic Acid – Biweekly.

b) 5 – 10 years – IFA tablet containing 45 mg elemental iron and 400 mcg Folic Acid – Weekly

c) 10 – 19 years – IFA Tablet containing 100 mg elemental iron and 50 mcg Folic Acid – Weekly

d) Women of Reproductive Age group – Tablet containing 100 mg elemental iron and 50 mcg Folic Acid – Weekly

e) Pregnant & Lactating Women – Tablet containing 100 mg elemental iron and 500 mcg Folic Acid daily for 100 days during pregnancy + same dose for 100 days in postpartum period.

8.6 SEXUALLY TRANSMITTED DISEASES AND REPRODUCTIVE TRACT INFECTIONS (STI AND RTI)

STIs and RTIs constitute an important public health problem in India. These diseases are responsible for several adverse pregnancy outcomes including abortion, stillbirth, preterm delivery, low birth weight, postpartum sepsis and congenital infection. These infections also have important bearing upon the health of the adolescents who are prone to them due to inadequate knowledge and awareness. The control of STI/ RTIs during pregnancy is a priority and would be linked to the pregnancy care. All delivery points and other health institutions would be strengthened to provide RTI/ STI services. RTI/ STI will be included in the education material of ARSH. With the support of NACO, RTI/ STI services will be improved. An assessment to identify gaps in supplies and diagnostic services will be done and appropriate solutions for the identified problems will be devised to ensure quality services. Resources for IEC/ BCC will be developed to generate awareness about prevention and treatment. ANMs will be oriented during monthly meetings about RTI/ STI, so that they can effectively counsel the target groups in their catchment areas about appropriate preventive measures and health seeking.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
RTI/STI						
	Incorporate RTI/ STI in education material of ARSH	Develop materials by April Implement	Implement			
	Strengthen RTI/ STI activities with the NACO	Quarterly Joint Review Meetings at State and district level				
	Diagnostic services	Identify gaps Plug gaps Ensure uninterrupted services	Ensure uninterrupted services			
	Assessment of gaps in supplies	By March				
	Ensure supplies	Ensure supplies of drugs for treatment of RTIs/ STIs				
	IEC/ BCC activities	Carry out IEC/BCC campaign along with HIV and other messages				
	Strengthening the involvement of ANMs	Refresher trainings of ANMs through monthly meetings				
	Treatment kits	Ensure optimum supplies				
	Monitoring	Review of the status of the program; Plan intensified focus and supervision	Implement intense supervision and monitoring			

8.7 URBAN HEALTH

8.7.1 Recruitment of 308 Medical Officers, 308 Staff Nurses, 784 ANMs, 154 Pharmacists and 154 Laboratory Technicians on regular or on contract basis is envisaged under the National Urban Health Mission to strengthen the health services in the urban areas.

8.7.2 A study is required to understand in depth the reality, role/ strengths of various service providers/ agencies and pathways to improve RMNCH+A healthcare using the NUHM framework. In addition State level consultation would be held and action plan developed under an expert group to develop an action plan.

8.7.3 As a part of community participation and risk pooling effort there is a plan to enroll 8,769 Mahila Arogya Samitis at the rate of one per 400 slum population.

8.8 NEW INITIATIVES

8.8.1 On a mission to improve continuously, the State of Punjab is open to adopt proven, cost effective and high impact technologies. To reinforce the commitment the State has taken initiative to include three major interventions in the State Action Plan viz.

a) Preconception Folic Acid Prophylaxis to prevent neural tube defects

b) Elimination of Rh linked disease through counseling, screening and timely intervention, and

c) Thalassemia screening of adolescents.

8.8.2 To rollout the new initiatives the State will hold detailed consultations and field tests to design guidelines for implementation, and supportive supervision and establish reporting and feedback mechanism.

8.8.3 Another important initiative will be detecting and managing developmental delays and behavioural problems of children within the RBSK, and to prevent substance abuse among the adolescents for which a plan will be developed after consultations.

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
NEW INITIATIVES						
Focus on child development and mental/ behavioural health	Action plan for child development, mental-behavioural health and substance abuse prevention	Hold consultation Develop plans embedded in RBSK, mental health and substance abuse prevention programs				
Prevention of Neural defects in newborns by preconception folic acid prophylaxis	Designing guidelines for providing preconception folic acid to women planning to conceive	By July 2014				
	Planning of orientation for health providers (AWW, ASHA and ANMs)					
	Planning and roll out of preconception folic acid strategy					
	Plan and establish supportive supervision					
Elimination of Rh linked disease	Develop guidelines for counselling of adolescent boys and girls and screening of expecting couples					
Screening of adolescents for Thalassemia	Consultation to draft a policy	Consultation				
	Planning, advocacy and implementation		Planning, advocacy and implementation			

CHAPTER 5

8.9 HEALTH SYSTEMS STRENGTHENING

8.9.1 The improvement in health care services requires strengthening of the health system. The building blocks of health system are: policy and stewardship; health financing; physical infrastructure; skilled, motivated and enabled human resources; service delivery; monitoring and supervision, and health information and management system.

9.1 HEALTH INFRASTRCTURE FOR RMNCH+A

9.1.1 NRHM has given a major impetus to health infrastructure in the State. The State is strengthening its facilities with the aim of ensuring IPHS norms at all levels.

9.1.2 In order to provide good maternal and child health services in the State, 100 government health institutions will be strengthened to IPHS standards for round-the-clock services. These include 22 district hospitals, 41 sub-divisional hospitals and 37 Community Health Centres (CHCs). These institutions would, in future, be supplemented with the strengthening of more peripheral institutions which would take the load off these institutions. Improvement in the infrastructure in Medical Colleges is also being taken up on priority.

9.1.3 Creation of Sick Newborn Care Units (SNCUs), Newborn Stabilization Units (NBSUs) and Newborn Care Corners (NBCCs) at all delivery/ childbirth points, is high on the agenda of the State. The process for establishment of SNCUs, NBSUs and NBCCs was initiated in 2010-11. Till date 5 SNCUs – three at Medical Colleges and 2 at district hospitals (Patiala and Bathinda) have been operationalised. Work is already in progress at 8 district hospitals for the creation of SNCUs. NBSUs and NBCCs are being strengthened at the district and sub-divisional hospitals, CHCs and 24*7 PHCs.

9.1.4 Consequent upon the 4-point reduction in the IMR, the State has received an incentive grant of Rs. 106.71 crores from Thirteenth Finance Commission, Govt. of India, for the year 2011-12. This grant is being utilized for improving the Child Health Services in the State under the guidance of a High Level Committee constituted under the Chairmanship of Chief Secretary. The detailed proposal for the utilization of this grant is as below:

S. No.	Activity	Estimated Cost (Rs. in crores)
1.	Up gradation of Medical Colleges	
	Govt. Medical College, Amritsar	2.5
	Govt. Medical college, Patiala	15
	GGS Medical College, Faridkot	15
2.	Strengthening of District and Sub-District Hospitals	
	1. Establish/ Strengthen SNCUs at District	3.25
	Hospitals	
	a. CH Mansa	
	b. CH Sangrur	
	c. CH Barnala (Equipments)	
	d. CH Bathinda (Equipments)	
	e. CH Muktsar	
	f. CH Fazilka	
	g. CH Faridkot (Equipments)	
	h. CH Ferozepur	
	i. CH Jalandhar (Equipments)	
	j. CH Kapurthala	
	k. CH Tarn Taran (Equipments)	
	l. CH Amritsar (Equipments)	
	m. CH Gurdaspur	
	n. CH Pathankot	

S. No.	Activity	Estimated Cost (Rs. in crores)
	o. CH Mohali (Equipments)	
	p. CH Roop Nagar	
	q. CH SBS Nagar (Equipments)	
	r. CH Ludhiana (Equipments)	
	s. CH Fatehgarh Sahib	
	2. Creation of Mother and Child Hospitals	69
	a. Ajnala (Amritsar)	
	b. Manawala (Amritsar)	
	c. Kotkapura (Faridkot)	
	d. Batala (Gurdaspur)	79
	e. Sultanpur (Kapurthala)	
	f. Kapurthala	
	g. Ludhiana	
	h. Mohali	
	i. Mansa	
	j. Rajpura (Patiala)	
	k. Roop Nagar	
	l. Mandi Gobindgarh (Fatehgarh Sahib)	
	m. At five Urban Health Care Units in Amritsar	
3.	Strengthening of State MCH Cell	2
	TOTAL	**106.75 Cr**

9.1.5 The Government has already started the expansion of the physical infrastructure and the faculty of the Medical Colleges. But there is a need for a comprehensive improvement in maternal and child health services at all the government Medical Colleges. It was decided that a specific action plan be developed accordingly in consultation with Medical Colleges by March 2014 and implemented as a part of the present initiative. Such a plan should also take into account the report of the Task Force on improvements in medical education already prepared.

9.1.6 The aim of strengthening the infrastructure is to ensure that 100 public health facilities achieve IPHS standards by 2016 by creating the necessary infrastructure, equipment and manpower in order to ensure high quality care of mothers, neonates, children and adolescents. Efforts for quality improvement in all facilities will continue simultaneously. The focus, in particular would be on ensuring skilled birth attendance, essential newborn care, care of the small/ sick neonates, care of sick children and adolescent friendly services. Furthermore linkages between facilities, and facilities and community, would be strengthened.

9.1.7 Existing linkage of all the district hospitals with Medical Colleges and then with Institutes like PGIMER though tele-technology will be used for child health activities not only for curative aspects but also for preventive aspects especially for IEC activities. There is a need to use the National Knowledge Network SWAN for making linkages between different health facilities.

9.2 Blood Banks and Blood Storage Units

Availability of blood transfusion facilities at FRUs and district hospitals is extremely important. Forty blood banks and 28 Blood Storage Units (BSUs) are already functional in the State and 29 BSUs are being operationalised soon by the PHSC (Punjab Health Systems Corporation). By the end of next financial year, the State plans to have BSUs at all the FRUs.

9.3 HUMAN RESOURCES

9.3.1 Infrastructure strengthening is of little use if it is not supplemented by deployment of appropriately trained human resources.

