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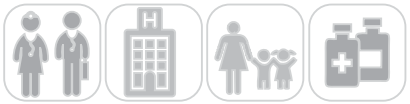
Sub-National Governance Programme

# NEEDS ASSESSMENT PRIMARY HEALTH CARE

## Hafizabad



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## Hafizabad

# Acknowledgements

This report has been prepared to better understand the dynamics of the budgeting of health service delivery at the district level in Punjab, Pakistan. The report is a combination of survey and desk based analyses developed in collaboration with several partners. The survey work and its report were undertaken by Contech International, a health sector consultancy firm based in Lahore, while the Geographic Information Systems (GIS) maps and analyses were supported by the World Bank's team working on IT solutions for improving governance. The analyses of budget and financial statements were undertaken by the Sub-National Government (SNG) Programme Punjab team.

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| | |
|---|---|
| AFB | Acid Fast Bacteria |
| AIDs | Acquired Immune Deficiency Syndrome |
| ANC | Antenatal Care |
| ARI | Acute Respiratory Infection |
| BHU | Basic Health Unit |
| BOD | Burden of Disease |
| CDC | Child Development Centre |
| CDD | Childhood Disintegrative Disorder |
| CEI | Client Exit Interview |
| CEO | Chief Executive Officer |
| CMIPH | Chief Minister's Initiative for Primary Health Care |
| CMW | Community Midwife |
| CS | Contraceptive Surgery |
| DALYs | Disability Adjusted Life Year |
| DCO | District Coordination Officer |
| DFID | Department for International Development (UK) |
| DG | Director General |
| DGHS | Director General of Health Services |
| DHA | District Health Authority |
| DHDC | District Health Development Centre |
| DHIS | District Health Information System |
| DHQ | District Headquarters Hospital |
| DoH | Department of Health |
| DOH | District Officer Health |
| DOTS | Directly-Observed Treatment, Short-Course |
| DSM | District Support Manager |
| DSU | District Support Unit |
| DTL | Drug Testing Laboratory |
| EDO | Executive District Officer |
| EDO (H) | Executive District Officer (Health) |

# List of Abbreviations

| | |
|---|---|
| EPHS | Essential Package for Health Services |
| EPI | Expanded Programme of Immunisation |
| FGD | Focus Group Discussion |
| FP | Family Planning |
| FWW | Family Welfare Workers |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| GPRS | Ground Packet Radio System |
| HCP | Health Care Provider |
| HHs | Health Houses |
| HIV | Human Immunodeficiency Virus |
| HR | Human Resources |
| HRH | Human Resources for Health |
| HSMB | Health Sector Ministerial Board |
| IDIs | In-Depth Interviews |
| IUCD | Intrauterine Contraceptive Device |
| IMR | Infant Mortality Rate |
| JDs | Job Description |
| KII | Key Informant Interview |
| KP | Khyber Pakhtunkhwa |
| KPIs | Key Performance Indicators |
| LHS | Lady Health Supervisor |
| LHV | Lady Health Visitor |
| LHW | Lady Health Worker |
| M&E | Monitoring and Evaluation |
| MCH | Maternal Child Health |
| MDGs | Millennium Development Goals |
| MICS | Multiple Indicator Cluster Survey |
| MIS | Management Information System |
| MMR | Maternal Mortality Ratio |

# List of Abbreviations

| | |
|---|---|
| MNCH | Maternal Newborn and Child Health |
| MO | Medical Officer |
| MSDS | Minimum Service Delivery Standards |
| MTBF | Medium Term Budgetary Framework |
| MTDF | Medium Term Development Framework |
| NGO | Non-Governmental Organisation |
| OPD | Out Patient Department |
| OPV | Oral Polio Vaccine |
| ORS | Oral Rehydration Salts |
| OT | Operation Theatre |
| PBF | Performance-Based Finance |
| PDHS | Pakistan Demographic Household Survey |
| PER | Performance Evaluation Reports |
| PET | Post Exposure Treatment |
| PHC | Punjab Health Care Commission |
| PHC | Primary Health Care |
| PHDC | Provincial Health Development Centre |
| POL | Petroleum Oil and Lubricants |
| PPP | Public–Private Partnership |
| PSLM | Pakistan Social and Living Standards Measurement Survey |
| PRSP | Punjab Rural Support Programme |
| PSPU | Punjab Health Sector Policy and Strategic Planning |
| PITB | Punjab Information Technology Board |
| PWD | Population Welfare Department |
| RH | Reproductive Health |
| RHC | Rural Health Centre |
| RHS | Reproductive Health Services |
| RMNCH | Reproductive Maternal Newborn and Child Health |
| RTIs | Reproductive Tract Infection |
| SDA | Special Drawing Account |

# List of Abbreviations

| | |
|---|---|
| SH&NS | School Health and Nutrition Supervisor |
| SMPs | Standardised Medical Protocols |
| SOPs | Standardised Operating Procedure |
| SNG | Sub-National Governance |
| STIs | Sexually Transmitted Infection |
| TBAs | Traditional Birth Attendants |
| TB | Tuberculosis |
| THQ | Tehsil Headquarters |
| TNAs | Training Needs Assessment |
| TT | Tetanus Toxoid |
| U5MR | Under-Five Mortality Rate |
| UC | Union Council |
| UN | United Nations |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |
| WMO | Women Medical Officer |

# Executive Summary

## A. Introduction

### 1. The Sub-National Governance Programme

The Sub-National Governance (SNG) Programme aims to strengthen governments' capability to deliver health and education services by providing technical assistance to sub-national governments of 12 selected districts of Punjab and Khyber Pakhtunkhwa (KP) to enable them to: take decisions based on robust evidence; make services more responsive to people's needs; and strengthen government capability to deliver basic services.

### 2. The health needs assessment in Hafizabad District

To support the achievement of these objectives, the SNG Programme conducted a health needs assessment in Hafizabad District, Punjab to: identify gaps and issues in the access, coverage and quality of primary health services; highlight gaps in health sector performance indicators and identify the factors influencing these gaps (planning, budgeting and management processes); and inform relevant stakeholders about the service delivery gaps and identified needs.

An integrated approach was adopted in the needs assessment, including a literature review, Key Informant Interviews (KIIs), Focus Group Discussions (FGDs), field visits for Client Exit Interviews (CEIs), Mystery Clients Interviews, stakeholder consultations, and GIS analysis. A review and analysis of budgetary allocations for the sector was also carried out.

### 3. Areas assessed

The areas looked at in the needs assessment were:

- **Access to services**, including: physical accessibility of primary health care facilities – Basic Health Units (BHUs) – for the catchment population (average distance and travel time of citizens to BHUs); other hindrances / constraints to accessibility (the local environment, local culture); and the availability of roads. To support analysis in this area, outpatient department (OPD) data was analysed

and FGDs carried out to obtain citizens' views of the ease of accessibility of their respective BHUs, especially for women, girls and minority groups.

- **Service delivery and coverage**, including: whether Minimum Service Delivery Standards (MSDS) and Essential Package of Health Services (EPHS) and other services were provided; the disease patterns of the districts; and the availability of requisite staff, medicines and diagnostic services at the facility level. To support analysis in this area, information / data of BHU doctors, staff and medicines was gathered and feedback from citizens was sought during FGDs. Inspection of the facilities was also carried out.
- **Quality of services**, including: client satisfaction with primary health services; community feedback regarding the timeliness of service delivery; attitudes of BHU staff towards patients; the level of attention given by physicians; the provision of medicines; and the effectiveness of referrals.
- **Management, governance and finance of services,** including: the supply side or management practices, particularly financial management systems of the districts (such as budgeting, planning and management practices); the utilisation of resources; the effectiveness and efficiency of procurements, (especially of medicines and facilities); and decentralisation.

**Results of assessment**

The findings of the assessment resulted in recommendations to improve the provision of primary health care, including improvements in the business processes for the services. These recommendations also include proposals regarding the district budget.

## B. Findings

### 1. Management and governance issues at provincial level

#### 1.1 Limited use of data for planning health services

Most of the stakeholders involved in policy-making processes in Punjab province report limited use of data for planning health services. An absence of collated information at different levels and low quality reporting system results in constrained decision-making and planning at the provincial and sub-national level.

#### 1.2 Procurement of medicines and equipment

Lack of planning for the timely procurement of medicines in accordance with patients'

needs is reported as being the major issue regarding provision of services. Although a specific timeframe is stipulated for each step of the procurement process, this is seldom followed. The reasons given for this are a weak supervisory and monitoring mechanism and issues in planning. In addition, data used to forecast medicines is neither maintained nor reliable. Indeed, despite the fact that one of its highest priorities is to ensure the availability of the required range of medicines at BHUs, the Punjab Rural Support Programme (PRSP), to which the District Government Hafizabad has contracted out the management of BHUs, has so far had partial success in the timely provision of medicines, due largely to scarce resources and an increased patient load. Governance issues – such as weak supervisory, coordination, accountability and performance management – are other elements undermining the provision of quality health services.

### 1.3 Lack of structural integration

A lack of inter-provincial harmonisation between different health services programmes is a main concern highlighted by respondents to the study. A low level of coordination between regular health departments and vertical programmes gives rise to issues such as duplication of resources and services. Most of the vertical programmes have their own management, reporting and monitoring mechanism and work in isolation, with a low level of coordination with other programmes.

### 1.4 Poor management skills and capacity

A lack of management skills and capacity issues at the provincial level is reported. Provincial health directors and members of their health management teams have clinical backgrounds, but very few of them are trained in public health planning or health management. They also lack guidelines.

### 1.5 Inadequate monitoring and evaluation (M&E)

Inadequate monitoring and measuring of health system performance is reported, leading to a failure to achieve optimal service delivery outputs. Provincial managers highlight a lack of funds and human resources (HR) to enable effective monitoring. Moreover, delays in the provision of resources means that departments cannot make regular monitoring visits and evaluate workers. Also, although monitoring manuals have been designed for service providers, due to restricted resources these manuals are not followed. Finally, no grievance redress mechanism has been established at the BHU level till now, as due to limited resources the Punjab Healthcare Commission (PHC) is not taking on this task.

