Functional Integration of Primary Health Care In Punjab
FUNCTIONAL INTEGRATION OF PRIMARY HEALTH CARE IN PUNJAB

Primary Healthcare is of critical importance in uplifting the overall health status of a country. It is the first port of call for majority of the patients and as first level care facility it is accessible to the largest portion of the populace. It addresses, by definition, preventive, promotive, curative, general hygienic and nutritional requirements of its catchment population and area. In case of Punjab it serves the vast majority of rural poor and is the most effective level to improve the maternal and child health. It is the appropriate level to institutionalize community participation for addressing local needs, and empowering the community to monitor and manage the primary healthcare service delivery. Primary healthcare is also the most economical system to provide comprehensive services to the majority of people at their door steps with the active participation and mobilization of local communities. Many countries in the world are now adopting an integrated approach towards Primary Health Care as a solution to their health care problems.

Punjab does not have an Integrated Primary Health Care System. The health care system consists of public sector hospitals, private sector organizations and hospitals, primary health care facilities, other public sector departments etc. The districts are experimenting with different kinds of management models and processes with the intention to improve health care services for the community.

Commitment to Primary Healthcare

Government of the Punjab is committed to provide quality healthcare services to the community through efficient and effective service delivery system that is accessible, equitable, affordable and sustainable. Fortunately the province has one of the best laid down healthcare infrastructures in the region in the form of Basic Health Units and Rural Health Centers. Moreover, there are a number of outreach programs on ground. Unfortunately, all these arrangements are not meeting the communities’ health needs and expectations due to serious institutional insufficiencies and governance issues.

One of the most important causes of this failure is the fragmentation and vertical nature of preventive and promotive service delivery that hampers effective provision of comprehensive package of services. There is also no functional linkage between outreach and clinic based services. The fragmentation and compartmentalization of service delivery is further compounded by lack of a robust referral linkage between different levels of care and less attention to inter-sectoral coordination – thus neglecting the potential of allied departments

Concept of Integration

An integrated health care focuses on the coordination of health services across the board, and collaboration of health care provider organizations and individuals. There are two levels of integration horizontal and vertical: Horizontal Integration involves coordination amongst the organizations providing same level of care under one management and Vertical Integration means coordination of organizations providing different levels of care under one management. Functional Integration is the coordination of functions and activities such as quality improvement, human resources, planning amongst various operating units in order to achieve greatest value out of the system.

Since Alma Ata Declaration more attention, political support and national resources are diverted to strengthen PHC services to ensure equitable access to sustainable quality health care for the entire population. Over the past decade there has been an increasing awareness of inefficiencies in service provision, and less than optimal outcomes for communities caused by the fragmented nature of the health systems. While health planners
and administrators envisaged that integration of the components of PHC would prove a cost-effective approach to health care delivery, many difficulties have been encountered in achieving such integration. These difficulties involved the semi-autonomous vertical programs alongside general health infrastructure providing curative services and a variable range of preventive services. These vertical programs were intended for the control of specific priority health problems, such as smallpox, malaria, tuberculosis, leprosy, during the 1960s and 1970s, or for the provision of basic health services for specific national target populations, such as mothers and children. The transition required restructuring these vertical and basic health services programs into an integrated infrastructure providing quality health care services to all the population. Some of these difficulties could also be attributed to other factors: recognition of the positive impact of integration, absence of shared objectives among health professionals and workers, and lack of motivation or personal incentives to contribute to an integrated approach.

The primary goals of integration are to ensure that clients receive quality, coordinated care, and that gaps, duplication and fragmentation in the provision of services are minimized. Health service integration has been described as:

a. formal and informal linkages between health service providers
b. cooperation and collaboration in implementing specific programs
c. formal sharing of care across health disciplines and settings.