9.3.2 The Government will take effective steps to ensure deployment, retention and high motivation of the health workforce.

a) The Government also will take all round actions to ensure high level of motivation and quality of performance by doctors, nurses and other health professionals through enabling policies and service conditions.

b) The Government will review transfer procedures to ensure that there is confidence among the doctors and other health professionals.

c) The Government will take innovative steps to fill vacancies deploy specialists, program managers and doctors, and to get the best out of their performance, including:

i) Monetary and non-monetary incentives to work in underserved areas.

ii) Redeployment of retired doctors on contract.

iii) Performance-based compensation for better outcomes (such as survival of LBW neonates in SNCUs, high coverage of ORS etc.).

iv) Regularization of contract doctors without change in posting.

v) Strategic placement of the specialists to make facilities operational rather than spreading them thin without effect.

9.4 The State would create a role model system of ICT driven distance education and telemedicine system linked to the telemedicine hub of PGIMER, Chandigarh.

9.4.1 **Female Medical Officers** would be deployed at all 24*7 PHCs in order to provide adequate and appropriate ante-natal, natal and post natal care to the mothers and newborns.

9.4.2 Readjustments in the deployment of manpower, their adequate training, orientation and motivation would be some of the pre-requisites for improving the health status of these groups.

9.4.3 **Rational posting** of the trained manpower will be ensured to improve the functioning of the health institutions.

9.4.4 Recruitment of manpower for urban areas specifically urban slums under the Urban Health mission would help reduce the gaps in health care services in the urban areas. Following trainings targeted at maternal and child health care are being carried out in the State:

a) F-IMNCI (Facility Based Integrated Management of Neonatal and Childhood Illnesses) Training

Care of the child in the health care institutions where the services of specialist paediatricians are not available is a challenge. Training of M.B., B.S. Medical Officers in F-IMNCI is an important intervention for improving the care of the newborn child in the 24*7 PHCs and FRUs. Till date 377 Medical Officers have been trained in F-IMNCI. The plan is to train another 640 Medical Officers in the next two years. The availability of trained staff nurses to complement the trained doctors is a prerequisite for improving maternal and child health care services. F-IMNCI Training of staff nurses deployed at the centres where F-IMNCI trained doctors are working is important. Four hundred F-IMNCI trained staff nurses would be supplemented with another 640 during the next two years.

b) IMNCI (Integrated Management of Neonatal and Childhood Illnesses) Training

IMNCI is the key to providing primary care to sick children. IMNCI Training of LHVs, ICDS Supervisors, ANMs and AWWs. The training being conducted at the district hospitals would help in reducing the child hood mortality due to common illnesses. Till 2012-13, 877 LHVs/ ICDS Supervisors and 1889 ANMs have been trained in IMNCI. There is plan to train further 480 LHVs/ ICDS Supervisors and 1440 ANMs during the next two years.

c) NSSK (Navjat Shishu Suraksha Karyakram) Training

NSSK Training of Medical Officers, Staff Nurses and ANMs focuses on resuscitation and essential care of the newborn child. Until last year 1332 Medical officers and 1981 staff nurses were trained in NSSK. The State has resolved to train another 640 Medical Officers, 1280 Staff Nurses and 1280 ANMs in NSSK during 2013-14 and 2014-15.

d) SNCU Training

Training of Medical Officers and Staff Nurses in care of sick neonates admitted to SNCUs in the State is another important component in newborn care. As mentioned earlier SNCUs are being established at the district hospitals to provide specialized care to the sick neonates. Medical Officers (Paediatricians or General Duty Physicians) and Staff Nurses posted in the SNCUs would be trained appropriately. Apart from the onsite workshops, the training would be conducted in the PGIMER, Chandigarh and 88 Medical Officers and 88 Staff Nurses would be trained during the current financial year.

In addition, other Medical Colleges of the State (including the Private Medical Colleges such as the DMC, Ludhiana and CMC Ludhiana) would be engaged for this training.

e) Training in Infant and Young Child Feeding Practices

All Obstetricians, Paediatricians and other staff attending to deliveries need to be skilled in infant and young child feeding counseling. An integrated course on Breastfeeding, Complementary Feeding & Infant Feeding, HIV Counselling and Growth Monitoring that provides core training material for all levels including Master Trainers, Mid- Level Trainers, Facility based service providers and frontline workers will be imparted to the target professionals. The training would be planned and conducted in collaboration with the Breastfeeding Promotion Network of India (BPNI).

f) Life Saving Anaesthesia Skills Training (LSAS)

As an important Maternal Health intervention, M.B., B.S. Medical Officers are being trained in Life Saving Anaesthesia Skills whereby they are being trained in giving Spinal Anaesthesia in LSCS cases at the FRU level. Ninety three Medical Officers (74 certified as per GoI Protocol) have been trained in Life Saving Anaesthesia Skills to fulfill the deficiency of Anaesthetists in the State. Another 48 Medical officers would be trained during current financial year.

h) Emergency Obstetric Care Training

Training of Medical Officers in conducting normal deliveries and Caesarean Sections is another important Maternal Health Intervention. The M.B., B.S. Medical Officers deployed at PHC are being trained in conducting Normal Deliveries (Basic Emergency Obstetric Care – BEmOC) while those at the CHC/ FRU are being trained in conducting Caesarean Sections (Comprehensive Emergency Obstetric Care – CEmOC). Thirty one doctors have been trained in BEmOC during 2012-13 and 7 in CEmOC during the current year and there is plan to train another 80 Medical Officers in BEmOC and 24 in CEmOC during 2013-14.

i) Skilled Birth Attendance Training

Care of the mother during pregnancy, identification of high risk pregnancies and intra-natal and post-natal care of the mother and the child requires trained manpower at the peripheral level. Skilled Birth Attendance Training being conducted at the district hospitals aims at capacity building of ANMs and Staff Nurses towards this end. As such

1345 staff nurses & 1411 LHVs and ANMs have been trained in SBA till 2012-13 and another 360 staff nurses and 360 LHV/ ANMs are being trained during 2013-14.

j) Task shifting for Pediatric Care

In order to bridge the shortage of pediatricians in the interim, it is proposed to train a suitable number of M.B., B.S. Medical Officers in providing child healthcare for a period of 6 months at PGIMER, Chandigarh and other designated teaching institutions. A competency based curriculum would be prepared by mid-2014, and program launched thereafter.

k) Other Trainings

Apart from maternal and child health trainings listed above other trainings aimed at other population groups and programme components i.e. Adolescent Health, School Health, WIFS, ASHA etc. are also planned to be conducted in the State. The details of these trainings are given in the matrix below (Panel).

Panel: Capacity Building of Human Resources in Health

S. No.	Name of Training	Present Level	Target 2013 – 14	Target 2013 – 14
HBNC				
1.	Training of ASHAs in Module 6 & 7	Round I & II completed	Round III 100%	
2.	Home Visit after delivery by ASHA/ ANM	50%	80%	10%
3.	Care of the Sick Children by ANM/ ASHA		60%	80%
Child Health				
1.	**NSSK Training**			
	Medical Officers	1332	320	320
	Staff Nurses	1981	640	640
	ANMs		640	640
2.	**IMNCI**			
	LHV/ ICDS Supervisors	877	480	
	ANMs	1889	720	720
3.	**F-IMNCI**			
	Medical officers	377	320	320
	Staff Nurses	400	320	320
4.	**SNCU**			
	Medical Officers		88	
	Staff Nurses		88	

5.	Training of MBBS MOs in child health (6months)		Develop curriculum, identify sites by mid-2013 Train 50 doctors by end 2015	
Maternal Health				
1.	**LSAS Training** Medical Officers	93 (74 certified)	48	
2.	**CEmOC Training** Medical Officers		32	
3.	**BEmOC Training** Medical Officers	31	80	
4.	**SBA Training**			
	Staff Nurses	1345	360	
	LHV/ ANM	1411	360	
School Health				
1.	Medical Officers		584	
2.	Paramedics		255	
ARSH Training				
1.	Medical Officers	353	300	
	LHV/ ANM/ Counsellors	764 + 26	1200	

9.5 Creation of Public Health Cadre

The State has already taken the initiative of setting up of Public Health Cadre in the Department of Health & Family Welfare which will help in appropriate utilization of services of Public Health Specialists in Programme Management and Clinical Specialists in providing good clinical care to the patients.

9.6 Strengthening of Training Institutions

The State Institute of Health and Family Welfare, Ajitgarh and Health & Family Welfare Training Centre, Amritsar are two important in-service training centres in the State. They have been provided with State of the art equipments for conducting trainings but need further strengthening in terms of human resources. Deployment of more technical staff at these institutions is of utmost importance for them to function to their full their potential. Apart from these, 6 ANM Training Centres and 9 GNM Training Schools also need strengthening in terms of infrastructure and human resources.

9.7 Capacity building of Medical Colleges

Medical Colleges are an important link in the delivery of health care to the community. Apart from giving tertiary care facilities they help in pre-service and in-service training of doctors

and other staff. In order to involve the faculty of Medical Colleges in various National Health Programmes and take their assistance in the training of health care functionaries they need to be re-oriented towards changing scenario in the country. The faculty from the Departments of Paediatrics, Obstetrics and Gynaecology and Community Medicine would be trained as trainers at the apex institutes like AIIMS, New Delhi and PGIMER, Chandigarh.

9.8 Involving Rural Medical Officers

The workforce of Rural Medical Officers has a significant potential to contribute to RMNCH+A programs. As Stated earlier in Chapter 3, a total of 1186 subsidiary health centres were transferred to the Department of Rural Development from the Health Department. Involvement of these Rural medical Officers in the NRHM, specifically RMNCH+A, is highly desirable. This can be achieved by creating a convergence mechanism with the Rural Development Department, or preferably by bringing these Institutions back into the fold of Department of Health & Family Welfare. Since this is an interdepartmental issue, a committee may be constituted to take appropriate decision on the subject. Mainstreaming this cadre into the RMNCH+A/ NRHM activities would be a force multiplier and could prove decisive in the quest for attaining the XII Plan goals.