## 2. Management and governance issues at district level

### 2.1 Autonomy at district level

The District Coordination Officer (DCO), the head of the District Administration in a district, has the power to evaluate the performance of officers and direct them to achieve the set goals in the approved district action plans, as well as to deal with HR and finances. However, the DCO is subject to political interference in exercising this power. Similarly, the Executive District Officer (Health) (EDO(H)) and the District Officer Health (DOH) have autonomy to make health plans according to the needs of the community but limited capacities in this regard. A similar uncertainty exists regarding the District Support Manager (DSM) PRSP.

### 2.2 Improvements to be made in PRSP management of BHUs to ensure quality service delivery

The District Government Hafizabad has contracted out the management of BHUs to the PRSP, a semi-government organisation, under the Chief Minister's Initiative for Primary Healthcare (CMIPH). In line with the agreed arrangement, the District Government has transferred a one line budget to PRSP to manage and operate the district BHUs. It was observed that although the district has made improvements (in the availability and attendance of staff, increased patient turnover, better availability of medicines and improved general cleanliness and maintenance of the facilities) it still faces issues in the provision of quality service delivery, despite having full administrative leverage. Although, the entire allocated budget of BHUs has been handed over to PRSP, a slow transfer of funds is reported to be one of the hindering factors in the timely provision of quality health services and in achieving set targets.

### 2.3 Inadequate M&E at district level

Inadequate monitoring and health system performance evaluation makes achievement of service delivery outputs challenging. It was stated that Performance Evaluation Reports (PERs) assessing the performance of district managers and health care providers (HCPs) give 'good' remarks to everyone, irrespective of actual performance. Promotions are made on a routine basis, rather than on the basis of performance, and there is no incentive system to motivate managers and employees to perform better. However, the study did reveal that the use of IT and tracking telecommunication (through Android phone technology) to strengthen monitoring in the district was introduced in April 2014. Monitoring is carried out on set parameters, such as presence of staff, cleanliness and provision of medical supplies, etc.

At BHU level, PRSP has its own monitoring and supervision mechanism in the district, with all health facilities being required to keep a daily record. District management, including the DSM of PRSP, check this record during their visits, to assess the quality of

health care services. PRSP Provincial teams also conduct monitoring visits. However, a lack of means of transport, security of female staff and ineffective linkages were identified as major barriers in ensuring the quality of PHCs at BHU level in the community. Moreover, the PRSP monitoring system has not been integrated into the district health monitoring system, which has led to coordination and performance issues.

## 3. Finance and budgeting

### 3.1 Allocation of financial resources

Insufficient financial resources (Rs. 44,629.627 million in 2013–14) are allocated to health in the provincial budget. The negligible expenditure on health as a percentage of GDP (2.7%, last calculated in 2012) is insufficient to provide effective and quality health services to the community. It was reported that no evidence or data is used when making a budgetary plan for facilities in the district, and the prevalence of diseases and incidences in the district are not considered during the process of allocating finance resources. Also, most of the allocation is for tertiary health care facilities, at the expense of secondary and primary health care. Furthermore, the non-salary component of the budget is quite low for both the primary and secondary health care facilities. This non-salary component, which includes the budget for procurement of medicines and repair and maintenance of equipment, is critical for effective service delivery at the grass roots level. Thus, the basic community needs are not properly fulfilled.

### 3.2 Utilisation of budget

There is significant variance in the budgeted amounts and actual expenditures (AE) incurred by the Health Department, Hafizabad. This clearly highlights gaps in financial management practices at the district level. Moreover, even the low level of funding allocated for the non-salary component is not fully utilised by the district.

In Hafizabad funds are transferred to PRSP on a quarterly basis, for the administrative and financial management of BHUs. The variation between the budgeted amounts and AE for 31 BHUs in Hafizabad District (29 BHUs under the PRSP and two under the DG), clearly reflects a lack of financial planning and an absence of evidence-based budgeting for the provision of primary health services during the last few years.

BHU budgeted expenditure and AE mainly consists of employee-related expenses, operating expenses and repairs and maintenance costs. Most of the spending at BHUs is on the salaries of staff.

The budgeted amount for operating expenses and for repairs and maintenance falls short of the sectoral needs. Despite this fact, the budgeted amounts for operating

expenses and for repairs and maintenance are not being fully utilised. The non-salary budget, including that for vacant posts, is transferred to PRSP as grant-in-aid. Therefore, the procurement of medicine is carried out by PRSP. However, the allocation of the grant-in-aid is often not in accordance with PRSP's demands.

The per patient non-salary expenditure at the BHU level ranges from Rs.149 to Rs.61. This allocation is quite modest, keeping in view the actual need for provision of medicines and diagnostic facilities etc. This suggests there is a need for budgeting in accordance with the needs of the sector, i.e. the number of patients visiting BHUs and the average cost of the provision of health care services.

**Details of finance and budgeting at district level**

The share of the expenditure of health institutions in the total expenditure at district level remained between 16%–18% during the four year period (FY 2010–11 to FY 2013–14).

The health current budget was Rs.327, Rs.336, Rs.508 and Rs.517 million during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. The year on year (Y-o-Y) increase in the budget was 3%, 51% and 2% in 2011–12, 2012–13 and 2013–14, respectively. The Y-o-Y increase in AE was 30%, 20%, and -2% in 2011–12, 2012–13 and 2013–14, respectively.

In the district health budget estimates, the salary share was 74%, 76%, 79% and 81% and the non-salary share was 26%, 24%, 21% and 19% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. Similarly, the share of salary in AE was 71%, 72%, 77% and 77%, whereas the non-salary share was 29%, 28%, 23% and 23% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. Overall budget utilisation of salary was 79%, 98%, 81% and 79% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. The non-salary budget utilisation was 91%, 119%, 89% and 99.6% during the same years.

Generally the district has – despite restraints – been allocating an adequate non-salary budget for the health sector, keeping in view the generally accepted standard that a non-salary budget should be equal to 30% of the salary budget. The non-salary budget primarily comprises operating expenses and repair and maintenance. The operating budget includes the budget for drugs and medicines. In Hafizabad, the Director General (DG) allocates funds to PRSP as a grant-in-aid for the procurement of drugs and medicines. Excessive expenditure for grant-in-aid / transfers has been reported in the civil accounts for FY 2011-12, which clearly reflects under-budgeting. The utilisation of the non-salary budget has been quite volatile over the years.

The share of secondary health care in total health expenditure ranges from 30% to 34%. The rest of the budget is used for administration, other health facilities and general nursing schools, etc.

Primary health care services were provided through 41%, 40%, 32% and 32% of the total health budget in the district during the four years under analysis. The AE on primary health care was 38%, 41%, 40%and 37% during FY 2010–11, 2011–12, 2012–13 and 2013-–14, respectively. Utilisation of this budget was 75.1%, 107.1%, 99.8% and 97.5% during these years, respectively. While budget estimates show a decreasing trend in primary health care allocations, AE has mostly been on the higher side, reflecting poor budgeting during these years.



## 4. Other

### 4.1 Access to services

The majority of the study respondents stated that in the case of remotely located BHUs, accessibility is a major problem. The conditions of most of the roads to these BHUs are poor and transport is not available all the time. Where transport is available,

high costs were highlighted as making it difficult to access remote BHUs. Where there is a BHU nearby, people are willing to seek health services from the BHU as they can approach it by walking or by motorcycle. However, a majority of respondents stated that the limited opening times of BHUs (from eight to two o'clock) were another issue regarding accessing services from BHUs, causing respondents to take patients to private or city hospitals. Respondents demanded that the BHUs be kept open 24/7.

The mean distance of residences from BHUs is 3.7 km. It was further reported that within one km, all of the citizens travel to a BHU by foot. However, within three kms, 50% of the citizens travel by foot and 50% by cycle. Beyond three kms all use motorbikes to travel to BHUs. 17% of citizens reported having travelled on a bad road to a facility. 47% said that the main reason for their visit was access to the facility; 50% reported that both access and affordability were reasons. The rest were minor reasons. These findings were corroborated by GIS analysis.

### 4.2 Service delivery and coverage

Due to the increasing population, the coverage of health services in the district is insufficient. Many service delivery gaps at the facility level were reported. The study found insufficient financial resources and lack of staff for delivering current provincial government approved and notified service packages. The majority of facility in-charges reported unavailability of trained staff at their BHUs, due to which provision of primary health services at BHUs was not possible. To give an example, the target population for each Lady Health Worker (LHW) has increased from 1000 to 1400 since 2001. However, because of a ban on recruitments, retired staff cannot be replaced. LHWs are thus increasingly burdened and unable to cover the added patient load.

There is a shortage of qualified staff at BHUs, especially female health professionals. It was reported that around 75% of the clients who have visited BHUs in Hafizabad were examined by male doctors and 25% by Lady Health Visitors (LHVs). Underutilisation of antenatal care (ANC) services could be due to non-availability of female health professionals. Around 60% of citizens reported that they waited for not more than five minutes to be examined by HCPs. Another 33% waited for around 10 minutes. None waited for more than 15 minutes.



Unavailability of medicines and equipment was a common complaint of respondents: the quantity of provided medicines only caters to the needs of a small proportion of the population. It was stated that although many of the BHUs had basic equipment, like weighing machines and blood pressure apparatus, basic equipment was missing in a few facilities. Additionally disposable gloves, sterilised-delivery kits, iodine, and spirit were also reported to be missing in some BHUs.

The quantitative study revealed that the population coverage of Hafizabad District in terms of general diseases reported by BHU in-charges seemed to be adequate for most of the prevalent diseases. However, it fell short in covering asthma (adults and children) and tuberculosis. Only one BHU (17%) was found to be uncovered. The rest of the BHUs maintained the appropriate treatment inventory vis-à-vis the disease set.

Malaria, gastroenteritis, and scabies were found to be fully covered. Snakebite was also fully covered by the BHUs. An anti-rabies vaccine was not found anywhere but this could be because this item is not present in the EPHS medicine list. The services and stocks (medicines, equipment and allied) were found to be appropriately present for ANC, delivery care, postnatal care and family planning in most of the facilities.

Underutilisation of services and stocks (medicine, equipment and allied) was noticed for ANC, delivery care, postnatal care and family planning in most of the facilities, due to access and coverage issues.

### 4.3 Quality of services

It was shared by many BHU in-charges that no document on the provision of good quality services had been provided to them. Instead, only verbal instructions are given to ensure quality health services in BHUs. The lack of trained staff was another issue identified in relation to providing quality services. A need to recruit efficient and skilled staff for vacant posts was stressed. Very poor conditions of staff residences have also led to absenteeism of staff. Non-availability of clean and safe water and electricity was also reported at BHUs.