**Millennium Development Goals**

The UN Millennium Declaration at the 1990 Millennium Summit of the General Assembly has set eight Millennium Development Goals (MDGs) to be achieved by the year 2015. Three out of the eight MDGs are directly related to the health sector. And more importantly, their attainment is directly dependent on the service delivery at the primary healthcare level;

- Goal 4: Reduce Child Mortality.
- Goal 5: Improve Maternal Health
- Goal 6: Combat HIV/AIDS, malaria, and other diseases

The Punjab Province has set an ambitious plan, under the Punjab Mid Term Development Framework (MTDF) 2007, to achieve the MDGs;

<table>
<thead>
<tr>
<th>Targets</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>Year Reaching MDG of MDG Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children fully immunized 12-23 months (%)</td>
<td>76</td>
<td>80</td>
<td>84</td>
<td>2010-11</td>
</tr>
<tr>
<td>Delivery by TBAs (%)</td>
<td>43</td>
<td>47</td>
<td>52</td>
<td>2014-15</td>
</tr>
<tr>
<td>Infant Mortality Rate per 1000 live births</td>
<td>71.5</td>
<td>69</td>
<td>66</td>
<td>2014-15</td>
</tr>
<tr>
<td>Maternal Mortality Rate per 100,000 live births</td>
<td>257</td>
<td>244</td>
<td>232</td>
<td>2018-19</td>
</tr>
</tbody>
</table>
Primary Healthcare Infrastructure in Punjab

Punjab has an elaborate network of Primary Healthcare Facilities (PHFs);

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>NO.</th>
<th>Beds (Indoor/Outdoor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Health Centre (RHC)</td>
<td>291</td>
<td>5986</td>
</tr>
<tr>
<td>Basic Health Unit (BHU)</td>
<td>2456</td>
<td>4866</td>
</tr>
<tr>
<td>Dispensaries/Sub Health Centers</td>
<td>787</td>
<td>318</td>
</tr>
<tr>
<td>Mother &amp; Child Health Centers</td>
<td>188</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3724</td>
<td>11170</td>
</tr>
</tbody>
</table>

PHFs have sanctioned posts of about 4327 doctors (male & female), 291 dental surgeons, 1624 nurses and 6668 paramedics. There is a sanctioned strength of 52000 Lady Health Workers (LHWs) under the National Program for PHC & FP to provide primary healthcare and family planning services to an estimated 55% of the total population in Punjab. Beside, a number of vertical programs are being implemented to combat communicable/non-communicable diseases at the district level.

The existing primary health care infrastructure provided by the government is inadequate in terms of coverage of the population and grossly underutilized because of the poor access and dismal quality of health care provided. In most PHFs drugs and equipments are missing or in short supply. Some of the BHUs are working without basic utilities like electricity, sewerage and telephone. There is shortage of staff and the system is characterized by endemic absenteeism on the part of medical personnel due to lack of supervision and control. The PHC system in fact has never functioned at its full strength;

District Health System

District is the operational level where the government policies and strategies are translated into action. At this level, planning from the top and the community level can best be integrated. A district is a manageable unit small enough to be administered effectively and efficiently, and yet large enough to make it feasible to provide the components and technologies needed to support the primary health care programs. The District Health System can integrate health programs by adopting top level and bottom up planning, and is capable of coordinating government and private sector efforts. It can identify inequities and target them for action.

With various vertical programs financed by the federal and provincial governments, and the NGO and donor financed programs for MNCH services, service delivery in districts risks fragmentation, duplication, and inefficiency in resource use. Although most of the programs at least keep EDOs (Health) informed, they have separate management and reporting arrangements. In addition to vertical programs, there are district specific, donors driven, health programs operating in the area of primary healthcare.

The district health management system controlling the primary healthcare facilities has built-in flaws. Those who are responsible for the execution do not have the administrative authority. This has made the health management status quo - minded, devoid of initiative and drive. There is no system of continuing education or training of health administrators in new development techniques like information technology and project management. Moreover, there is little evidence of a conscientious commitment by the District Governments to invest in primary healthcare uplift from their own development budgets.
**PHC Service Package**

Keeping the principles and components of PHC and the notified Minimum Service Delivery Standards into consideration, the following appears to be the minimal basic human health needs for the populace of Punjab.