9.9 SUPPLY CHAIN MANAGEMENT

9.9.1 Maintaining adequate supplies of medicines and consumables at various levels in the health care system is a great challenge. Till recently, the procurement was done by multiple agencies for their individual requirements leading to no co-ordination in the procurement and distribution process. The process has been streamlined based upon the recommendations by a Committee of Directors of Health Services. The Punjab Health Systems Corporation has been authorised to finalise the contract rates of various items (drugs and consumables) required in health institutions.

9.9.2 Contract rates have been finalized for 225 essential drugs, 40 surgical/ consumable items and 19 types of suture materials. To maintain quality of medicines, they are tested at two stages – The suppliers are required to get each batch tested from a NABL accredited laboratory before dispatch, and are tested again by a Government Analyst on delivery.

9.9.3 The supply chain management through computerized system is being established at all levels to ensure the availability of drugs at all levels esp. Delivery Points. The system for online inventory management is being developed on the lines of TNMSC and RMSCL. Regional

warehouses have been planned to be established in the State. The State has signed a MoU with C-DAC, Noida for the development of web based inventory management.

10.1 QUALITY OF CARE

The provision of quality services requires an efficient organization of work and a high level of motivation and commitment besides the addition of equipment and human resources. Maintaining the quality of services esp. Maternal and Child Health Services is one of the major commitments of the State. The quality assurance committees already established at various levels i.e. State, District, Block and Facility need to be reactivated and strengthened. The forum of these committees would be utilized to improve the quality of health services at all levels. USAID as the nodal development partner would be engaged in this effort.

NB: Action Matrix on this chapter follows after Chapter 12

Chapter 6

PROGRAMME MANAGEMENT

Supervision, Monitoring and Evaluation

Achievement of targets mentioned in this Action Plan would not be possible without efficient managerial systems.

10.2 SUPPORTIVE SUPERVISION

10.2.1 The health manpower at the peripheral level is performing a great job but their efforts need to be continuously supported by the technical expertise of the senior and experienced professionals. Supportive supervision has been identified both nationally and internationally as a tool for optimal functioning of a health system. It helps ensuring the supervisory cadre to remain in regular contact with the health providers with a motive to identify gaps in service delivery and suggesting corrective measures during supportive supervision. Supportive supervision is an established method that prevents attrition of knowledge and skills of workers after trainings. It provides opportunity to derive local solutions to the problems within the frame of set guidelines. The State will prepare an extensive supportive supervision plan with the involvement of supervisors at all levels – State to district to block and local level supervisors. The formats devised by the Government of India for this purpose would be utilized for supervision and improvement in the health care activities at the grass root level. The plan would specifically include roles and responsibilities of supervisors, frequency of activities, sub plan to manage the information for action and essential resources including transportation, checklists, manuals etc. Equal emphasis would be given to all the life stages.

10.2.2 The State will strengthen the monitoring and supervision system to assure the quality of service delivery. Field visits of supervisory cadre will be made mandatory and will be used for orientation of ANMs and onsite correction of wrong practices. This system will bring about a better exposure of facility level staff to the field and help them plan in a better way.

10.2.3 A group will review the supportive supervision procedures and prepare a revamped plan for supportive supervision with specified roles and responsibilities and accountability for each supervisor/ official. Emphasis would be on field visits. Deputy Commissioners will be held accountable for the overall performance of the RMNCH+A activities and timelines.

ICT and mobile phones will be used extensively for this purpose.

10.2.4 Mobility of the State and district level program managers must be facilitated with vehicles or outsourced transportation without which effective supervision is not possible.

10.3 HEALTH MANAGEMENT INFORMATION SYSTEM

10.3.1 The success of any public health programme depends upon maintaining records and monitoring and evaluation. The present scenario of record keeping is not very encouraging. Records are poorly maintained and the staff is ill trained to analyse the reports. The medical and paramedical staff needs to be reoriented for proper record keeping and data analysis.

10.3.2 The use of Health Management Information System (HMIS) for relevant, accurate, comprehensive and timely data for improving operational planning, monitoring and evidence-based policy formulation is very important. Presently, the data is being collected through three different agencies:

a) HMIS – The data on primary healthcare is being generated through HMIS and collated at the State through NRHM.

b) Punjab Health Systems Corporation – The Corporation has its own HMIS and it collects data pertaining mainly to secondary healthcare services.

c) Directorate of Health & Family Welfare – Data related to various health programmes also flows manually from the field to the individual State programme divisions.

10.3.3 As a result of the multiplicity of the HMIS systems, there is a mismatching in the data at the State level and the reliability of data suffers. Often the concerned persons do not share data with stakeholders of other streams.

a) The State has undertaken a major initiative to channelize the data in such a manner that the duplication of data is prevented and all data from the field flows into single HMIS system which can be accessed by all concerned. The process would be ready for piloting by December 2013 and full scale launch by March 2014.

b) The quality of data generated through HMIS would be improved and it would be used for improving quality of health services in the State. The data would be reviewed at all levels – block, district and State for appropriate actions.

c) The system for streamlining of data collection and analysis is not likely to be effective in the absence of adequate hardware and human resources. Updating of the computers,

software and data generation systems would be given priority. The gaps in human resources would be plugged in order to ensure availability of accurate data at all levels of analysis.

d) The State will continue to track all indicators required under the RMNCH+A strategy.

10.3.4 Survey based Score Card and HMIS based Dashboard

An integrated monitoring and reviewing system has been proposed to measure the progress against RMNCH+A interventions at National, State and District level through “score card'. The score card refers to two distinct but related management tools: (1) HMIS based dashboard monitoring system and (2) Survey based child survival score card. The dashboard seeks to improve accountability in the public health system and catalyze States into using the HMIS data for improved decision-making; a comparative assessment of State and district performance in terms of service delivery is proposed on a quarterly/ yearly basis. Unlike the HMIS-based dashboard, the survey-based score card is developed to capture both public and private sector data and provides a basis for assessment of performance at national and State levels in terms of both outcomes and service delivery; this would be updated as and when new survey results are available. Detailed methodology and list of both indicators are provided in Annexure for further reference.

10.3.5 Annual Health Survey

The Government will explore initiating Annual Health Surveys in the State.

NB: Action Matrix on this chapter follows after Chapter 12.

CHAPTER 7

10.4 COMMUNITY PARTICIPATION

10.4.1 The community-based monitoring of health services is the key strategy to ensure that services reach those for whom they are meant. Community monitoring is also seen as an important aspect of promoting community led action in the field of health. The community participation needs to be improved through advocacy and capacity building in order to create a conducive environment for utilization of available health services and enhancing quality of services locally.

10.4.2 Training of ASHAs, development of Self Help Groups at local level, involvement of PRIs in planning and implementation of National Health Programmes specifically for the maternal and child health care would be taken up in the coming days. Capacity building of Village Health Sanitation and Nutrition Committees, Rogi Kalyan Samitis and appropriate utilization of Village Health and Nutrition Days (VHNDs) as a platform for assured and predictable package of outreach services would be the major activities for improving maternal and child health.

10.4.3 These activities would ensure:

a) Registration of all (100%) pregnancies during first trimester, appropriate ANCs and infant and young child feeding counseling.

b) Testing and treatment for anaemia in pregnant women.

c) Post natal care to mothers including contraceptive advice.

d) Facilitate access to contraceptive devices.

e) Growth monitoring and achievement of 100% full immunisation.

f) Follow up care for malnourished children.

g) Care of the children suffering from diarrhoea with ORS and Zinc and ensure availability of ORS and Zinc at the grass root level.

h) Referral support to ASHA and AWW in community level care, for sick children.

i) Sessions and services for adolescent girls as well as boys.

This would provide platform to the PRIs for participating in improving health of their communities.

CHAPTER 8

10.5 BEHAVIOUR CHANGE COMMUNICATION

10.5.1 The improvement in maternal and child health is largely dependent upon the behavior of the community. Change in the health care practices of a community can be achieved by communication with them through various media. Interpersonal communication through local level health functionaries like ASHA, ANM, AWW; extensive use of print and electronic media and involvement of local influencers would be used to reach the community for adoption of good maternal and child health care practices.

10.5.2 A new BCC Strategy is being developed for the State with a view to better reach to the community in order to have maximum impact of the maternal and child health action plan.

10.5.3 The Mass Media Division of the Directorate of Health and Family Welfare needs to be revamped through induction of more professional human resources having greater insight into the present day communication strategies.

10.5.4 The Behaviour Change Communication Strategy would also include all behaviours related to RMNCH+A. In order to give appropriate messages for youth electronic social media like facebook, twitter, sms etc. would be used extensively.

NB: Action Matrix on this chapter follows after Chapter 12.

CHAPTER 9

10.6 PRIORITY ACTION FOR HIGH FOCUS DISTRICTS

10.6.1 As per the Government of India classification 6 districts (Gurdaspur, Pathankot, Mansa, Sangrur, Sri Muktsar Sahib and Barnala) in the State have been identified as high focus. These districts need additional inputs for almost all programmatic components. Deployment of additional human resources including Doctors (both specialist and non-specialists), Staff Nurses, ANMs, etc. is urgently required. Most of the health staff prefers to serve at places that have easy accessibility and where the facilities are available to maintain an appropriate lifestyle. This general preference is behind the lesser motivation to work in underserved and difficult areas. In order to provide a stimulus to the workforce and attract them to such areas it is essential to provide better incentives for personnel posted at such locations. It is important to map such hard areas and do a need assessment to know the adequate incentives that would attract the staff to these places.

10.6.2 The important steps being undertaken in these districts include:

a) Recruitment of more doctors specifically for these districts and giving them additional incentives.

b) Deployment of an additional ANM at all subcentres.

c) Priority in the creation of SNCUs and NBSUs.

d) Creation of specialist MCH Centres on priority basis.

e) Cater to the needs of urban poor and slum dwellers through additional resources being generated under Urban Health Mission.

The plan for these districts would be prepared by March 2014.

10.6.3 RMNCH+A strategy is to be implemented across the country with further intensification of efforts in each of the identified High Priority Districts (HPDs) of the States through committed technical support by the Development Partners. In each HPD the States will allocate 30% higher resource envelope per capita (within the overall State Resource Envelope under NRHM). This has to be mandatorily specified and earmarked as a part of the ROP and diversion of this envelope to other districts would not be permitted. Relaxation of norms allowed in tribal areas under NRHM will further be extended to HPDs.