25% of respondents were found to be very satisfied with the overall hospital experience, while 75% were satisfied. These client satisfaction figures are consistent with the percentage of clients who received medicines from the facility as the study reported that all of the citizens received all the medicines prescribed at the facility.

## C. Recommendations

### 1. Management and governance issues at provincial and district level – recommendations

### 1.1 Improve management skills and capacity, as well as use of data for planning health services

It is recommended that the health planning capacity be enhanced in the short-term through outsourced technical assistance (TA). In the long-term, the institutionalisation of health planning within the Department of Health (DoH), especially at district level, is recommended, along with training of HCPs, front line desk operators, data analysts and health managers.

Additionally, the strengthening of the existing planning cells, supported through trained HR and linking with data resource units, would ensure evidence-based planning in the health sector. The Punjab Health Sector Strategy proposes setting up a Knowledge Store Unit – a comprehensive data-clearing warehouse. It is recommended that these units be established at the earliest opportunity, to help augment planning at the provincial and district levels.

Finally, improvement in the quality of data collected and included in the District Health Information System (DHIS) will also increase the comfort level of health sector planners, so that they will be more inclined to use the data for planning purposes. Therefore, it is recommended that measures be taken to improve the authenticity and validity of the data reported in DHIS and to link multiple information systems to collate information within the district for use in planning and decision-making.

### 1.2 Increase structural integration

In order to minimise duplications and wastage of resources, it is recommended that a coordination mechanism be developed which effectively links the vertical programmes, the DoH and the Population Welfare Department (PWD) at the district level. The model of the District Health Population Management (DHPMT) could be adopted to ensure that such inefficiency is reduced. In the long run, the functional integration/synergy of the vertical health care programmes at the provincial and district levels is recommended.

### 1.3 Improving M&E

A robust M&E system is proposed for the primary health care sector, through the use of mandatory checklists, feedback, and follow-ups. Highlighting the issues of mortality and morbidity, based on evidence, would further help in this regard. Moreover, setting targets and costing activities would play an important role in achieving the objective of improved health care. Therefore, target setting through key performance indicators (KPIs) is recommended. For this purpose, a robust M&E framework/mechanism can be implemented and – through health reforms – a mechanism of accountability can be devised based on KPIs, to improve the health status. The setting of targets should form the basis for performance contracts between the provincial and district health authorities, in order to monitor progress.



## 2. Finance and budgeting

### 2.1 Increase allocation of financial resources and improve budgeting

It is recommended that districts vigorously pursue additional budget allocations through the preparation of evidence-based district action plans for the health sector. Furthermore, clearly defined targets, specific activities and pre-set indicators could attract sufficient funds. Timely releases of budget, at the provincial and district levels, will also ensure that the available funding is transferred and utilised efficiently. In the

long-term, it is recommended that needs-based budgeting be linked to performance, outputs, and outcomes at the district level.

Detailed budget proposals are made later in this section.

## 3. Other

### 3.1 Access to services

It is recommended that innovative approaches be adopted to resolve issues of access, such as the deployment of mobile health units at strategic locations. Moreover, measures for efficient patient transport, through arrangements such as community emergency ambulances, made available through Community Emergency Services (CES), are also recommended. In the long-term, it is recommended that a mapping of health facilities be carried out, with the objective of synchronising the placement of the health facilities with the community needs, using GIS. Furthermore, the issues of affordability of health services for the poor segments of the community should be addressed by using pro-poor initiatives, like voucher schemes. Linking a voucher scheme with a community-based transport model can additionally help in improving access to health facilities.

### 3.2 Service delivery and coverage

To improve service delivery and coverage in the short-term, a rethinking of the service delivery system is recommended, through the use of innovative approaches, such as community midwives, pairing of Traditional Birth Attendants (TBAs) and LHWs, and involvement of the private sector and non-governmental organisations (NGOs). The matching of the burden and distribution of disease at the district level is also recommended. In the long-term, it is recommended that the options of out-sourcing health services, fostering public–private partnerships (PPPs) and implementing health insurance models be considered.

The implementation of "task shifting" is also proposed, meaning the redistribution of tasks among health worker teams, by enhancing their capabilities. Additionally, the possibilities of using telemedicine and mobile health (mHealth) to address the issues of coverage and access could also be explored.



### 3.3 Quality of services

In order to address issues regarding the quality of health services in the short-term it is recommended that the PHC be made fully operational so that it can contribute at all levels of service delivery in the public health sector, as envisaged in its Act. Additionally, in the long-term, it is recommended that there be implementation of, and strict compliance with, MSDS and operationalisation of district health authorities (DHAs), along with periodic skills development training for the staff of primary health care facilities in the various jobs/responsibilities assigned to them. Finally, it is

proposed that performance-based financing be introduced, with pre-set indicators to measure the quality of health services. This may result in a substantial improvement in the quality of health services.

Non salary budget proposals to address issues of access, coverage and quality of primary health care services in Hafizabad are set out below

## 4. Non-salary budget proposals

### 4.1 Access to services – non-salary budget proposals

**Medical camps**

It is imperative that the district government makes special arrangements to reach out to areas with poor access to health services periodically. The holding of medical camps in such areas is one option. Considering the fact that the PRSP already arranges medical camps for underserved areas of the district, setting up these camps would require minimal logistical support and cost as the medicines and equipment available at BHUs can be used for them. An indicative allocation of Rs.1.0 million for this purpose is proposed for Hafizabad District during FY 2014–15.

### 4.2 Service delivery coverage – non-salary budget proposals

**Medicines/supplies/lab investigations**

It is imperative that adequate funds are allocated and released to PRSP, to enable it to provide medicine at the primary level health care facilities, keeping in view the burden of diseases and thus the requirement for medicines for those diseases. To align budgetary allocations with the burden of disease, and to ensure that the essential supplies and basic diagnostic facilities are available at the primary health care level, we calculated the funding requirements for providing these services. Rs.14.8 million is needed to provide the supplies and basic diagnostic facilities at all the BHUs in the district and the average cost per BHU is around Rs.477,772/-. Therefore, during FY 2014–15 Rs.14.8 million is needed for the provision of requisite medicines at the BHU level to address the burden of disease and patient load at those facilities. However, if a buffer stock is also taken into account, a total of Rs.18.52 million is required. This would be in addition to other operating expenses and maintenance and repairs. It is recommended that the allocated budget be distributed among BHUs on the basis of patient load instead of by using a constant or incremental budget approach.

Since the study identified certain areas where the utilisation ratio of the budget is very low the above funding requirement can be met from such areas. The study also indicated over-budgeting in health facilities in the district and over-budgeting in the salary component at the Rural Health Centre (RHC) level. This over-allocation can easily be diverted to fund BHU medicines, supplies, and lab investigations.

**Missing equipment**

To provide the equipment found to be missing at BHU level, EPHS-based costing of equipment has been used to calculate the funding requirements. The cost for the provision of the missing equipment at the six sample BHUs has been calculated as Rs. 2.95 million. Using the list of missing equipment for sampled BHUs, the district government can extrapolate the cost of missing equipment for all 31 BHUs in the district (29 with PRSP + two with District Government). It would, however, be useful to conduct a comprehensive assessment of missing facilities to accurately estimate the funding requirement for the provision of missing facilities / equipment in all BHUs in the district.

The provincial ADP 2014–15 includes an allocation of Rs. 350 million for 'Purchase of Missing Equipment and Hospital Furniture etc. for Primary and Secondary Care Hospitals in Punjab'. The district government is therefore recommended to approach the provincial government for funding to provide the missing equipment in BHUs for Hafizabad District. It is also possible that the district government can provide missing equipment in a phased manner, using its own budget.

**Resource provision for vaccination**

In order to ensure that the allocation for petrol, oil and lubricants (POL) to vaccinators is disbursed, it is proposed that a separate allocation be made in the budget for the provision of POL to vaccinators and the amount be disbursed through the use of fleet cards to vaccinators if it is practical (considering the availability of this facility in Hafizabad District).

### 4.3 Quality of services – non-salary budget proposals

**District Health Development Centres (DHDCs)**

One of the main reasons for underutilisation of BHUs is a lack of qualified staff in the facilities. DHDCs have been established by the provincial government in each district, with a mandate to conduct training for health sector employees. However, a DHDC has not been established in Hafizabad District. A DHDC needs to be established, including developing a training schedule and robust monitoring mechanism to gauge its performance. In the meantime, Hafizabad District should take advantage of the adjoining DHDC centre. It is proposed that a non-salary allocation for this purpose be allocated during the next financial year, 2014–15, under the EDO (H), to ensure funding for the capacity building of primary health care staff in Hafizabad District.

# 1. Background and Introduction

## 1.1 Background

The SNG Programme aims to strengthen governments' capability to deliver basic public services, i.e. education and health, in an improved, responsive and accountable manner. For this purpose it plans to provide TA to sub-national governments of 12 selected districts of Punjab and KP to enable them to:

i. take decisions based on robust evidence;

ii. make services more responsive to people's needs; and

iii. strengthen government capability to deliver basic services.

To achieve these results, the SNG Programme planned to conduct a needs assessment in the education and health sector, with a particular reference to women and girls. The assessment initially focused on the health sector, to identify gaps in service delivery. The findings of the needs assessment will be fed into the district budget for the provision of funds, in order to fill the identified service delivery gaps and make budgetary allocations responsive to the needs of the people and ensure that allocations are based on evidence.

## 1.2 Introduction

The purpose of the needs assessment was to enable policy-makers and service managers to identify gaps in health sector service delivery and factors influencing access, quality and coverage in the health sector. To increase the utility of this exercise and avoid duplication, an integrated approach was adopted, including: a literature review, KIIs, FGDs, a district health sector budget review, a GIS-based analysis, and field visits. Moreover, stakeholder consultations were carried out to validate identified needs and to provide a platform for stakeholders to suggest measures to address those needs. On the basis of the analyses and recommendations, adjustments are proposed in respect of the business processes, especially aligning the budget to sectoral needs.

The report has been divided into five sections: the first three sections are introductory, they provide the background to the study, the literature review and the district profile of Hafizabad; the fourth section presents the findings and results of the needs assessment study, the budget review and the GIS analysis; and the final section gives recommendations for improving primary health care service delivery

in the district using evidence-based planning and budgeting by targeting citizen needs. The report includes a number of graphs and tables, to support the text. Additional information is provided in relevant annexes at the end of the report.