- Access to knowledge and information on the beneficial health practices;
- Access to prevention from preventable diseases including vaccine preventable illnesses;
- Access to clinical care for basic illnesses, accidents, and emergencies;
- Access to clinical care and support for chronic illnesses like hypertension, diabetes, tuberculosis etc;
- Timely identification and management of potential threats to the human health including childhood illnesses, pregnancy related risks, environmental hazards, etc;
- Provision of safe deliveries and neonatal management;
- Effective and efficient referral of high risk cases from lower levels to the higher levels of the health care delivery system;
- Community involvement in the healthcare related issues; and
- Identification and correction of common learning impediments amongst primary school students.

The Health Department has notified Minimum Services Delivery Standards (MSDS), Standard Operating Procedures (SOPs), Standardized Medical Protocols (SMPs) and the Referral Protocols, and the Government of the Punjab is committed to implement all these standards and protocols. Their implementation at the Primary Health Care facilities will be instrumental in the functional integration of the PHC.

Punjab has also ventured into the Public-Private-Partnership (PPP) models to improve the primary healthcare service delivery. In one example, the management of BHUs is contracted out to the Punjab Rural Support Program (PRSP), a semi-government organization, under the Chief Minister’s Initiative for Primary Healthcare (CMIPH). The Initiative was started in district Rahim Yar Khan in 2003 and later on eleven more districts entered into an agreement with the PRSP for management of the BHUs. According to the agreement the District Governments transferred the budget and administration of the BHUs to the PRSP to manage and operate the health facilities. Although, the model made improvement in the presence and punctuality of staff, increased patient turnover, better availability of medicines and general cleanliness and maintenance of the facilities, but despite full administrative leverage it could not ensure the preventive, promotive and community based functions of the BHUs, due to a variety of reasons.

Similarly, the Punjab Integrated Primary Health Care Model (PIPHCM) Program is being executed in 12 districts of the province to restructure and strengthen primary health care system. The Program is funded by the Government of the Punjab and executed by the National Commission for Human Development (NCHD), which is an NGO. The main objectives of the program are to integrate preventive and curative health services, establish an automated household database of the catchment population, and establish an effective referral system to and from BHU etc.

Beside this extensive public sector network, vertical programs and other reform initiatives, at the primary healthcare level, there is also a visible presence of private practitioners in traditional and alternate medicine. The sector is unregulated and operating without any quality control checks by the government authorities.

There is no formal and well defined integration within the horizontal infrastructure and services; or with the vertical programs. Healthcare facilities at primary, secondary and tertiary level are working in isolation with no practical referral linkages. As a result the community services (LHWs) are not linked and supported by the BHUs which in turn are not
practically linked with the RHCs. The same goes for the secondary and tertiary level health facilities. There is no system of patient registration and follow-up, especially at the primary level facilities. There is no proper system of record keeping and file work at these facilities. Moreover, there is no inter-sectoral coordination between the public sector departments which control the conditions contributing towards the healthy living environments. The basic function of primary healthcare i.e., providing promotive, preventive, curative and rehabilitative services cannot be performed without improving the level of education; provision of quality food supply; proper nutrition; adequate supply of safe water and basic sanitation. Only a coordinated effort of all these sectors can materialize an effective and sustainable health service to the community.

**PHC Service Provision**

**Community Level**

PHC approach gives more importance to prevention of diseases for which contact and interaction between the community and the health worker is most vital, and is made possible by various community health functionaries and different outreach health workers.

The *community health functionaries* include Lady Health Workers (LHWs) and Community Midwives (CMWs).

**LHW**: Covering a population unit of 1000, she is supposed to bridge the gap between the community & the health facilities, provide PHC services with emphasis on MCH, family planning & improvement in nutritional status of mothers & children, and improve utilization of health services through referral. She organizes community by developing women groups and health committees and liaises between formal health system and community.

**CMW**: It is a cadre of community-based health workers, who meet the international definition of skilled birth attendants. These community midwives (CMWs) are being trained in home-based deliveries, which will significantly increase the proportion of skilled birth attendance in the province. She will provide individualized care to the pregnant women throughout the maternity cycle and the neonate, in her own environment and helping her in self-care. She will also monitor the physical, social and emotional well being of the pregnant woman as needed.