10.6.4 As the HPD districts are lagging behind in terms of RMNCH+A indicators and possibly most other development indicators, they need special focus and support in terms of planning and implementation. It is considered that maximum gains in reduction of fertility and mortality can be made by reaching out to underserved and vulnerable populations in these districts.

10.7 District Assessment

The first step in the HPD should be to conduct a detailed assessment of the district in terms of equity and access to health services and key social determinants of health (including nutrition, water and sanitation, connectivity, electricity and motorable roads). The remoteness of the block/ village and accessibility to basic health services, including maternal and child health services should be assessed. District Level Checklist should be used for systematic mapping of underserved districts and vulnerable social groups.

10.8 Assessment of local health system

Mapping of the health infrastructure (SC, PHC, CHC, DH), manpower (Medical Officers, specialists, staff nurses, ANMs, ASHAs), training facilities (ANM/ GNM training schools, district training centres), and assessing the functionality of health facilities (IPD, OPD, minor & major surgeries, delivery points, FRUs conducting C section, 24x 7 PHCs, newborn care facilities) should be undertaken as the first step.

10.9 Differential Health Systems Planning for HPD

10.9.1 **Financial allocations:** The State will allocate 30% higher resource envelope per capita for each HPD (within the overall State Resource Envelope under NRHM).This should be specified and earmarked as a part of the ROP and diversion of this envelope to other districts would not be permitted.

10.9.2 **Relaxation of norms**

a) Relaxation of norms may be extended to all high priority districts.

i) **ASHA recruitment:** The general norm is 'one ASHA per 1000 population'. In HPD, the norm could be relaxed e.g. to one ASHA per habitation, in remote, inaccessible areas/ blocks.

ii) **Health Infrastructure as per IPHS norms:** Population norms for establishment of sub-centre could be relaxed when needed based on 'time to care' norm.

iii) **Up gradation of Sub centers:** As Sub centre is envisaged as the first health post and will possibly be the only health infrastructure within close access, follow up on construction/ renovation, equipment and manpower is important. It is being proposed that a full-fledged village health team be located at the SC to address the basic health needs for the local population.

iv) **Medical Mobile Units:** Till the time SC or PHC are established, underserved, areas may be reached through MMUs and HPDs may be allowed to have more MMUs than other districts.

10.9.3 Performance based incentives: Special incentives to medical and para-medical staff for performing duties in difficult areas (e.g. identified health facilities; facilities remote from DHQ) may be incorporated with appropriate financial and non-financial incentives schemes for attracting qualified human resource to work in HPD with time-bound targets and performance benchmarks for addressing the key issues and optimum utilization of funds to ensure effective implementation of NRHM.

10.9.4 Special strategies, incentives, packages, schemes for HPDs

11.1 Accrediting private health institutions

In order to increase the access to delivery care institutions, functioning private institutions that meet the criteria set out by GOI, can be accredited to provide delivery services, abortion care and newborn care. The State and district authorities should draw up a list of criteria/ protocols for such accreditation; which could be inspected by team from State Medical Colleges. These institutions could be reimbursed for the health facilities provided to local population on pre-agreed rates.

11.2 Improving demand for services

Community outreach: Social mobilisation is an important strategy to increase demand for health services. In addition, creating awareness on health issues in general and on social determinants of health and information about available health services will be important aspects for frontline workers and social mobilisers. The local population may not recognise the need for health services or there may be lack of trust in service providers or even the allopathic system of medicine. Due emphasis should be given to platforms like VHND which bring both information and services to the villages.

Involving NGOs for community mobilisation, service delivery: to make the information and services more accessible to the underserved or especially vulnerable populations.

11.3 Multisectoral Planning

Health of the population cannot be improved in isolation; other services like transport, telephone/ mobile connectivity, water, sanitation, girls' education and nutrition services are required in the area. In addition, convergence with other departments will promote better resource utilization.

11.4 Monitoring

Close monitoring of the progress and outputs should be undertaken, based on the routine from HMIS and various other evaluation studies. Facility based tracking should be the focus in districts where facility based reporting has already been initiated. District Score cards, filled in every quarter, can be another tool that can provide a snapshot of progress made in the district and also to compare changes over time. Regularity of monthly review meetings are to be ensured by CMHO/ District Collector.

District score card or HMIS based dashboard monitoring system is a mechanism to improve accountability in the public health system and catalyze States into using the HMIS data for improved decision-making; a comparative assessment of district performance in terms of service delivery “dashboard” indicators on a quarterly/ year to quarter basis. Survey based score card will be prepared to monitor the changes at outcome and impact level as and when updated data available for the districts in the State.

NB: Action Matrix on this chapter follows after Chapter 12.

CHAPTER 10

11.5 CONVERGENCE AND PARTNERSHIPS

11.5.1 The achievement of outcome outlined in this document are difficult to achieve if, the Department of Health and Family Welfare works in isolation. Involvement of other stakeholders in this effort is absolutely essential. Involvement of PRIs, Department of Medical Education, Department of Women and Child Development, Department of Education, Water and Sanitation Department, Department of Urban Development and Department of Rural Development is the key. In addition, involvement NGOs and Public Private Partnerships are required to augment the momentum for achieving the goals.

11.5.2 It is proposed to ensure intradepartmental convergence through joint reviews with Department of Medical Education at quarterly intervals. There is an urgent need for a seamless convergence of the PHSC.

11.5.3 The inter-sectoral convergence would be achieved through a proposed Apex Committee on Health and Development under the chairmanship of Chief Secretary, with Principal Secretary Health as the Member Secretary. This Apex Committee that would meet quarterly shall be the convergence point of interdepartmental endeavor on health and nutrition. Its membership would comprise secretaries of the Departments of Education, Panchayati Raj, Women and Child Development, Water and Sanitation, Rural Development, Urban Development, Planning etc. The Committee may also have independent development experts. This mechanism shall play a decisive role to address the social determinants of health in addition to enhancing convergence across development sectors for attaining high level of health and nutrition in the State.

11.5.4 Private Sector and not-for-profit NGOs would be involved for service delivery at secondary as well as tertiary care for the mothers, neonates as well as the children. This would require a policy framework to be developed by March 2014.

11.5.5 The Government expects a greater role of the professional bodies (National Neonatology Forum, Indian Academy of Pediatrics, FOGSI and others) to partner RMNCH+A action. In particular, their assistance is required for:

a) Capacity development, training and continuing education of specialists, doctors, nurses and others

b) Quality of care in facilities

c) Technical guidelines

d) Developing framework for public – private partnerships in service delivery o Needs assessment and rapid surveys

e) Tele-medicine

f) Voluntary service delivery to under served populations/ pockets/ settlements

NB: Action Matrix on this chapter follows after Chapter 12.

CHAPTER 11

11.6 OPERATIONS RESEARCH

11.6.1 For a health program to succeed and to pave way for even more ambitious and visionary program new knowledge and insights are a must.

11.6.2 The State will invest in operations research for which a budget would be earmarked. A mechanism, say a Research Committee, will be created. The focus would be operations and implementation research to enrich the program delivery and to enhance equity.

11.6.3 Not only studies will be commissioned, but also academics/ institutions would be encouraged to seek funds for studies.

11.6.4 Steps will also be taken to build capacity for such research with help from PGIMER, AIIMS, PHFI and ICMR.

NB: Action Matrix on this chapter follows after Chapter 12.

CHAPTER 12

11.7 TECHNICAL STEWARDSHIP FOR MCH ACTION PLAN

The success of the MCH Action plan is critically dependent upon technical stewardship at all levels – State, district and block. This would require not only short term strengthening of the MCH Cell, but also reorganization/ revamping of the Directorate for long term impact and sustained gains with the aim of having health services in the State that match those in developed countries in near future. The suggestions that follow in this chapter may be seriously examined by the Government.

11.7.1 Strengthen linkages between the Department of Health and FW and the State Program Management Unit (SPMU)

The purpose of the SPMU is to be a catalyst to ensure that each intervention under NRHM/ RMNCH+A reaches every women, neonate, child and adolescent. That would materialize only through a close working relationship between the SPMU and the technical divisions. One way to do so is by making SPMU report to the MD-NRHM through the Director, Health and Family Welfare. This would add a strategic impetus to the Directorate resulting in more effective technical stewardship.

11.7.2 Strengthen technical and supervisory capacity of the Directorate of Health and Family Welfare

a) To translate this Action Plan into implementation, outcome and impact require considerable technical and managerial strengthening of the Directorate. Improved survival and health outcomes for women, neonates, children and adolescents of the State necessitates a competently – manned, well-knit and well supported team at the State level. There are simply too few technical people at present to drive an ambitious RMNCH+A program in the State. The organogram in the Annex is suggested for consideration of the Government to develop a critical capacity to ensure sustained progress over the medium/ long term.

b) The ecosystem at the Directorate should be challenging, conducive and satisfying for bright persons to move from the districts to the headquarters. Currently, it is more exciting to be in the field. The technical staff at the State directorate should be provided optimum office equipment, support staff and mobility support for effective stewardship and monitoring.

c) In the immediate, there is an urgent need to strengthen the MCH Cell at the State headquarters. Induction of at least 2 Public Health Specialists (Maternal Health and Child Health) to assist the Programme Officer (MCH) would help in achieving better co-ordination the State level. Apart from this there is need for at least 4 consultants and 6 computer assistant – cum – data managers.

11.7.3 Strengthen technical and supervisory capacity at the District level

The districts are the nerve centre of RMNCH+A action, and there are simply innumerable tasks to be done. There is a need to discuss the needs for strengthening the technical capacity district level through a consultation. Provisionally, there is need for at least 1 public health specialist, 1-2 consultants (depending upon the size of district) and 2 computer assistant – cum – data managers at each district headquarter.