## 1.3 Objectives

The key objectives of this needs assessment are to:

- identify issues in the access, coverage and quality of primary health services in the light of the needs of people in the district, especially women, girls and minority groups;
- highlight gaps in planning, budgeting and management processes, with a special focus on women, girls, and coverage of minority groups; and
- inform relevant stakeholders, including policy-makers, health managers and frontline service providers, about service delivery gaps and identified needs, along with recommendations to improve the provision of primary health care in line with the Provincial Health Sector Strategy 2012–20.

## 1.4 Scope of needs assessment

The needs assessment was carried out in Hafizabad (in the northern SNG cluster) and Bahawalnagar (in the southern cluster). The needs assessment exercises in these districts were useful for developing an understanding of health sector service delivery issues, especially for women, girls and minority groups. It encompassed the following key areas:

### 1.4.1 Physical access to primary health care facilities (BHUs)

According to the World Health Organization (WHO), access to health services relates to the perceptions and experiences of people regarding their ease in reaching health services or health facilities in terms of location, time, and ease of approach. [1]



In the study, to examine access to primary health services in BHUs, the following important aspects of service delivery were studied:

1. **Physical accessibility of BHUs for catchment population:** In order to review this aspect, estimates of the average distance and average travel time of individuals in a catchment area from a BHU were obtained from secondary data and were compared with distance and travel time norms. The views of citizens were also obtained through FGDs regarding whether

1 http://www.who.int/healthsystems/hss_glossary/en/

average distance and travel time of citizens from BHUs was reasonable.

2. **Other hindrances / constraints relating to accessibility, with a focus on women, children and minorities:** Such as local environment, local culture, denial of access by a landlord, an intervening structure or family restraints. This aspect may have special relevance for women, girls and minority groups. This aspect was probed with the local population during FGDs.

3. **Availability of roads:** This is clearly linked to access to health services. This aspect of accessibility was examined with the help of a combination of primary (FGDs) and secondary data and was further examined through GIS-based analysis.

4. **Analysis of OPD data:** BHU-wise OPD data was collected and reviewed to examine its patient load, using Provincial and/or DHIS Cell. This process enables the SNG Programme to identify overburdened and underutilised BHUs. This will establish the relationship between accessibility and the utility of BHUs.

5. FGDs focused on ascertaining citizens' views regarding ease of accessibility of their respective BHUs, especially for women, girls and minority groups, looking at the dimensions mentioned above.

### 1.4.2 Coverage

Coverage is the extent of interaction between the service and the people for whom it is intended. Coverage is not limited to a particular aspect of service provision, but ranges from resource allocation to the achievement of the desired objectives.[2]

To evaluate coverage, the needs assessment assessed:

i. Implementation of MSDS / EPHS and other services in accordance with local needs.

ii. Overview of disease patterns of Hafizabad District through secondary data and comparison of the pattern with the scope of services offered by the district health system.

iii. Needs of citizens/community, especially women and girls, minority groups (through FGDs).

iv. Availability of requisite staff, medicines, and diagnostic services at the facility level in accordance with requirement of MSDS / EPHS. Gathered information / data of BHU doctors, staff and medicines from district health managers. Feedback on this data was also sought from citizens during the FGDs and this was verified through inspection of the facilities (Observation Checklist).

2 http://www.who.int/healthsystems/hss_glossary/en/index2.html

### 1.4.3 Quality

According to the WHO, quality improvement means taking a snapshot of the whole system, paying close attention to individual service users and the community at large, and emphasising delivering effective, efficient, accessible, acceptable, equitable and safe health care services to all [3].

The needs assessment study focused on governance related aspects of quality, such as documentation of the client satisfaction level and effectiveness of management practices to support delivery of health care services at the local level in accordance with local preferences and needs. In this context the following aspects were examined:

i. **Client satisfaction** with primary health services, through primary data collection. In the study, client satisfaction is given as reported by respondents during CEIs (CIEs). Criteria were based on the perceptions of the clients. Community feedback was obtained through FGDs regarding the timeliness of service delivery, the attitude of BHU staff towards patients, the level of attention given by physicians, the provision of medicines and the effectiveness of referrals etc.

ii. **Supply side or management practices**, particularly financial management systems of the districts, such as budgeting, planning and management practices and how these processes took into account local needs – especially those of women, girls and minority groups. Furthermore, the assessment reviewed system for, and timeliness of, the release of funds allocated to the sector.

iii. **Utilisation of resources:** By comparing budget allocation and expenditure trends, along with effectiveness and efficiency of procurements, especially medicines, resource utilisation trends were reviewed.

iv. **Decentralisation:** Devolution of authority to the local level to improve service delivery. In Punjab, proposed DHAs are likely to be formed after the upcoming local government elections. From this point of view, the system for monitoring staff, medicine inventory control and management, and the system of public feedback and complaint / grievance redressal was reviewed.



3 WHO, 2007

# 2. Literature review

A comprehensive review of the literature, research materials, articles and evaluation reports has been carried out, to assess the existing situation of health care services and policy interventions in Pakistan. The secondary evidence from the local and global literature highlights gaps, needs, lessons learnt and best practices, in order to tackle the challenges in service provision of health care.

## 2.1 Primary health care in Pakistan

Primary health care, often abbreviated as "PHC", is the first level of contact between an individual and the health system, where the majority of prevailing health problems can be satisfactorily managed. According to the WHO and the United Nations Children's Fund (UNICEF), primary health care is defined as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination".[4]

In Pakistan, the model of primary health care was adopted in the declaration of the International Conference on Primary Health Care held in Alma Ata in 1978 (known as the "Alma Ata Declaration") and became a core concept of the WHO's goal of health for all. During the 1980s, the Basic Health Services Project and Primary Health Care Project laid down a framework on the basis of population. The health infrastructure was expanded so that all UCs had one BHU and a RHC was established at each Markaz/ Thana level.

Pakistan has a large primary health care infrastructure. This includes 5000 BHUs, 600 RHCs, and 7500 other first-level care facilities. Primary health care focuses on the following components:

- education concerning prevailing health problems and the methods of preventing and controlling them;
- promotion of a safe food supply and proper nutrition;
- an adequate supply of safe water and basic sanitation;
- maternal and child health care, including family planning;
- immunisation against major infectious diseases;
- prevention and control of locally endemic diseases;

4 International Conference on Primary Health Care Alma-Ata, U. (1978). *Primary Health Care.* USSR: World Health Organization and United Nations Children's Fund.

- appropriate treatment of common diseases and injuries; and
- provision of essential drugs.

Moreover, in 1994, the Government of Pakistan launched the Programme for Family Planning and Primary Health Care (the LHW programme) through the Ministry of Health. This Programme recruited women and trained them to provide family planning and primary health care services in their own communities. These women, known as LHWs, became the frontline of primary health care in many low-income communities of Pakistan.

The major objectives of this Programme were to reduce poverty and improve national health indicators through the provision of essential primary health care services. The Programme contributes directly to Millennium Development Goals (MGDs) 1, 4, 5 and 6, and indirectly to Goals 3 and 7. Presently, LHWs are supposed to deliver a range of services related to maternal and child health, including promoting childhood immunisation, growth monitoring, and family planning and health promotion. They are trained to treat minor ailments and injuries and to identify and refer more serious cases. Also LHWs are involved in supporting the implementation of many public health programmes, including those relating to tuberculosis treatment, malaria control, immunisation, polio eradication, health education, maternal, newborn and child health and family planning. For capacity building of this cadre, WHO and many other international non-governmental organisations (INGOs) provide technical support in relation to updating the knowledge and skills of supervisors through regular refresher courses and assist the health authorities in developing monitoring and supervisory checklists and creating a feasible health management information system for the Programme.

Besides above-mentioned initiatives, during recent years, a number of policies and interventions have been adopted for the provision of better health care services at the primary level in Pakistan. Several of these policies and interventions are summarised below:

### 2.1.1 Health MDGs (2015)



For the attainment of eight MDGs, the UN Millennium Declaration fixed 18 targets and 48 indicators, of which Pakistan has adopted 16 targets and 37 indicators. Three of the eight MDGs relate directly to the health sector, with four targets and 16 indicators. The MDGs include: Reducing Child Mortality (one target, six indicators); Improving Maternal Health (one target, five indicators) and Combating HIV/AIDS, Malaria and Other Diseases (two targets, five indicators).[5]

### 2.1.2 Medium Term Development Framework (2005–10)

The first Medium Term Development Framework (MTDF), 2005–10, provided guidelines to ensure equitable development across Pakistan. The MTDF

5 http://www.un.org/millenniumgoals/

acknowledged the MDG targets and strengthened the shift from curative services to preventive, promotive and primary health care. Moreover, the MTDF also addressed the issues of health care financing, health insurance and employees' social security, and PPPs in the health sector. Considering the on the ground health situation, the MTDF proposed a sound health care system and the practising of a healthy life style, in partnership with the private sector – including civil society. The MTDF Health Sector Strategy focused on primary health care in rural areas and urban slums; vertical programmes, training and re-training of medical staff; subsidisation of health services for the poor segments; regulation of the private sector; and health education through skill development of health staff in communication techniques at all levels.

Parallel to the MTDF, the Ministry of Finance, in collaboration with the UK Department for International Development (DFID), also started a Medium Term Budgetary Framework (MTBF) project. The MTBF was supposed to provide budgetary guidelines to the finance departments.[6]

### 2.1.3 Integrated Reproductive Maternal Newborn and Child Health (RMNCH) and Nutrition Programme (Punjab 2013–2016)

This Programme has been designed to reduce maternal, newborn and child morbidity and mortality, promote family planning services and improve the nutritional status of women and children and to help achieve related MDGs by 2015. The Programme aims to increase accessibility of MNCH services by the provision of 24/7 service delivery at selected BHUs, all RHCs, Tehsil Headquarters (THQs) and District Headquarter Hospitals (DHQs). An announced Provincial Management Committee will select the BHUs under this Programme; the criteria for selection include the geographical distribution of, and the community's accessibility to, individual facilities.[7]

### 2.1.4 EPHS (2012)

The main objective for developing the EPHS at primary care level in Punjab is to define the minimum health services to be provided as an integrated package at a given level of health service.[8]

### 2.1.5 Punjab Health Sector Strategy (2012–2020)

Based on the current health status and delivery modalities in Punjab, a Health Sector Strategy has been devised with a vision to enhance the health status and productive lives of the people of Punjab by improving maternal and child health, nutrition, and control of communicable and non-communicable diseases. The key emphasis of the Strategy is on integrating health services supported by a strong M&E system.