The *outreach health workers* functioning for specified programs in the province are Communicable Diseases Control (CDC) Supervisor - focusing mainly on malaria control activities, Vaccinator - primarily responsible for administering vaccines against the immunize-able diseases, and Sanitary Inspectors - the care takers for sanitation needs, and implementation of Sanitation and Pure Food Acts.

**PHC Health Facilities Level**

In the current setup the First Level Care Facility (FLCF) is represented by the Basic Health Unit and in some places the Rural Health Center.

**Basic Health Unit (BHU)**

Typically each Union Council has a BHU which has 2 beds and serves a catchment population of about 10,000 to 25,000. It is charged with the roles of First Level Referral for patients referred by LHWs, primary level organized curative care using approved essential drugs list. BHU refers patients to RHC as and when necessary, provides MNCH services including preventive EmONC which includes antenatal care, birth preparedness counseling, conduction of normal deliveries, post-natal care and management of ailments of neonates and children which do not require referral.
Rural Health Centre (RHC)

Typically the RHC, at the former Markaz level has 20 beds, and each serves a catchment population of about 100,000. This is envisaged as a health facility which is open 24/7. RHCs is meant to function as the BHU for the Union Council in which it is located and provide First Level Referral care to the patients referred by the LHWs, CMWs, and BHUs. The referral role is strengthened by the availability of ambulance at this level. The additional facilities include minor surgical operations, provision of basic EmONC, newborn care including resuscitation and care for minor complications of newborn, radiography / imaging services, dental services etc.

Issues in PHC Service Provision

Despite the massive network of public primary and secondary health facilities, coverage of basic health services remains low. The reasons include limited availability and low quality of services, and suboptimal health seeking behavior. Public primary health care has been largely underutilized mainly because of the absence of doctors, unavailability of drugs, and unreliable and poor quality of services. The biggest obstacle for improving quality is the absence of doctors and paramedics, and poor quality of their training. The day-to-day management of health services has suffered from inadequate capacity, challenges in recruiting and posting motivated doctors and other professionals in rural and remote areas, rigid administrative procedures, inefficient and lengthy procurement processes for drugs and medical supplies, and lack of performance monitoring to periodically identify problems and solutions.

To address some of the above issues, the Government of Punjab started the model of contracting of health services delivery or management to Punjab Rural Support Program (PRSP) – with the expectation of improving the efficiency of health service delivery and making the services flexible by removing bureaucratic rigidities. Similarly the actions agreed with the National Commission for Human Development (NCHD) focused on augmenting the service delivery mechanisms at the UC level – most prominently strengthening BHUs, ensuring effective community participation, and launching School Health Service.

A new service delivery model is required which is based on strengthening the government’s own institutional arrangements and ensures optimal PHC service delivery to the masses. It is therefore imperative to draw up a strategy aimed at addressing these core issues with a view to improve effectiveness and efficiency of health services. A paradigm shift is needed as doing the same things over and over again will yield the same results. However, important considerations of minimal service structure changes, health policy redesign and avoidance of massive resources investment will need to be factored in if such a reform has to be effective.

Recommendations for Functional Integration

It goes without saying that quality healthcare is a fundamental right of all citizens. A comprehensive adequate, appropriate, easily accessible, affordable and sustainable primary health care is essential to protect, maintain and enhance people’s health, but the same is constrained due to ad-hoc approaches. There are however, no quick-fix solutions in health. A sustained strategic approach can deliver good quality care but it must be adequately resourced and properly planned, to bring a change in the health delivery system.

The districts have prepared and adopted their three years’ rolling plans, which would result in improved operational planning for implementing MSDS. Systems for providing support in this vital area will have to be put in place. There is severe lack of competent, professionally trained health managers due to discontinuation of management cadre of doctors. There is need of putting in place a comprehensive HR policy, and re-introduction and strengthening of management cadre. The entry into this cadre should be after appropriately gauging the
aptitude and competence of aspiring health manager. There should also be arrangements for continuous professional development of these managers by making compulsory attendance of minimum numbers of short training programs for each step promotion.