11.7.4 Strengthen synergy between the Departments of Medical Education and Department of Health & Family Welfare

Transformation of healthcare in the State is also dependent on strategic and functional linkages between the Medical Colleges, the Directorate of Health & Family Welfare and the State NRHM. Medical College hospitals are a part of the continuum of care that is grounded in community where ASHAs and ANMs toil. Medical Colleges need to emerge as role model institutions in quality of care. Medical Colleges should be developed as centers of excellence for tertiary care as well as centres for providing trained human resource for healthcare delivery. Strengthening of State Medical Colleges in terms of infrastructure as well as human resources needs to be taken up on priority. The State has already started the process with huge budgetary allocations for the Medical Colleges and recruitment of faculty. This process should be taken forward by systematically planning their up-gradation. It is suggested that a committee be constituted to propose a rapid action to strengthen their facilities and capacity for education, mentoring and research in the area of RMNCH+A.

It is also recommended that both the departments should be under the same administrative head for greater synergy and effectiveness.

NB: Action Matrix on this chapter follows in the next section.

ACTION MATRICES

- Health System Strengthening
- Programme Management
- BCC
- Community Participation
- High Priority District Planning
- Convergence and Partnerships
- Operations research
- Technical Stewardship

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
HEALTH SYSTEMS STRENGTHENING						
	Achieving IPHS Standards at 100public health facilities by 2016	Rapid assessment of gaps in IPHS standards by January				This will be the flagship program under this initiative that would benefit all other facets of health care in addition to RMNCH+A
	District Hospitals	Achieve IPHS standards at 22 District Hospitals	Maintain IPHS standards			
	Sub-district Hospitals	Achieve IPHS standards at 15 Sub- District Hospitals	Achieve IPHS standards at 15additional Sub-District Hospitals (Total 30)	Achieve IPHS standards at 11 addi-tional Sub-District Hospitals (Total 41)	Maintain IPHS standards	
	Community Health Centres (Geographically appropriate)	Achieve IPHS standards at 10 CHCs	Achieve IPHS standards at 14 additional CHCs (Total 24)	Achieve IPHS standards at 13 addi-tional CHCs (Total 37)	Maintain IPHS standards	
	Up-gradation of Medical Colleges for RMNCH+A: Infrastructure, HR; includes in service training of faculty/ nurses, and establishment of sub specialties	Develop action plan by March 2014	Completed			
	Telemedicine and ICT driven Distance Education System	Develop plans by March 2014;MoU with PGIMER by July 2014; Implementation thereafter	Implementation			

	Establish and operationalize blood banks at all district hospitals and blood storage units at all FRUs (40 blood banks and 28 BSUs already functional).	Operationalized				
	Establish and operationalise Mother and Child Hospitals (15have been proposed)	Established				
	Strengthening of 24*7 PHCs	Completed by September				
	Strengthening of State MCH Cell	Completed by March				
	More efficient supply chain management guidelines	Launch a new ICT driven supply chain system				
	Development of quality assurance guidelines	By July				
	Operationalize quality assurance committees	By December				
	Review the achievements of QA committees for corrective action	By November				
	Quality certification: Develop an accreditation system for evaluating the health facilities as per their respective levels of care	By October	Implement starting January			
	Streamline RKS system	Review performance of RKSs by April by in depth study Streamline working of RKSs	Streamline working of RKSs			
HUMAN RESOURCES						
	Deployment and retention of motivated health work force	Announce new liberal provisions to dramatically improving deployment and retention of doctors and				

		nurses: - Monetary and non-monetary incentives to work in under served areas. - Redeploy-ment of retired doctors on contract. - Performance-based compensation for better outcomes (such as survival of LBW neonates in SNCUs, high coverage of ORS etc.). - Regul-arization of contract doctors without change in posting. - Strategic placement of the specialists to make facilities operational - Other measures Regularization of contract doctors without change in posting. - Strategic placement of the specialists to make facilities operational - Other measures				

	Strengthening of Training Institutions at Ajitgarh and Amritsar Rational transfer policy for doctors, nurses and other staff of the department	Develop plans by April Start strengthening by June Discussions to stremline transfer policy Revise policy by April Declare a revised transfer policy with long term vision to ensure a strong health system	Implement plan completed by March			
	Involving RMOs in NRHM/ RMNCH+A programs	Constituting a committee to examine the issue; report by March Implementation from April				
	Creation of Public Health Cadre	Created by mid-year				

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
Program Management						
	Supportive Supervision	Review supportive supervision system through consultations. Develop a revamped Supervisory system that lists roles and responsibilities of all concerned. Launch revamped system from April 2014 Data entry into HMIS system to be made mandatory and functional		Review support-ive super-vision Launch further improv-ements		Support-ive Super-vision was recog-nized as one of the weakest areas
	Health Management Information System	New, ICT based revamped data flow system accessible to all concerned				
		Revamping the hardware for HMIS				
		Meting HR needs to ensure functional HMIS				
		Guidance note about utilization of information from HMIS for planning and action by February2014				

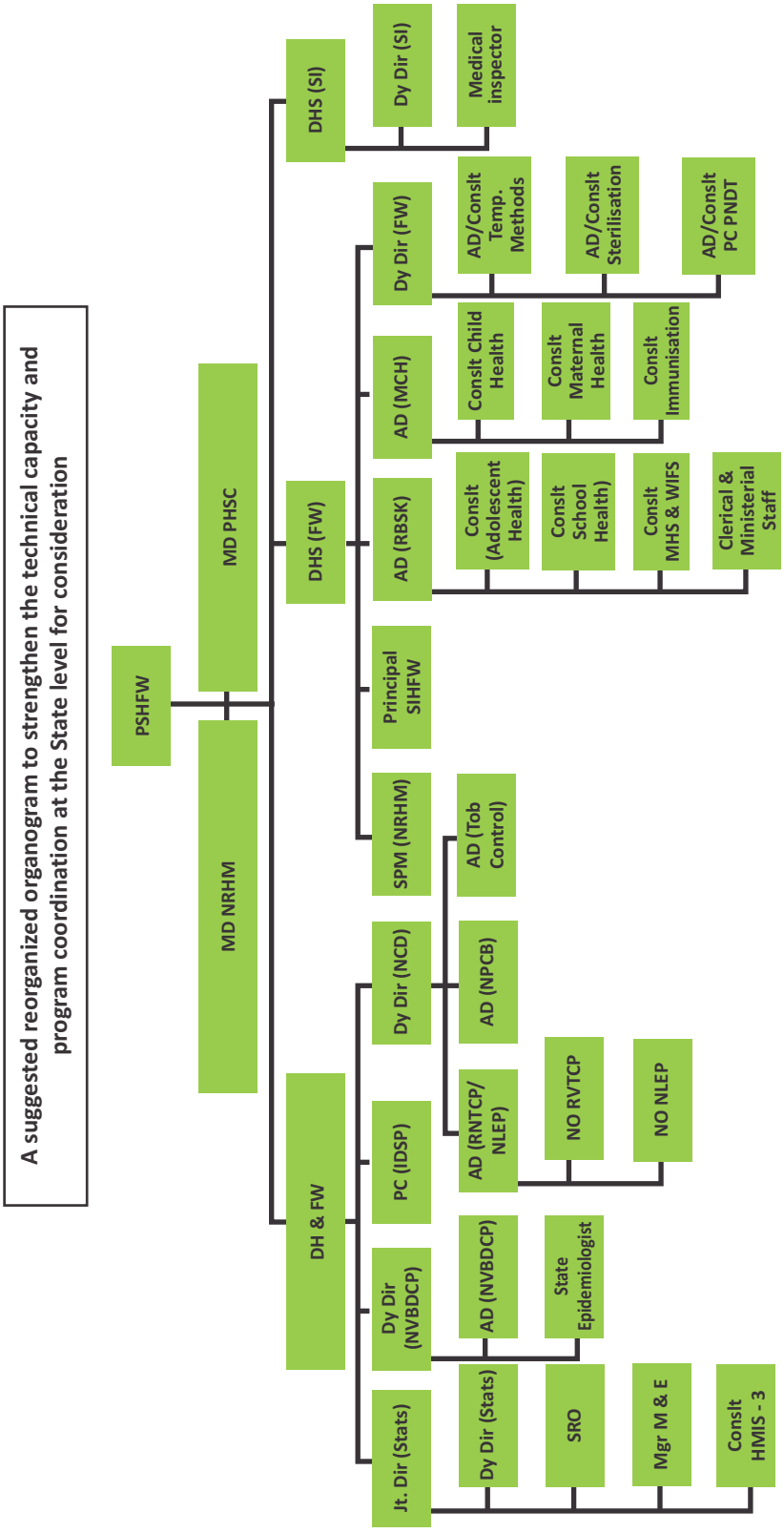
		Dash Board indicators on RMNCH+ A available and system operationalized by March 2014				
	Death reviews	Preparation and dissemination of maternal and infant death review guidelines (emphasis on corrective instead of punitive approach)				
		Training and supportive supervision of human resources to conduct death reviews				
		Guidance note about utilization of information from death reviews for planning, prioritization and action by March				
	Annual Health Survey	Explore initiation of AHS in Punjab				

	Gender-based monitoring	Create a template for incorporating gender into monitoring indicators on care-seeking, mortality and coverage indicators by April Implement				
	Accountability	Define roles and responsibilities for all concerned including Deputy Commissioners				
		Map the accountable persons as per their names and designation again steach thematic area/programdomain/activity				

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
BCC / IEC						
	BCC Strategy	Finalization of a comprehensive BCC strategy by January	Implementation	Review progress	Implementation	
Community Participation						
	VHNDs	Evaluate performance of VHNDs by May Revamp activities of VHNDs and provide stronger oversight thereof	Implementation	Review progress	Implementation	
	Involve women's groups, Rotary, Lions' Club, Red Cross, charitable institutions, NGOs in RMNCH + A program	Hold Consultations. Develop a Plan. Implement by May	Implementation	Review progress	Implementation	
High Focus District Plans						
	High Focus District Strategy	District Assessment by USAID Strategy in place by March 2014 Implementation from April 2014	Implementation	Review progress		
Convergence and Partnerships						
	Intradepartmental Convergence	Quarterly meetings				
	Intradepartmental Convergence	Constitution of Apex Committee on Health and Development by February	Quarterly meetings/ reviews			