6 Mid Term Development Frame Work 2005–2010, Higher Education Commission. Pakistan

7 PC-1.2013-2016. Government of Punjab, Integrated Reproductive Maternal Newborn and Child Health (RMNCH) and Nutrition Programme.

8 Technical Resource Facility. (2013). Essential Package of Health Services for Primary Health Care in Punjab, Technical Component. Government of Punjab

The main policy actions proposed in the strategy are:[9]

- establish a health sector ministerial board (HSMB);
- implement a health sector strategy in a 'phased approach';
- ensure effective M&E of strategy implementation;
- measure progress through improvements in health outcomes; and
- focus on key strategic areas.

### 2.1.6 Punjab Rural Support Programme (PRSP) Model

In order to improve the delivery of services, a number of alternative models have also been implemented in the province during recent years. One model, that of contracting out BHUs, was tried out in Punjab. The model aimed to reorganise and restructure the management of all the BHUs in the district, with a central role for community-based support groups. This model started under the CMIPH in Rahim Yar Khan District in 2003. The purpose of this initiative was to strengthen the curative and preventive services by handing over the management and finances of running BHUs to the PRSP. This model was evaluated in 2005 by the World Bank, which showed that there were positive results in increasing the utilisations rates of these facilities. However, there has been no evaluation of improved health outcomes in the catchment populations.[10]

## 2.2 Issues in the primary health care system

In spite of the above-mentioned strategies and interventions, Pakistan has been unsuccessful in achieving its targets and is far behind in meeting the MDGs. Various reasons have been identified from a global perspective, through a literature review. This review highlights that inadequate resource allocations and the low prioritisation of health by the government are the most significant reasons for the lack of success in health.



### 2.2.1 Management and governance issues

For all health programmes, implementation largely rests with the district governments, with an extensive network of outlets at the district level: primary and secondary. The Executive District Officer Health (EDO (H) is in charge of the district health system and is responsible for delivering promotive, preventive and curative services through outreach workers and the primary care district facilities. The managers of all primary healthcare facilities report to the EDO (H). The efficiency

9 PHSRP. (2012). Punjab Health Sector *Draft Startegy 2012–2020.* Department of Health

10 http://www.prsp.org.pk/Programs/ProgramPhilosophy-1

of the entire system, however, ultimately depends on a robust information system, the quality of data generated and the effective use of evidence for decision-making. However, through the secondary literature, it was assessed that use of evidence has seldom been practised for crucial decision-making in Pakistan's health sector.[11] The main weaknesses found were: inadequate IT facilities and lack of trained manpower; weak supporting and monitoring mechanisms; a negligible budget; and almost no maintenance. The published literature suggests that many developing countries have benefited from the use of computer databases in the health sector and from the generation of evidence which has eventually been utilised for effective strategic planning for improved health system performance.[12]

### 2.2.2 Access

According to the WHO, the accessibility of health services depends on a structure of health services or health facilities that enhances the ability of people to reach a health care practitioner, in terms of location, time, and ease of approach.[13] Access to facilities is an important component in the overall health care system and has a direct impact on the burden of disease that affects health conditions in many developing countries.

Transport, road infrastructure and distance play a dynamic role in access to and delivery of health services, and in the effectiveness of the referral process. According to Pakistan Standards, primary health care facilities are located within five km of patients. Research has shown that approximately 80% of maternal deaths can be averted if women have access to essential maternity and basic health care services.[14] Studies reveal that many of the women who lack access to a road tend to have less access to health services for receiving pregnancy care. In Indonesia, for instance, 64% of women living near a well-developed road receive ANC by a skilled service provider, compared to 38% of those living near a non-paved way.[15] In Malawi, rehabilitation of the road system in particular areas has increased the number of patients in the nearest hospital by 15%.[16] Similarly, after constructing new direct roads in Kenya the improved roads increased utilisation of a district hospital.[17]

The transportation cost is one of the primary factors which deters a community from seeking care from a health facility, if that community is remotely located. Even when



11 Yasir I, Shaikh BT. (2011). 'Use of evidence for decision-making: A qualitative exploratory study of the MNCH Program'. Pakistan: Pak J Public Health

12 Spero JC, McQuide PA, Matte R. 'Tracking and monitoring the health workforce: a new human resources information system (HRIS) in Uganda'. Human Resource Health.

13 http://www.who.int/healthsystems/hss_glossary/en/#2

14 Ronsmans, Carine, Graham W. 'Maternal Mortality: who, when, where and why?' The Lancet, 2006; 368 (9542: 1193)

15 Ishimori, Koichiro. (2003). 'The Impact of Road Development on the Health of Pregnant and Parturient Women. Results from collaborative research project between The Japan Bank for International Cooperation (JBIC) and the United Nations Population Fund (UNFPA)'. July–October.

16 Ellis SD (1996). 'The economics of the provision of rural of rural transport services in developing countries'. PhD Dissertation, Bedfordshire, UK: Cranfield University.

17 Airey, T. (1991). 'The influence of road construction on the health care behavior of rural households in the Meru District of Kenya'. Transport Reviews; 11: 273–90.

a vehicle is available, its cost may inhibit its utilisation in certain cases. A study in Bangladesh reveals that transport is the second biggest expense for patients after medicines.[18] Likewise a study was conducted in rural Sudan and showed that half of families were unable to take their children to hospital even after referral, due to transport costs.[19] As an intervention, in countries like Uganda, Malawi and Tanzania, such means of transport as bicycles or modified bicycle ambulances are quite common vehicles for transporting pregnant women.[20] Studies show that bicycle ambulances are the preferred choice of families for obstetric referral because of their cost effectiveness. Another study reveals that ambulance bicycles resulted in a reduction in home deliveries in Malawi.[21] These sorts of transport facilities are most commonly used for general medical problems, but are also utilised to transport pregnant women.

Measuring access to health care facilities contributes to a wider understanding of health systems performance within and between countries and facilitates the development of evidence-based health policies.[22]

Using GIS for the measurement of physical accessibility is well established and has been applied in many areas, including retail analysis, transport, emergency services, and health care planning. For example, the Honduras Ministry of Health, along with Pan American Health Organization (PAHO) has undertaken a project to identify accessibility problems in relation to primary health care using GIS.

A study in New Zealand estimated the geographical accessibility of public hospitals. A cost–path analysis was used to determine the minimum travel time and distance to the closest hospital via a road network. Local average time and distance statistics were calculated by modelling the total travel time of an individual, assuming that everybody visited a hospital at least once. These types of statistics can be generated for different population groups, and comparisons can be made between regions.[23]

The WHO has been involved in measuring the accessibility of healthcare facilities in developing countries, in collaboration with a number of academic institutions.[24] They have used AccessMod software to calculate accessibility, which determines the geographic extent of the catchment areas corresponding to an accumulated cost



18 Ensor, Tim, and Stephanie Cooper. 'Overcoming barriers to health services access: influencing the demand side – Review article.' Health Policy and Planning 19, No. 2 (2004): 69–79. Oxford University Press.

19 Sumaia Mohammed al Fadil, Samira Hamid AbdAlrahman, Simon Cousens, FlaviaBustreo, Ahmed Shadoul, Suzanne Farhoud and SamiaMoahmed El Hassan. (2003). 'Integrated management of childhood illness strategy. Sudan.'

20 Ishimori, Koichiro. (2003). 'The Impact of Road Development on the Health of Pregnant and Parturient Women. Results from collaborative research project between The Japan Bank for International Cooperation (JBIC) and the United Nations Population Fund (UNFPA)'. July—October.

21 Ahluwalia, I. B., Schmid, T., Kouletio, M., and Kanenda, O. (2003). 'An evaluation of a community based approach to safe motherhood in North-western Tanzania.' International Journal of Gynaecology and Obstetrics, 82, pp. 231–240.

22 Mainardi, S. (2007). 'Unequal Access to Public Healthcare Facilities: Theory and Measurement Revisited.' in *Surveys in Mathematics and Its Application.* 2: 91–112

23 Brabyn, L. and C. Skelly. 2002. 'Modeling Population Access to New Zealand Public Hospitals.' *International Journal of Health Geographics* 1(3): 1–13.

24 Black, M., Ebener, S., Aguilar, P. N., Vidaurre, M. and Morjani, Z. E. 2004. *Using GIS to Measure Physical Accessibility to Health Care.* Geneva: World Health Organization.

surface using the standard Cost Distance function available in the Spatial Analyst extension for ArcView 3.x.[25] The WHO has provided training regarding using this software to the Department of Health of the Philippines, the Ministry of Health of Cambodia and the Ministry of Health of Malawi.