After a meticulous analysis of the status-quo, new features will have to be implemented in the Primary Health Care, to bring about integration, improvement in the service delivery and quality of care. Although much can be learned from the successful models in the region like Iran, China or Sri Lanka, but the best recipe lies in the indigenous approach. The inherent logic of new features should be characterized by integration of services, minimum service delivery standards, computerization, referral linkages, capacity building of health staff both at facility and management level, community participation and inter-sectoral cooperation. The progress and impact of the new measures can be supervised through effective use of DHIS and stringent monitoring and evaluation (internal & external) mechanisms. The following measures are recommended for functional integration in the Primary Health Care:-

**BHUs / RHC to be the hub of Primary Health Care Services**

The Primary Health Care services will be integrated at the Basic Health Unit and Rural health Centre level. The Medical Officer in charge of the BHU has already been declared as Health Officer and is responsible for all health activities in the catchment area of the health facility. The catchment area of a Rural Health Centre does not normally has a BHU and its Senior Medical Officer may also be declared a Health Officer on similar lines. The MSDS and the Referral Protocols will be implemented in all the Primary Health Care facilities. All the vertical programs including routine immunizations, prevention of specific communicable diseases and mother & child health would report to the BHU/RHC for an integrated action plan. A systematic integration of LHWs with the BHUs and RHCs is another essential requirement to make full use of the potential of both the components. The modalities of the integration need to be clearly spelled out in the job description of the LHWs and the staff of the BHUs/RHCs. The proposed integration would also create a linkage between the community and the primary level health facilities. The operating procedures under the integration would require regular monitoring by the district and provincial authorities, supervised by a dedicated unit, for proper implementation of the system.

**Minimum Service Delivery Standards at the BHUs and RHCs**

The Primary Health Care facilities in Punjab are functioning without observing the laid down service delivery standards and operating procedures. The patients visiting the health facility are also un-aware about the available services and medicines. The concept of legal rights of the patients is non-existent. As a result there is no certainty about the kind and quality of medical care at the BHUs and RHCs. The people therefore, have never developed a confidence in the government run primary level health facilities.

The Punjab government has developed Minimum Service Delivery Standards (MSDS), Standard Operating Procedures, Standard Medical Protocols and Referral Protocols, for the primary and secondary healthcare facilities. It would be imperative to implement MSDS in all the districts in Punjab at least for the primary health care facilities to achieve the objective of functional integration.

**Expansion of LHWs' network, enhanced supervision**

The National Program for PHC & FP with its existing strength of 52000 LHWs covers 55 % of the population of Punjab. They are supervised by 1445 LHSs i.e., about 1 LHS for 35 LHWs. The Program is in the process of expansion all over the country.
There is no second opinion about the efficacy of LHW network in household coverage and promotion of better health practices. There are however, concerns about the level of skill and knowledge of the LHWs, as revealed in the internal evaluation report 2008. Another weak area is the linkage between the LHWs and the PHFs. The LHW Program, despite being embedded, geographically, in the local rural communities of all the provinces, gives the impression of a vertical national program. The MoH, Islamabad and the Federal Program Implementation Unit (FPIU) make no bones about the over-guarded ownership of the program virtually to the exclusion of the provincial governments. Resultantly, the LHWs have failed to become an integral part of the primary healthcare network.

**Household database at the BHU**
The primary healthcare facilities have no record and information about their catchment population; neither do they have any evidence based information about the burden of disease and health requirements of the people and its area. It is therefore, very essential to establish and maintain computerized record of the households and their health status at the BHU. This is being tried in twelve districts of Punjab under the PIPHCM Program; however the intervention can be implemented in all the districts after a careful evaluation of the PIPHCM model.

**Job description - Roles and Responsibilities of the health staff**
The MSDS also proposes changes in the job description of the primary healthcare staff at all levels i.e., medics, paramedics, health technicians and the support staff. Some of the redundant cadres like the sanitary inspectors and sanitary patrols will have to be re-activated or a new cadre of public health worker may be created at the level of BHU with specific tasks including conditions of safe drinking water and sanitation.

**Improvement in the work conditions**
There is a definite need to improve the working conditions of the health staff in terms of facilities, delegation of power and constant capacity building. However, this should be entailed with tangible and quantifiable targets for the each level of health staff to measure and evaluate their performance. There is also a need to develop systematic and rigorous monitoring and evaluation mechanism to measure the performance of the staff.