	Private Sector/ NGOs	Create a policy framework for PPP; Implement	Implementation	
	Professional bodies (NNF, IAP, and FOGSI etc.)	Action Plan by May 2014; Implementation there after	Implementation	
Operations research				
	Promote implementation/ operations research	Announce a plan to support such research Create a budget Create mechanism to manage/ support research	Also, seek requests for research by individual scientists Commission studies Build capacity for research in collaboration with PGIMER, PHFI, AIIMS and ICMR	

Strategic Output	Actions	Time Frame				Remarks
		2014	2015	2016	2017	
Stewardship/ Administration						
	Strengthen linkages between the Department and the State Program Management Unit (SPMU)	Constitute a high level committee to examine this issue Report of the Committee by April 2014 Policy decisions by June 2014				
	Immediate strengthening of technical capacity at all levels for effective implementation of RMNCH+A programs with appointment of consultants and data entry persons	Immediate strengthening of technical capacity at State and District levels by February				
	Strengthen technical and supervisory capacity of the Directorate of Health and Family Welfare	Examine issues about office/ mobility/ support systems by February Implement required steps from April				
	Strengthen technical and supervisory capacity at the District level	Develop action plan for strengthening the role of Medical Colleges for RMNCH+A activities Create a Medical College network to mentor RMNCH+A action				


A suggested reorganized organogram to strengthen the technical capacity and program coordination at the State level for consideration
PSHFW
MD PHSC
MD NRHM
DHS (SI)
Dy Dir (SI)
Medical inspector
DHS (FW)
Dy Dir (FW)
AD/Consit Temp. Methods
AD/Consit Sterilisation
AD/Consit PC PNDT
AD (MCH)
Consit Child Health
Consit Maternal Health
Consit Immunisation
AD (RBSK)
Consit (Adolescent Health)
Consit School Health)
Consit MHS & WIFS
Clerical & Ministerial Staff
Principal SIHFW
SPM (NRHM)
AD (Tob Control)
DH & FW
Dy Dir (NCD)
AD (NPCB)
PC (IDSP)
AD (RNTCP/ NLEP)
NO RVTCP
NO NLEP
Dy Dir (NVBDCP)
AD (NVBDCP)
State Epidemiologist
Jt. Dir (Stats)
Dy Dir (Stats)
SRO
Mgr M & E
Consit HMIS - 3

1.1 HMIS based Dashboard monitoring system

The need for relevant, accurate and timely data to facilitate improved operational planning and monitoring and evidence based policy formulation is well recognized. In 2008, MoHFW, GoI initiated a web based Health Management Information System (HMIS). At present, all 35 States and UTs (656 districts) upload health related data on a range of outputs and service delivery indicators; by March 2013, facility level data would also be available.

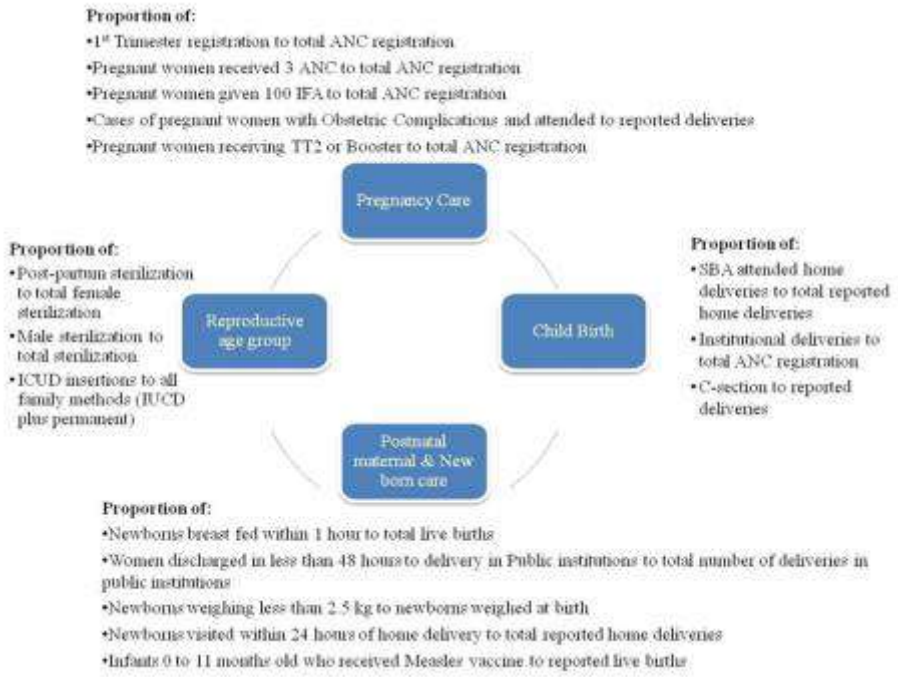
1.2 Methodology

1.2.1 Objective:

a) Review the progress and performance of services/ interventions at State level

1.2.2 Selection of Indicators:

A total of 16 indicators have been selected based on life cycle approach i.e. Reproductive and pre-pregnancy, Pregnancy, Child birth, Post natal care (Mother and Child), representing its various phases. Selection of the indicators is based on likelihood of accurate data and its amenability to improved decision making. Indicators are listed below for reference.



1.2.3 Way of preparation:

The methodology described below can be used for preparing All India/ State or State/ District score card.

2.1. Let XBidB represent the value of the i-th indicator in the d-th district of a State (i=1,2,3……. 16: d=1,2,3……, n) (n being the number of districts in a State). For each of the indicators, a normalized index value is worked out. If an indicator XBiB is positively associated with development, like safe deliveries, then

$$\text{Index Value Xid} = \frac{(Xid - \text{Min}(Xid))}{(\text{Max}(Xid) - \text{Min}(Xid))}$$

Where Min (XBidB) and Max (XBidB) are, respectively, the minimum and maximum of (XBi1B, XBi2, ……B XBi,nB) that particular indicator across districts.

If, however, XBi B is negatively associated with development, as, for example, 'women discharged in less than 48 hours to delivery in Public institutions to total number of deliveries in public institutions' or 'newborns weighing less than 2.5 kg to newborns weighed at birth', etc. which should decline as the district develops, then the index value for XBid can be derived as:

$$\text{Index Value Xid} = \frac{\text{Max}(Xid) - Xid}{(\text{Max}(Xid) - \text{Min}(Xid))}$$

The index values of each of the 16 indicators for a district are then combined by using simple average to arrive at composite index value for each district as follows:

$$\text{Composite Index for dth (d=1,2,.....,n) District} = \frac{\sum_{i=1}^{16} IXi_d}{16}$$

The composite indices for each of the four phases (Pregnancy care, Child Birth, Postnatal maternal & new born care, Reproductive age group) are also obtained by simple average of the index values of individual indicator falling in respective phases.

1.2.4 The composite index may be taken as an index of overall progress of that district on the above mentioned parameters. Based on the quartile values of index for each of the four Phases / overall Index, the States / districts have been categorized into four categories, i.e., very low performing, low performing, promising and good performing.

1.2.5 **Survey based Score Card**

The survey-based score card is developed to capture both public and private sector data and provides a basis for assessment of performance at national, State and district levels in terms of both outcomes and service delivery.

1.3 **Methodology**

1.3.1 **Objective:**

a) To monitor the utilization of services and measure the outcomes at national, State and district level periodically, once in every 1 or 2 years.

b) To measure the performance against MDG at National level and States.

1.3.2 **Selection of Indicators:**

A total of 19 survey based outcome and coverage indicators related to health, nutrition and sanitation were used for the score card.

Indicators for survey based score card	
Mortality	Neonatal mortality rate - SRS 2010
	Infant mortality rate - SRS 2011
	Under-five mortality rate - SRS 2010
	Maternal mortality ratio (per 100,000 live births) - SRS 2007-09
Fertility	Total Fertility Rate - SRS 2010
	Births to women during age 15-19 out of total births - DLHS 3
Nutrition	Children with birth weight less than 2.5 Kg – AHS
	Children under 3 years who are underweight - NFHS3 2005-06
Gender	Child sex ratio 0-6 - Census 2011
Cross-cutting	Full Immunization (Children (12-23 months) receiving 1 dose BCG, 3 doses of DPT/ OPV each and 1 measles vaccine - CES-2009
	Household having access to toilet facility DLHS 3
	Couple using spacing method for more than 6 months DLHS3
Diarrhoea	ORT or Increased Fluids for Diarrhea (Among children <2 year of age who had diarrhea in preceding 2 weeks) - CES 2009
Pneumonia	Care Seeking for ARI in any health Facility (Among children <2 year of age who had ARI in preceding 2 weeks) - CES 2009
Service Delivery	Woman who received 4+ ANC - CES 2009 Skilled Birth Attendance (Delivery by Doctor, ANM/Nurse/LHV) - CES 2009
	Mothers who received postnatal care from a doctor/nurse/LHV/ANM/ other health personnel within 2 days of delivery for their last birth (%) - NFHS3 2005-06
	Early Initiation of Breast Feeding (<1hr) - CES 2009
	Exclusive Breast feeding for 6 months (among 6-9 months children) - **CES** - 2009

1.3.3 Source of data: Latest available data will be taken into consideration from Sample Registration System (SRS), Coverage Evaluation Survey (CES), District Level Household and Facility Survey (DLHS), National Family Health Survey (NFHS), Census and Annual Health Survey.

1.4 Ways of preparation

1.4.1 All India average for each indicator will be taken as reference point in case of India vs. States. States will be colour coded based on:

a) Mortality Indicators, Nutrition, Fertility: Green - Less than 20% of the National average, Yellow - 20% below and above National average, Red - More than 20% of the National average

b) Remaining Indicators: Green - More than 20% of the National average, Yellow - 20% below and above National average, Red - Less than 20% of the National average

1.4.2 Similarly, State average will be taken as reference point to develop State vs. district score card in case district and State level data available for indicators. It is advised that only one source of data to be used for one indicator for India vs. State & to be Dashboard and score card analysis of all the States will be analyzed and shared with respective States for further follow up with RMNCH+A implementation.

1.5 Maternal Death Review

The process of maternal death review has been initiated in the State and would be strengthened further to identify gaps in service delivery and take appropriate measures. The analysis of maternal deaths would be used to help identify delays contributing to maternal deaths at various levels and the information used to adopt measures to prioritise and plan for intervention strategies and reconfigure health services.