### 2.2.3 Coverage and Service Delivery

Coverage issues and inequitable service delivery have been identified as major hindering factors in providing services to far-flung areas of any country. The World Health Report (2006) proposes that the density of health care provision is the key to achieving the fifth MGD: reduction of maternal mortality by 75% by 2015. One of the major challenges is securing the availability and effective use of HR in each part of the country, especially in remote areas. A relevant study conducted regarding the distribution of midwives in districts in Indonesia reflects the same results, with inequitably distributed provision in remote villages as compared to urban areas. This translates into considerable advantages to urban residents. In contrast to rural villages, urban areas have a more stable and experienced workforce and are more likely to have resident midwives.[26]

The lack of qualified HR for health care is a major limiting factor in implementing health policies and health reforms in the developing world.[27] A recent study underlines this fact, stating that progress toward health-related MDGs is seriously impeded by a lack of HR for health.[28] Being a low-resource country, Pakistan's health sector is also facing tremendous problems in meeting the health care needs of its people, mainly because of a dearth of trained HR in the rural areas, where 65% of the population lives.[29]

In the past decade much attention has been given to finding solutions to the health workforce crisis and, while some progress has been made, by 2011 the Global Health Workforce Alliance found that of the 57 countries they surveyed, only less than half had developed a plan to strengthen their human resources for health (HRH) and even less had implemented the plan.[30]

One of the major interventions to cope with HR deficiency is **task shifting**, which is defined by the WHO (2008) as 'the rational redistribution of tasks among health worker teams'. Many Sub-Saharan African countries are using task shifting as an ad hoc measure, largely in response to the need to scale up HIV/AIDS prevention and treatment. Sometimes tasks are redistributed to workers who do not normally



25 http://www.who.int/kms/initiatives/accessmod/en/index2.html

26 Makowiecka, K., Achadi, E., Izati, Y., and Ronsman, C. (2007). 'Midwifery Provision in Two districts in Indonesia: How Well are Rural Areas Served.' *Health Policy and Planning, 23*(1), 67–75

27 World Bank. 2004. The Millennium Development Goals for Health, Rising to the Challenges. Washington, DC: World Bank.

28 Thomas S, Mooney G and Mbatsha S (2007) The MESH approach: Strengthening public health systems for the MDGs Health Policy 83(2-3): 180-185UNAIDS and WHO (2009) AIDS Epidemic

29 Kumar, R., Shaikh, B. T et al.,.(2013, Sep 10). 'The Human Resource Information System: A Rapid appraisal of Pakistan's Capacity to employ the Tool.' *Biomedical Informations & Decision Making*. doi:10.1186/1472-6947-13-104

30 Global Health Work Force Alliance. (2011). 'Progress report on the Kampala Declaration and Agenda for Global Action: Reviewing Progress, Renewing Commitment.' Geneva

carry out those tasks – for example, nurses also give antiretroviral therapy (ART). In Mozambique, Zambia and Uganda task shifting has reduced the number of doctors required to deliver HIV/AIDS services and has improved some dimensions of service quality.[31]

Similarly, Community Health Workers (CHWs) have existed for many years and have been shown to extend access to services, as well as to improve quality.[32] Haynes et al described the task shifting for CHW as a "partial solution to extending the reach of inadequate health systems, aiming to expand coverage of key interventions and to fill the unmet demand for health services in communities".[33] High-income countries such as the United Kingdom have also had practical experience with task shifting: empowering nurses to prescribe routine medication has been successful both in expanding services and improving clinical outcomes for patients.[34]

For countries where the majority of the population lives in rural areas and where health care facilities are inefficient and inadequate, telemedicine/ telehealth can contribute substantially to bridging the gap between demand and supply. The main uses of eHealth in developing countries have been to improve access to health care services and to enhance the quality of care by making patient data and other relevant information available to the HCPs at the point of care. SUPARCO, the national space agency of Pakistan, which has experience in satellite communications, has successfully established a satellite communication-based telemedicine network as a pilot project.[35]

Pathfinder has been carrying out health work in Tanzania since 2008 with funding from the Centers for Disease Control. This project, housed under the Tutunzane project, uses mobile technology to improve communication and reporting between health clinics, home-based care providers, and clients. In collaboration with an NGO (D-Tree International), Pathfinder and its Tutunzane partners are using a mobile phone-based application, 'Care', to improve HIV and AIDS, tuberculosis, malaria, and family planning services offered at the community level. Community home-based care providers use mobile phones to provide better care during home visits, to follow referrals, and to improve client data management and use. Each month, CommCare sends a short message service (SMS) or text message summary of community home-based care activities to the home-based care providers' supervisors. District level coordinators access the collected data online, which further improves communication and information sharing between community-based providers, facility providers, and district coordinators. There are currently more than 300 home-based care providers in and around Dar us Salaam using this mobile phone application.[36]



31 IATT task Team on Human Resource. (2013). 'Human Resources for Health: A key component to achieve the plans of global health'.

32 Celletti F, Wright A, Palen J e al. (2010). 'Can the deployment of community health workers for the delivery of HIV services represent an effective and sustainable response to health workforce shortages? Results of a multi-country study.' AIDS.24:1:S45-57.

33 Haines A, Sanders D, Lehmann U et al. (2007). 'Achieving child survival goals: potential contribution of community health workers.' Lancet, 369(9579), 2121–2131.

34 WHO. (2007). 'Task shifting to tackle health worker shortages.'

35 Engr.Zulfiqar Ali Junejo. n.d.Suparco Telemedicine Pilot Project.

36 http://www.pathfinder.org/our-work/projects/mhealth-in-tanzania.html

### 2.2.4 Quality

The literature review indicates that in many developing countries staff performance is not effectively monitored and evaluated: assessment practices are unsatisfactory, quality standards are badly defined and little attention is paid to transparent processes and performance audits.[37] Having few resources, Pakistan faces similar issues regarding monitoring, resulting in a compromised quality of primary health care.

To address these issues of quality, the concept of Performance-Based Finance (PBF) has been introduced in several countries. Performance-based financing or budgeting can be defined as a mechanism by which health providers are, at least partially, funded on the basis of their performance or, "The transfer of money or material goods is conditional on taking a measurable action or achieving a predetermined performance target".[38]

Findings from a study in Uganda confirm that PBF can stimulate important changes and set incentives that improve health care quality. In Cambodia, performance-based financing was applied to the public sector.[39] [40] [41] However, despite promising results, it was not extended as a national policy. Such a breakthrough did, however, take place in Rwanda. Several pilots initiated in 2002 allowed for a better understanding of major issues. The country then rapidly adopted performance-based financing as its national policy and scaled up the approach to the entire country in 2005.[42] [43] [44]

## 2.3 Why governance matters to health

According to one study by Pappas and Ghaffar, governance matters to health largely because market forces alone cannot ensure an equitable distribution of health care and health in populations. Governance in the health sector is closely related to

37 Miller, Bennett et al., (2004) 'Determinants and consequences of health worker motivation in hospitals in Jordan and Georgia. Social Science and Medicine.' 58:343–355. doi: 10.1016/S0277-9536(03)00203-X.

38 Eichler R. (2006). '*Can "pay for performance" increase utilization by the poor and improve the quality of health services?* Discussion paper for the first meeting of the Working Group on Performance-Based Incentives.' Washington: Center for Global Development. Available from: PBI%20Background%20Paper [1].

39 Van Damme W, Meessen B, von Schreeb J, Heng TL, Thomé JM, Overtoom R, et al. (2001). *Sotnikum new deal, the first year – better income for health staff; better service to the population*. Phnom Penh: Médecins sans Frontières.

40 Barber S, Bonnet F, Bekedam H. (2004). 'Formalizing under-the-table payments to control out-of-pocket hospital expenditures in Cambodia.' Health Policy Plan. 19: 199-208doi: 10.1093/heapol/czh025 pmid: 15208276.

41 Soeters R, Griffiths F. (2003). 'Improving government health services through contract management: a case from Cambodia.' Health Policy Plan, 18: 74-83 doi: 10.1093/heapol/18.1.74 pmid: 12582110.

42 Meessen B, Musango L, Kashala J-P, Lemlin J. (2006). 'Reviewing institutions of rural health centres: The Performance Initiative in Butare, Rwanda.' Trop Med Int Health, 11: 1303-17 doi: 10.1111/j.1365 3156.2006.01680.x pmid:16903893

43 Soeters R, Habineza C, Peerenboom PB. (2006). 'Performance-based financing and changing the district health system: experience from Rwanda.' Bull World Health Organ, 84: 884-9 pmid: 17143462.

44 Rusa L, Schneidman M, Fritsche G, Musango L. Rwanda. (2009). 'Performance-based financing in the public sector.' In: Performance incentives for global health: potential and pitfalls. Eichler R, Levine R and the Performance-Based Incentives Working Group, editors. Washington: Center for Global Development.

the issue of equity because health care is guaranteed by the constitutions of many nations and by international treaties. Moreover, prevention measures, including road traffic injury control, the provision of clean water and sanitation, or draining malaria swamps, are public goods with externalities that require social coordination to ensure action. Assuring conditions for health and wellbeing in populations can be fulfilled only by the provision of adequate regulatory, legislative, and social measures.[45]

Poor governance in the health sector leads to misdirected spending of funds intended to improve the health status of the population. Corruption, inefficiency, and a poor regulatory authority undermine health care delivery in much the same way they do for police services, courts and customs.

In Pakistan, the past few years have seen landmark constitutional developments, key among which was the adoption of the 18th Constitutional Amendment, followed by the 7th National Finance Commission Award.[46] Prior to the adoption of the 18th Amendment, provinces and other federating units had been represented in the central legislature, with significant policy and economic development responsibilities already devolved to the sub-national level. Under the Devolution Plan in 2001, there a third tier of local government (comprising District, Tehsil and Union administrations) were introduced. All these developments established a new framework of devolution of powers from the federal level to the provinces and carried with them the prospects of better service delivery and greater scope for public participation.[47]



45 G Pappas, A Ghaffar, T Masud, A Hyder, S Siddiqi. Governance and health sector development: a case study of Pakistan. The Internet Journal of World Health and Societal Politics. 2008 Volume 7 Number 1.

46 National Report: Situation Analysis of Children and Women in Pakistan. 2012. Government of Pakistan, UNICEF.

47 Ibid.

# 3. District profile of Hafizabad

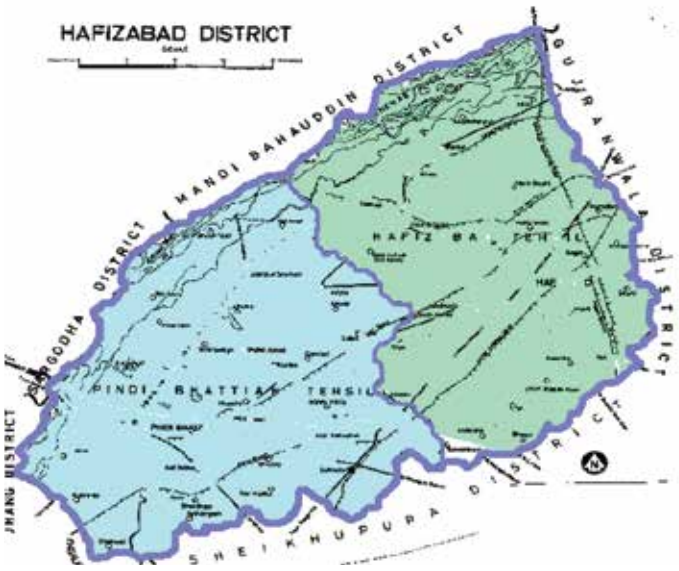
## 3.1 History and geography

Hafizabad is an old city which dates back to the period of Ashok. Hafizabad attained the status of district in 1991, with Hafizabad and Pindi Bhattian as its sub-divisions. With a length of about 90 kms and a width of about 72 kms, Hafizabad District is spread over an area of 2367 square kms and is surrounded by the districts of Gujranwala, Sheikhupura, Jhang, Sargodha, Faisalabad and Mandi Bahauddin. The Chenab River forms the northern and northwestern boundary of the district.