**Community participation and management structures**
Active community participation can be most instrumental to ensure sustainable improvement in the health service delivery, quality of care and the overall hygienic conditions. However, it has been difficult to turn the concept into reality in the health sector.

Generating community participation and establishing community management structures is one of the major activities and the exit strategy under the two PPP programs in Punjab i.e., Chief Minister’s Initiative for Primary Healthcare (CMIPH) and Punjab Integrated Primary Health Care Model (PIPHCM). The CMIPH has involved the community in the shape of Support Group, while the PIPHCM has constituted Village Health Committees, comprising of the representatives from local villages. The idea will however take time to get ingrained into the system. The provision of Citizen Community Boards (CCBs) under the Local Government Ordinance 2001 can further support to strengthen community’s active participation in the management and supervision of the primary healthcare facilities. The intervention however deserves greater support and ownership by the provincial and local governments, rather than being experimented under the projects.
**Integration of services at the District level**

The forum of District Health Management Team (DHMT) has been constituted in some districts under the health projects like Women Health Project, PAIMAN and SOHIP. The DHMT headed by the DCO, should be responsible to address the issues of public health for a well coordinated and integrated action. Integration of all the vertical programs should also be done at district level as well at the forum of DHMT.

**Strengthening of District Health System**

Due to a multitude of factors the management capacity available at districts has become severely compromised. This was one of the causes of experimenting with transferring management of BHUs to non-government sector. The following reasons could be ascribed for this management weakness:

- Lack of a robust system of monitoring and quality assurance
- Absence of facilitative systems for purchases; logistic and supply management; *and most importantly*
- Non-existence of a cadre of professionally trained managers

There is need for addressing the above deficiencies and redefining roles, responsibilities, authorities and accountabilities of health staff.

**Establishment of referral linkages between the BHU – RHC & THQ/DHQ hospitals**

There is no institutionalized referral system within the primary healthcare facilities and beyond in Punjab. This has resulted into unnecessary burden on the secondary and tertiary level hospitals. The Health Department has notified Referral Protocols, which should be implemented at both primary and secondary health care levels. This will be a key factor in making the BHUs fully functional and the developing confidence of the community in the government primary healthcare facilities. A free ambulance service should also be provided between the BHU – RHC and secondary health facilities for emergency patients. The idea of establishing a District Ambulance and Transport Service can also be explored and piloted in a few districts.

**School health program for primary level students**

Universal screening and treatment of identified illnesses of the primary school children should be made a regular activity under the primary healthcare. Initially the screening should be done for the common ailments like congenital deformities, ENT, eye and skin diseases which affect the learning abilities of the children. This activity is being done under the PIPHC program and can be replicated in all the districts of Punjab.

SHS combines services from medical, teaching and other professionals applied in or out of school to improve the health and well-being of children, and in some cases whole families. The fundamentals of SHS are the early detection, correction, prevention or amelioration of disease, disability and abuse from which school aged children can suffer. The problems of primary school students can easily be identified corrected through strengthening the resources available with health and education departments. The model of SHS being promoted both by NCHD and HSRP needs to be strengthened and integrated into the mainstream health care system.

Health care in Punjab is characterized by multiple practitioners and specialists, large number of health care organizations with complex structures, created around the needs of specialist groups and not around the needs of the patients. The results are completely dissatisfied customers and escalating costs. The integrated approach towards health care delivery is an attempt to many of these long standing problems afflicting our health care system.
Health is not simply a physiological phenomenon it is a state of overall well being. Improving the health of the people is directly dependent on a number of factors extraneous to the health sector. It is therefore inevitable to make a concerted effort, by integration of all the relevant services, to bring a marked improvement in the health service delivery, and the Primary healthcare due to its importance and scope provides the most appropriate starting point for the initiative.

The concept paper have been adopted from the papers written by Mr. Jawad Rafique Malik, Special Secretary Health, Government of the Punjab; and Dr Arshed Usmani, Director Development, Office of the Director General Health Services, Punjab.