1.6 Infant and Child Death Review

Infant death review has already been initiated in the State. The review of infant deaths would also be utilized for policy formulation to reduce infant death rate in future. The child death review would be initiated soon and used similarly.

1.7 Health, Drug Control, Food Safety and Information Systems

1.7.1 Department of Health

a) Registration of births and deaths

i) Notifier – At present Village Chowkidar notifies birth and death to the Local Registrar. ASHA workers should be declared as notifier.

ii) Local Registrar – ANM may be declared as Local Registrar.

iii) Delayed registration – ANM (new Local Registrar) should be authorised to make registrations after taking the approval from the Senior Medical Officer of PHC (in place of District Registrar who is Civil Surgeon).

iv) Delayed registration – after one year – Registration within 10 years, there is little possibility of misuse and therefore for such cases the process adopted for registration within one year should be adopted.

v) Entry of names in time barred cases – Entry of names should be permitted without any limitation.

vi) Digitisation of records – The Commission has suggested three points:

vii) Digitisation should be linked from the e-governance project.

viii) Suvidha Centres be authorised to digitise the records.

ix) To declare the incharge of Suvidha Centres as Additional Registrar for the purpose of maintenance of digitised record and issuance of copies.

x) Fees – The Commission has suggested that no fees should be charged upto one year and the notional liability should be carried by the State Government.

1.7.2 Emergency medical response system

The department should place a network of ambulances and central control facility in place. And upgrade medical emergencies in all FRUs.

1.7.3 **Regulatory Mechanism for Private Medical Facilities**

a) To put in place regulatory mechanism for private nursing homes and hospitals. RMP, Diagnostic tests, private health care is completely unregulated in Punjab.

b) Quality of health service in terms of setting up basic minimum service standards. Need to work out a treatment protocol.

c) Regulating Cost since health is an essential service and needs to treated as a 'right' of citizens. No monopoly or unreasonable gains be permitted for those who provide this service as 'business'.

d) Grievance redress - establish the balance between critical and timely care from the service provider and protecting the rights of the consumers. Address the problems of asymmetric information.

e) Establish the framework of 'social responsibility' for the service providers based on the belief that health is a service.

1.7.4 **Restructuring of Health Providing Institutions in Pubic Sector**

a) Health providing institutions, should be divided into three basic categories

b) Primary Care Centre's (where basic clinical services will be provided)

c) Primary care centre (at the mini PHC level) can provide clinical services, emergency support 24 by 7 and basic reproductive services. Elementary diagnostic facility, basic emergency care infrastructure and medicines needed for regular use should be available at the primary care centre.

d) Elementary indoor facility may be provided at these primary care centre. Emergency transportation vehicles, fitted with modern life saving equipment, will be available to transport patients to FRUs in case of emergency.

1.7.5 **First referral units (FRUs)**

a) FRUs should have a full fledged diagnostic centre where range of specialties will be made available. Current PHCs and/or CHC's can be converted into FRUs and there is also a need to create additional FRUs.

b) To create norms and facilities at FRU IPHS code should be followed, doctor availability should be ensured, norms for residences be clearly laid out, clear transfer and posting policy be framed, and diagnostics capacity to be strengthened in a major way. Most OPD's should be run by MOs.

c) Hospitals or multi Specialty hospitals.

d) The third tier of health care is at the level of hospitals and multi specialty hospitals.

e) The first challenge here is to have adequate doctors, in particular specialists.

f) The administrative structure is complex and unwieldy and there are too many competing and overlapping layers. There is urgent need for realigning. Existing agencies that are in operation are PRI, PHSC, DHS, NRHM, and various special initiatives under national disease control programs.

g) There is a structural mismatch in the institutional arrangement of Central and State Ministries: into departments of Health, Family Welfare and Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH). Such fragmentation makes inter-programme integration problematic,diluting the technical capacity to think holistically and duplicating resource use.

h) There is a need to enhance the capacity of health workers.

i) Doctors who hold administrative position need to be trained in management and administrative skills. There ought to be constant in house training programs to train and upgrade the skills of paramedics, nurses and other medical staff. Trauma training and counselling services should be given priority at the moment in the area of training because of high incidence of accidents in the state.

1.7.6 **Framing Punjab State Health Policy**

The first major challenge for the state is its need to have its own health policy based on its own specificities. A small example of this reality is the mismatch between morbidities in the state and the disease control programs in operation here.

1.7.7 **Enhance Resource Allocation of Public Health**

Initiate steps to improve health status of Punjabi society - increased taxation on products (drugs, alcohol) to bring down their consumption, stringent regulation on food to reduce salt, fat intake; ensuring universal immunization; rehabilitation of patient who leave hospitals; availability of drugs; and availability of nutritional support.

1.7.8 **Formulation of Food Regulation Act including State Level Advisory Committee**

On the regulation of food, the Central Act may not serve the purpose since it suffers from many lacunae and Punjab needs to create its own legal provisions learning from the short sightedness of the Central Act. The bill emphasizes science- based standards, when most international food safety related legislation emphasize the need for health-based standards.

1.7.9 **Health Policy**

a) Punjab Health Policy to take into consideration morbidity patterns in the State.

b) Health policy must address Public health concerns. There is an urgent need of framing policing to ensure availability and accessibility of safe drinking water, sanitation, conduct of health impact assessment of all development initiatives, tackle life style related diseases like use of tobacco and alcoholism and other substance abuse and ensure road and transport safety.

c) To ensure the appropriate list of medicines to be supplied there are lots of process issues that need to be addressed. Punjab's major disease burden is still formed by diseases that are dependent very much on basic water and sanitation and directly related with levels of income at the household level. The National programs to address specific morbidities might not be enough to meet the state specific needs. The specific disease patterns make a compelling case for programs and strategies which are designed keeping in mind the specific reality.

1.8 **Drug Control**

1.8.1 Licencing and related activities

a) **Information and facilitation**

i) Develop a separate website

- Display of rules, check lists, forms on the drug controller website.
- Facility for downloading the forms.
- Client charter/standards of response, time lines and clear access systems.

ii) Maintaining electronic data base of all licensees in a form convenient for MIS/analysis.

b) **Information Systems**

c) **Approval of additional drugs**

Display all drugs already approved for manufacture on the State Drug Department website along with check list for new additions and service standards. Online acceptance of applications could follow in due course.

d) **Inspection and sampling**

i) Guidelines to be issued for inspection and sampling:

- Separating intelligence based and routine inspection the latter should be on a purely random basis.
- Based on ABC analysis, develop guidelines for inspection and random sampling of manufacturers/other licencees and review annually in consultation with the State Advisory Committee.
- Intelligence based inspection and sampling: mostly for spurious drugs to be left to local initiative.
- Team based sampling and inspection system: for routine random inspections and sampling.

1.8.2 **Contents of suggested guidelines**

a) **Random sampling:**

i) Should broadly be in the ratio of:

- consumption of drugs in Punjab of State and out of State manufactured drugs;
- consumption in rural and urban areas.

ii) Priority to sampling of expensive drugs which provide much higher incentives for violation (these can be suitably classified).

iii) Define percentage of sampling for misbranded drugs/other categories (in case felt necessary).

b) **Feedback on and review of Guidelines**

i) Get operational feedback by setting up district level committees to be convened by the drug inspectors. Nominees of state level associations apart from NGOs could be members of the district committee.

ii) Feedback from the state level committee for annual review.

c) **Information and data systems**

i) The district and state health statistical units should be reorganized to function as information systems division of the health department including drug control wing.

ii) The department should make use of the district data centres and the state data centre facility for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

iii) Drug control and similar units should be allowed and encouraged to make use of the district and state information systems units of the health department for this purpose.

iv) Laptops/ note books should be provided to the drug inspectors.

d) **Enforcement through information**

Place on the web site, a list of licencees from whose premises samples are taken, along with the results and action taken.

e) Control of NDPS Drug Abuse

i) Maintain data for different classes of drugs manufactured/imported in the State and available for trade/consumption in the state.

ii) Track the sale, trade and consumption by:

- prescribing monthly returns to be filed with the department by distributors/ whole sellers regarding; (a) receipt by of NDPS drugs; (b) sale within the State, with details of the licencees to whom sold;

- requiring retailers to maintain a monthly abstract of NDPS drugs/received/ sold/in stock, in addition to records already provided for under law.

iii) Compile the data, analyse and incorporate findings in the annual guidelines for the Drug Inspectors for inspection of licensee premises.

iv) Based on this analysis, prepare strategy for demand management.

1.8.3 **Resources**

a) Two posts of SDC/Joint Controller testing to be created and post of drug analyst to be filled up.

b) Adequate budget for payment for sample costs.

c) Adopting PPP model for providing lab testing services.

1.8.4 **Performance Indicators**

a) Rate of failure of samples – overall/specific issues of concern such as spurious drugs.

b) Annual comparison inter district.

c) Ratings to be given (above average, average, below average).

d) Annual change in the failure rate - for the State and the Districts.

1.9 Food Safety

1.9.1 Licences

a) The process needs to be streamlined as per law and confusion regarding jurisdiction should be removed- (Civil Surgeons vs local Municipal Committees) immediately and implementation of whatever decision is taken ensured.

b) A sub-site/website to be developed for food safety giving procedure for issue of licences, the application forms, fees and service standards etc. on the lines suggested for the Drug Control Wing.

c) Promotional publicity and inter action with the trade highlighting the legal obligations of dealers to get a licence and penalties for violation to ensure 100% coverage of food trade as per law.

d) Digitizing the licencee records, if necessary by out sourcing and updating periodically. Make a start by borrowing the client data base from the sales tax department

e) Inspection & Sampling

f) Guidelines to be issued for inspection and sampling.

g) Separating intelligence based and routine inspection - the latter should be on a purely random basis.

h) Based on ABC analysis, develop guidelines for inspection and random sampling of manufacturers/other licencees and review periodically in consultation with the State Advisory Committee.

i) Focus on manufacturers and wholesalers rather than retailers (the share of the latter is reportedly 60% at present.

j) Intelligence based inspection and sampling: mostly for adulterated food to be left to local initiative.

k) Team based sampling and inspection system: for routine random inspections and sampling.