## 3.2 Climate

The climate of the district is hot and dry during the summer and moderately cold in the winter. Owing to the proximity of the hills, there is more rainfall in the eastern parts than the western parts of the district. May and June are the hottest months, with temperatures rising to 48°C. Monsoons start usually from the middle of July and continue until September. The soil is alluvial and fertile. The district is actually a flat strip of land running roughly east to west. [48]

**Figure 3.1: Map of Hafizabad District**




48 http://www.punjab.gov.pk/hafizabad

## 3.3 Population

Hafizabad District is home to about 1.06 million people[49] , of which 48% are males and 52% are females. The majority of the population (70%) lives in rural areas. The estimated population growth rate is 2.9% and population density is 414 persons / square km. [50] Hafizabad's two sub-divisions are divided into 42 Union Councils. The highest proportion of the population lives in Tehsil Hafizabad (61%) and the rest of population lives in Tehsil Pindi Bhattian (39%).[51] The population consists of different ethnic and religious groups. Most people in Hafizabad speak Punjabi.[52] Besides Punjabi, most families who migrated from India also speak Urdu. Urdu is also spoken by educated families.[53]

## 3.4 Education and economy

According to the Pakistan Social and Living Standards Measurement (PSLM) Survey 2012–13, the literacy rate for ages 10 years and above is 61%, whereas for ages 15 years and above it is 57%. The district ranks 16th in the Punjab province. Geographical segregation reveals huge disparities: the literacy rate in urban areas for ages 10 years and above is 70% but in rural areas it is 58%. On the other hand, the literacy rate of ages 15 years and above in urban areas is 65%, while in rural areas it is 53%.[54]

The Human Development Index (HDI) is a composite statistical index that is used for ranking an area for the level of its human development. Hafizabad District has an average HDI when compared to other districts in the province, at 0.679.[55] The district has an HDI that is higher than the average HDI of Punjab (0.670).[56]



49 Data from National MNCH Program; Government of Pakistan. 2011, Health Facility Assessment Survey 2010–11.

50 ibid.

51 ibid.

52 ibid.

53 Hafizabad District 2010–2013 Three Year Rolling Plan

54 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13

55 Jamal H, Khan AJ. 2007. Trends in Regional Human Development Indices, Research Report and www.ppaf.org.pk.

56 ibid.

| Table 3.1: Development indicators of Hafizabad District | |
|---|---|
| Indicator | Value |
| Female Literacy Percentage | 65.2 |
| Access to Tap Water | 2 |
| Access to Flush Toilet | 79 |
| Deliveries in Public Sector Health Facilities | 6 |
| Deliveries in Private Sector Health Facilities | 48 |
| Electricity | 98.7 |
| Infant Mortality Rate (IMR) | 117 |
| Under-Five Mortality rate (U5MR) | 154 |
| Source: PSLM 2012-13, Multiple Indicator Cluster Survey (MICS) 2011 | |

## 3.5 Health status

The health indicators for Hafizabad have shown an improvement in recent years but the situation is far from satisfactory when assessed against the MDGs. The current situation regarding the key health indicators in the district show that there is room for significant improvement. The key challenge is the slow speed of improvement and the differential between different areas of health. Because of the slow pace of improvement, re-emerging and new challenges have surfaced and at times even eclipsed the efforts and investments made to improve the health status.

The following description of the health sector in Hafizabad makes clear that action is needed: it highlights major issues in each area of health and presents indicative issues for action planning. The areas are described according to their importance and linkage with key health goals, beginning with a discussion of maternal health.

## 3.6 Issues in maternal health care

The Punjab Health Sector Strategy 2012–2020 and the fifth MDG underscore the need to improve the quality and accessibility of maternal services, particularly in rural communities. These policy commitments require high-level readiness for, and devotion, to the establishment of high quality and accessible maternal care systems. ANC is necessary to ensure optimal maternal health as well as ensure healthy beginnings for new lives. The current situation in Hafizabad is marked by a high maternal mortality rate, placing pregnancy and childbirth related mortality on the top of the list of public health issues in the district. According to the Annual DHIS Report 2013, 29 maternal deaths were reported by public sector facilities.[57]

57 Department of Health, Government of Punjab. Annual DHIS Report 2013.

The links between ANC and maternal mortality are well recognised. Proper ANC can help ensure better pregnancy outcomes, a healthy mother and a healthy baby. In Hafizabad, 62% of pregnant women reported having antenatal consultation. However, only 16% reported that ANC services were provided by public sector health facilities. This proportion was slightly higher in rural areas (21%). Private clinics and hospitals provided ANC to 60% of women. Tetanus Toxoid (TT) immunisation was provided to 90% of pregnant women in Hafizabad and the district was ranked 12th in Punjab for TT immunisation.[58] According to the Annual DHIS Report 2013, 41,032 first ANC visits (ANC-I) were reported by public sector facilities, and 13,279 pregnant women were administered with TT-2 immunisation.[59]

Skilled birth attendance is a pre-requisite for ensuring effective maternal care, and for reducing the burden of maternal morbidity and mortality. Currently, 37% of births are conducted by Skilled Birth Attendants (SBAs). However, the share of public sector facilities is a major reason for concern, as **only 6% of deliveries took place in public sector facilities.** The percentage of home deliveries is as high as 47%. Moreover, TBAs conduct 8% of all births that occur in the district.[60]

Globally, the major proportion of maternal deaths occurs during the first 24 hours after delivery. In this time period, institutional readiness protocols for responding to emergency are an area that can enhance survival. The situation of postnatal care in Hafizabad is not positive: only 16% of mothers consulted a health facility for a postnatal check-up, which is less than the provincial average of 28%. Out of the mothers who received postnatal care in Hafizabad, only 17% visited a public sector facility for postnatal services, while 73% went to a private hospital or clinic[61].

## 3.7 Highlights regarding poor maternal health in Hafizabad District

- During 2013, 29 maternal deaths were reported in public sector facilities.
- Only 16% of pregnant women received ANC in public sector facilities; and in rural areas this percentage was 21%.
- TT immunisation was provided to 90% of pregnant women
- Overall skilled birth attendance was 37%; out of these, 6% of deliveries took place in public sector facilities.
- Postnatal care coverage was 31%.



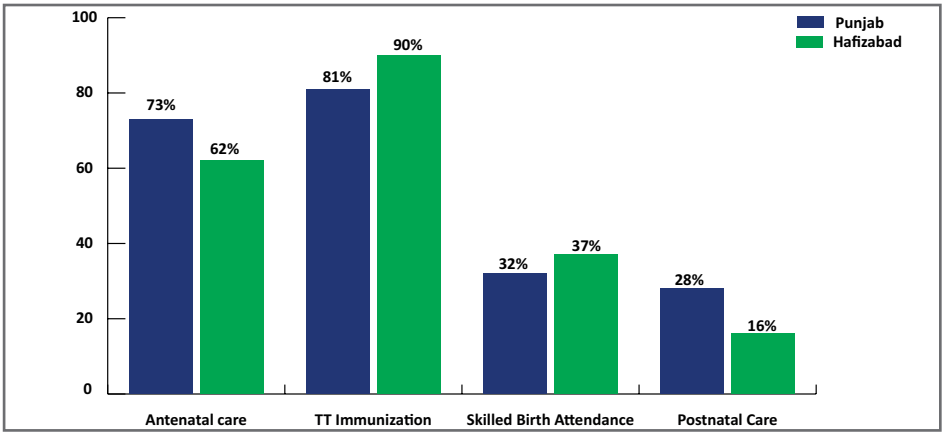
58 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13.

59 Department of Health, Government of Punjab. Annual DHIS Report 2013.

60 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13.

61 ibid.

Figure 3.2: Situation of Maternal Health in Hafizabad




## 3.8 The status of child health

Infant and under-five mortality rates (U5MR) are the most widely used indicators of health status and socio-economic development because they reflect not only child mortality levels but also the health status of the broader population. The fourth MDG calls for a two third reduction in U5MR and the IMR between 1990 and 2015. Like other districts in Punjab, Hafizabad relies on survey data to measure infant and childhood mortality because essential registration and health information systems are not adequate for this purpose. The last empirical estimates of childhood mortality that are thought to be reliable were collected from the MICS Punjab, 2011. According to the MICS report, Hafizabad has an IMR of 117 deaths per 1,000 live births. [62]

District specific figures are not available; however, an analysis of variables related to IMR and U5MR in the province reveals that children in rural areas of the province are at higher risk of dying before five years of age, compared to urban areas. Two thirds of infant deaths in Punjab take place in the neonatal period, mainly in the intra-partum and in the early neonatal period of the first week of life, and are a result of birth asphyxia, sepsis and prematurity.



In 2013, 32,656 cases of diarrhoea among children under 5 years of age were treated in the outpatient departments of primary and secondary level facilities in District Hafizabad.

**Source: Annual DHIS Report, 2013**

### 3.8.1 Childhood illnesses

According to the DHIS report 2013, diarrhoea was the most commonly seen communicable disease among children under five years of age in Hafizabad. A

62 Government of Punjab, Multiple Indicator Cluster Survey, 2011

review of MICS revealed that 26.3% of children under five years of age suffered from diarrhoea during the two weeks prior to the survey, indicating the significant contribution of diarrhoea in the overall burden of disease. Preventing dehydration and malnutrition by increasing fluid intake through some form of oral rehydration therapy (ORT) and continuing to feed are key strategies for managing diarrhoea. Diarrhoea can be cost effectively managed at community level with zinc and ORS use. [63] Hafizabad is ranked 26th among districts of Punjab in terms of cases of diarrhoea in which ORS was given to children. In Hafizabad, a health care provider was consulted in 71% of childhood diarrhoea cases; 54% of these cases were given ORS to treat dehydration.[64] This indicates that there is a great need for better health communication and adoption of low cost solutions. Both prevention and appropriate and timely treatment should be emphasised. Planning for adoption of prevention practices and appropriate and timely treatment will result in early childhood health gains through a reduction in diarrhoea-related deaths.