1.9.2 Contents and review of guidelines

a) The department should issue annual guidelines after discussion with the field officers and a State level advisory committee (to be set up) regarding inspection and sampling of food items on the lines being done already.

b) The focus at present could be on; (a) milk and milk products; (b) use of toxic colours for food items especially sweets; (c) cold drinks; (d) pulses and (e) loose sale of spices etc.

c) District level advisory committees should be set up and their feedback should be taken note of while issuing/renewing annual guidelines.

d) Integration of public health and sanitation functions

e) Sanitation- hygiene and public health at the licencee premises - should also be the responsibility of the food inspectors and they need to be empowered under the appropriate law, till the time Food Safety ACT COMES IN FORCE.

f) Licensing should incorporate conditions regarding licencee' liability for food hygiene at the premises, especially regarding storage and disposal of waste.

1.9.3 **Enforcement Staff**

Single line professional authority and control, at all levels, without waiting for the new Act to be enforced- for the present senior staff can be given district in charge duties in addition to their field duties.

a) Information and data systems

i) District and state health statistical units should be reorganized to function as information systems division of the health department.

ii) The department should make use of the district data centres and the state data centre facility for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

iii) Food safety and similar units should be allowed and encouraged to make use of the district and state information systems units for this purpose.

iv) Laptops should be provided to the food inspectors through interest free loans.

v) On line/IVRS/ SMS systems to encourage whistle blowers and flow of information with some built in reward systems.

b) Enforcement through information

Place on the web, a list of food licencees from whose premises samples are taken, along with the results and action taken.

c) Assessment of Performance

i) Rate of failure of samples – overall and for areas vital areas such as toxic colors, milk products etc.

ii) Annual comparison inter district.

iii) Ratings to be given (above average, average, below average).

iv) Annual change in the failure rate – for the State and the Districts.

2.1 **Data and Information Systems**

2.1.1 **Reorganization of statistical units**

a) The district and state health statistical units should be reorganized to function as information systems division of the health department and should service all divisions and wings including drugs, food safety etc.

b) The health department should make use of the district data centres and the state data centre facility set up by IT Department for connectivity, storage and security of data and even for multimodal communication (video conference etc.).

2.1.2 Nature of data/information to be compiled by the Information Systems Division

a) NRHM proforma – to be continued as required by Government of India.

b) Communicable disease proforma – to be continued as required by Government of India.

c) Non-communicable disease proforma - to be continued as required by Government of India.

d) Morbidity/Mortality proforma – to be discontinued for reasons indicated.

e) Registration of deaths and related data

f) As already recommended ASHA to be declared as the notifier under the act so as to ensure that information especially regarding infant and maternal mortality is provided as prescribed in form-2.

g) Form-2 regarding information about deaths to be modified to classify causes of deaths on the following lines:

i) Accident/homicide

ii) Suicide

iii) Natural causes - sub classified- water borne diseases, cancer, chest infections/all other diseases not specifically indicated.

h) The data to be digitized starting with current entries and analysed at district, regional and state levels, to devise policy and programme interventions in regard to IMR, MMR, cancer, other diseases as per priorities of the State.

i) Information required by Drug control, Food Safety and other wings such as Malaria control, TB etc. to be compiled as required by different wings.

2.1.3 **MIS and Data Analysis**

a) Considering that the hospitals and health institutions do not have any defined jurisdiction, the district should be the unit for comparison of results and performance.

b) Result/performance indicators should be developed and data compiled and assessed district wise for the indicators.

c) District performance should be assessed under the traffic light system – Green (+ Avg.), Amber (Avg.) and Red (- Avg.). It will be more appropriate than a ranking system, AND provide pointers for improvement, without necessarily indulging in a blame game.

d) All data needs to be assessed annually for performance – a month or a quarter is not a long enough period except for purely quantitative items like family planning measures.

2.1.4 **Performance and Outcome Indicators**

Suggested performance and outcome indicators, the data and sources thereof and criteria for assessment are indicated below:

Performance and Outcome Indicators

Indicator

Data and source

Assessment criteria

MMR

Birth and Deaths Registers

[as proposed by the PGRC (2nd Report), ASHA and ANM will have direct control of the data]

Annual change

District and State level

Institutional & home delivery percentage

As per present system- ASHA/ANM reports/ Institution data

Annual change

District and State level

IMR

Births and Deaths Register - (as above) Annual change

District and State level

Sex Ratio at Birth

Births and Deaths Register - (as above) Annual change

District and State level

Common/ major diseases-Prevalence (e.g. water borne diseases) Percentage of patients in each category of major diseases; Total number (indoor and outdoor) patients

Information about number of patients and deaths –av. in proformas and village death register abstracts

Annual change

District and State level

2.1.5 **Urban Hospitals-effectiveness/efficiency**

a) Number of outpatients per MO

b) Inpatients per MO/Nurse

c) Average number of lab tests per technician

d) Average number of X-Rays per unit

e) ECG etc. per unit machine

f) Average bed occupancy ratio

g) Costs-maintenance cost, raw material cost per laboratory (optional).

ABBREVIATIONS

AFHCs	Adolescent Friendly Health Clinics
AFP	Acute Flaccid Paralysis
AHS	Annual Health Survey
AIIMS	All India Institute of Medical Sciences
ANC	Ante Natal Care
ANM	Auxiliary Nurse & Midwife
ARI	Acute Respiratory Tract Infection
ARSH	Adolescent Reproductive and Sexual Health
ASHA	Accredited Social Health Activist
BCC	Behaviour Change Communication
BPL	Below Poverty Line
BPNI	Breastfeeding Promotion Network of India
BSU	Blood Storage Unit
BSUs	Blood Storage Units
C-DAC	Centre for Development of Advanced Computing
CES	Coverage Evaluation Survey
CHC	Community Health Centre
CHD	Congenital Heart Disease
CMC&H	Christian Medical College and hospital
CMHO	Chief Medical & Health Officer
CMO	Chief Medical Officer
DHQ	District Head Quarters
DLHS	District Level Household Survey
DMC&H	Dayanand Medical College & Hospital
Dy Dir	Deputy Director
ECG	Electro Cardio Graphy
EDL	Essential Drug List
CEmOC	Comprehensive Emergency Obstetric Care
FBNC	Facility Based Newborn Care
F-IMNCI	Facility based Integrated Management of Neonatal and Childhood Illnesses

FIR	First Information Report
FOGSI	Federation of Obstetric and Gynaecological Societies of India
FRU	First Referral Unit
FW	Family Welfare
GGS Medical College	Guru Gobind Singh Medical College
GNM	General Nursing and Midwifery
GoI	Government of India
Hb	Haemoglobin
HBNC	Home Based Newborn Care
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPD	High Priority District
HR	Human Resources
IAP	Indian Academy of Paediatrics
ICDS	Integrated Child Development Services
ICT	Information and Communication Technology
ICTC	Integrated Counselling and Testing Centre
IDSP	Integrated Disease Surveillance Project
IEC	Information, Education and Communication
IFA	Iron and Folic Acid
IMA	Indian Medical Association
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
IMS Act	Infant Milk Substitute Act
IPD	In Patient Department
IPHS	Indian Public Health Standards
IUCD	Intra-Uterine Contraceptive Device
IYCF	Infant and Young Child Feeding
JSSK	Janani Shishu Suraksha Karyakram
JSY	Janani Suraksha Yojna
LBW	Low Birth weight
LHV	Lady Health Visitor

LSAS Training	Life Saving Anaesthesia Skills Training
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCH	Maternal and Child Health
MCP Card	Mother and Child Protection Card MCTS Mother and Child Tracking System
MDGs	Millennium Development Goals
MD-NRHM	Mission Director- NRHM
MHS	Menstrual Hygiene Scheme
MKKS	Mata Kaushalya Kalyan Scheme
MMR	Maternal Mortality Ratio
MMU	Mobile Medical Unit
MNCH	Maternal Newborn and Child Health
MO	Medical Officer
MoU	Memorandum of Understanding
MPHW	Multi-Purpose Health Worker
MTP	Medical Termination of Pregnancy
MVA	Manual Vacuum Aspiration
NABL	National Accreditation Board for Testing and Calibration of Laboratories
NACO	National AIDS Control Organisation
NBCC	New Born Care Corner
NBSU	New Born Stabilization Unit
NFHS	National Family Health Survey
NGO	Non-Government Organization
NLEP	National Leprosy Eradication Programme
NMR	Neonatal Mortality Rate
NPCB	National Programme for Control of Blindness
NRHM	National Rural Health Mission
NSSK	Navjaat Shishu Suraksha Karyakram
NUHM	National Urban Health Mission
OPD	Out Patient Department
ORS	Oral Rehydration Salts

PC&PNDT Act	Pre-Conception and Pre-Natal Diagnostic Techniques Act
PGIMER	Post Graduate Institute of Medical Education and Research
PHC	Primary Health Centre
PHSC	Punjab Health Systems Corporation
PRI	Panchayati Raj Institutions
PS	Principal Secretary
QA	Quality Assurance
RBSK	Rashtriya Bal Swasthya Karyakram
RHD	Rheumatic Heart Disease
RMNCH+A	Reproductive, Maternal, Newborn, Child and Adolescent Health
RMO	Rural Medical Officer
RMSCL	Rajasthan Medical Services Corporation Limited
ROP	Record of Proceedings
RTI	Reproductive Tract Infections
SBA	Skilled Birth Attendant
SC	Sub Centre/ Scheduled Caste
SHCs	Subsidiary Health Centres
SMS	Short Message Service
SNCU	Sick Newborn Care Unit
SOP	Standard Operating Procedures
SPMU	State Program Management Support Unit
SRS	Sample Registration System
STI	Sexually Transmitted Infections
TFR	Total Fertility Rate
TNMSC	Tamil Nadu Medical Services Corporation Limited
TT	Tetanus Toxoid
U5MR	Under-Five Mortality Rate
USAID	United States Agency for International Development
VHND	Village Health & Nutrition Day
WCD	Women and Child Development
WIFS	Weekly Iron & Folic Acid Supplementation
WPV	Wild Polio Virus