According to the Annual DHIS Report of 2013 for Hafizabad, the number of children under five years of age having suspected pneumonia was 4,671 [65]. The key factor in seeking care for suspected cases of pneumonia is knowledge about the danger signs of pneumonia. A low level of awareness of danger signs contributes to mismanagement and delays in seeking appropriate care for children suffering from pneumonia. Appropriately designed messages should aim to focus mothers' attention on the danger signs. At the same time, efficacy of treatment should be emphasised. A system wide option may be required, to channel appropriate messages regarding rapid recognition of pneumonia symptoms to the population, through the extension of the media outlets that are available to the health care system in Hafizabad.

### 3.8.2 Nutritional status

Low nutritional status is a major health issue for children. The results of the National Nutritional Survey 2011 revealed alarming trends, with the number of children suffering from chronic malnutrition in Punjab having increased in the recent years.

**Many of the infant and childhood deaths in Hafizabad District can be attributed to diarrhoea, pneumonia, malaria, and vaccine-preventable diseases.** However, it is important to bear in mind that death is not usually an event with one cause, but a process with many causes. In particular, it is the combination of malnutrition and infection which contributes to childhood morbidity and mortality.



63 ibid.

64 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13

65 Department of Health, Government of Punjab. Annual DHIS Report 2013.

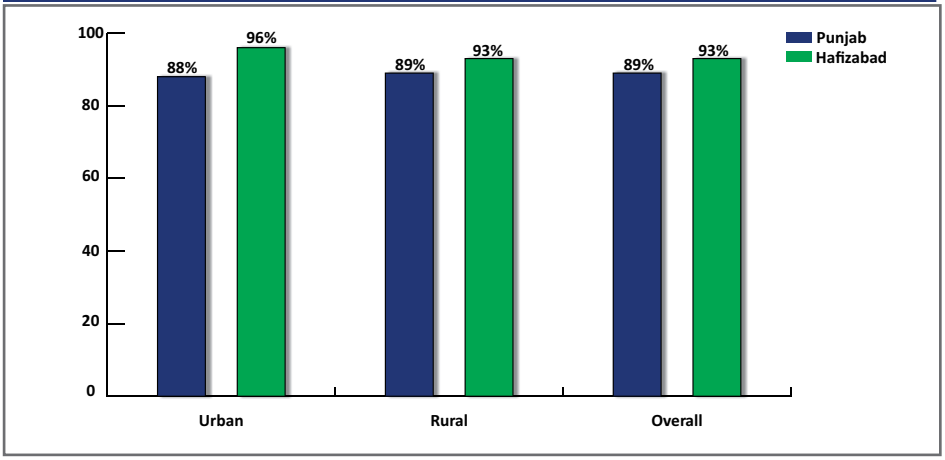
## 3.9 Burden of communicable diseases

From children to the elderly, communicable diseases make a significant contribution in the overall morbidity and mortality in Hafizabad District. By controlling communicable diseases, the district can make major achievements in health goals.

### 3.9.1 Immunisation-preventable diseases

The percentage of immunisation coverage in Hafizabad is 93%, which is higher than the provincial coverage of 89%.[66] Based on the available resources the district should be able to maintain this coverage level.

**Figure 3.3: Comparison of immunisation status in Hafizabad (Fully Immunised)**




#### 3.9.1.1 Tuberculosis (TB)

Pakistan is one of 22 countries that still have endemic levels of TB, with an estimate of 353 cases per 1000 people. TB is the main burden of disease amongst the poor. According to the Annual DHIS Report 2013 for Hafizabad, 7,848 suspected cases of TB were treated in the OPDs of public sector facilities in the district. Moreover, there were 1,826 intensive-phase TB Directly-Observed Treatment, Short-Course (DOTS) patients. The number of slides for acid fast bacteria (AFB) diagnosis was 9,195. The number of slides for AFB positive were 106,5 [67].

#### 3.9.1.2 Malaria

Malaria is a disease that disproportionately affects the poor due to prevailing environmental, socio-economic conditions and the epidemiological situation. In

66 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13

67 Department of Health, Government of Punjab. Annual DHIS Report 2013.

Hafizabad, a total of 10,652 cases of malaria were treated at public facilities in 2013[68]. The number of slides examined was 6610, and number of slides with MP positive was 62; the number for Falciparum positive was three [69].

#### 3.9.1.3 Hepatitis

The estimated prevalence of Hepatitis B and C is 2.5% and 5%, respectively, in Punjab – compared to 3% and 4% nationally. The prevalence of Hepatitis is much higher than that of HIV infection in Punjab. The costs of health care related to Hepatitis are entirely borne by the health department – unlike HIV for which donor assistance is provided. The high prevalence is due mainly to the use of contaminated needles by health providers and quacks. In fact, Pakistan has one of the highest rates of injections per patient in the world, with 90% of injections being unnecessary for treatment. In Hafizabad, 6,083 suspected cases of Hepatitis were treated in the OPDs of public sector facilities in 2013. [70] The number of screened patients was 2,188; the number identified as Hepatitis B positive was 143 and the number identified as Hepatitis C positive was 1,113.[71] As treatment of Hepatitis B and C is costly, mass vaccination and curtailment of unsafe injections are the primary cost-effective measures for control. Although Hepatitis B and C, and HIV are all viral borne diseases with similar routes of spread, long drawn out morbidity and reduction in mortality, they are dealt with by different preventive vertical programmes in the District, resulting in fragmented reporting and duplicated efforts. In order to strengthen the efforts against Hepatitis B, a Hepatitis B vaccination has been included in the expanded programme of immunisation (EPI).

### 3.9.2 Other communicable diseases

According to the Annual DHIS Report of 2013 for Hafizabad, in addition to the aforementioned communicable diseases, which represent the majority of health problems, other common communicable diseases include scabies (34,796 cases), typhoid fever (5,799 cases), and Otitis Media (11,157 cases).[72]

#### 3.9.2.1 Rising burden of non-communicable diseases



According to the Annual DHIS Report of 2013, hypertension contributed 19,040 cases, followed by Ischaemic Heart Disease at 423 cases. Among respiratory disorders, asthma contributed 17,939 cases, while Chronic Obstructive Pulmonary Diseases contributed 3316 cases. Peptic Ulcer diseases contributed 45,562 cases, and diabetes contributed 18,348 cases to the burden of disease in Hafizabad District. [73]

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68 Department of Health, Government of Punjab. Annual DHIS Report 2013.

69 ibid.

70 ibid

71 ibid.

72 ibid.

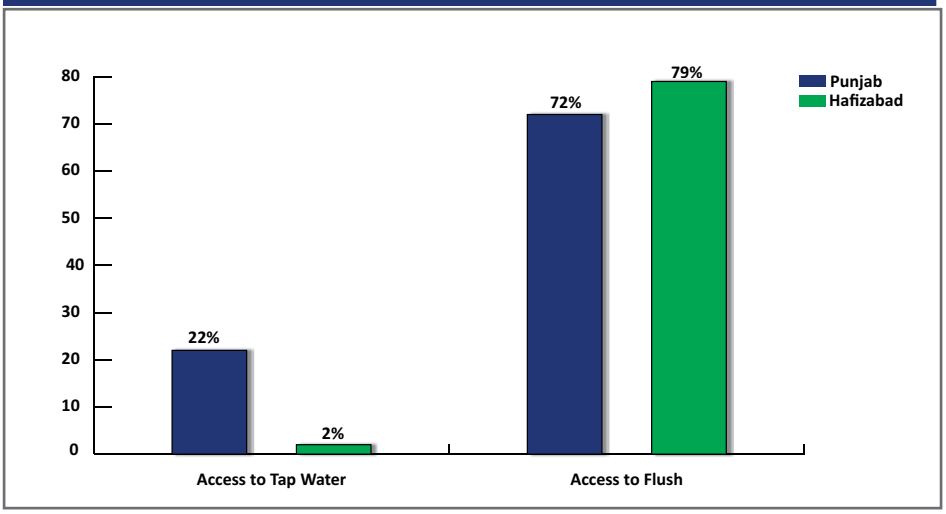
73 Department of Health, Government of Punjab. Annual DHIS Report 2013

## 3.10 Unsafe water and sanitation

According to PSLM 2010–13, overall only 2% of households in Hafizabad have access to tap water, which is less than the provincial average of 22%. **Hafizabad is ranked the lowest among the districts of Punjab in terms of availability of tap water for households.** Within the district, 1% of households in urban areas have access to tap water; in rural areas, 2% of households have access to tap water. [74]

The presence of a flush toilet is strongly associated with a reduced risk of infant death, with the IMR in households having a flush toilet being 22% lower than in households without such a toilet. [75] In Hafizabad, 79% households have access to a flush toilet, which is higher than the provincial average of 72%. The district is ranked 16th in the province, in terms of access to a flush toilet. [76]

**Figure 3.4: Access to tap water and flush toilets in Hafizabad**




## 3.11 Health seeking behaviour

Only 8.82% of the population of Hafizabad uses public sector services, as compared to 17.60 % in Punjab province. 77.96% use private practitioners, as against 73.24% in the province. In Hafizabad, 4.51% of the adult population and 7.03% of under-five children reported sickness during the two weeks preceding the PSLM 2012–13 Survey; of these, 96.03% and 96.84%, respectively, received care. [77]

74 ibid.

75 Jannifer Bennett. 'Correlates of Child Mortality in Pakistan: A Hazards Model Analysis.' The Pakistan Development Review, 1999; 38(1):85–118.

76 Federal Bureau of Statistics, Government of Pakistan. Pakistan Social and Living Standard Measurement Survey, 2012–13.

77 ibid.

| Table: 3.2 Primary Health Care Surveyed Health Facilities in District Hafizabad (BHUs) | | | |
|---|---|---|---|
| Facility | Catchment population | Number of new visits | Percentage |
| **Tehsil Hafizabad** | | | |
| BHU BakaBhattian | 11451 | 7079 | 61.82% |
| BHU Mehdianabad | 12342 | 11545 | 93.54% |
| BHU Nidala Khan | 24224 | 24406 | 100.75% |
| **Tehsil Pindibhattian** | | | |
| BHU Jhandraka | 11254 | 8987 | 79.86% |
| BHU KotNukka | 22930 | 18565 | 80.96% |
| BHU Rasoolpur Tarar | 23460 | 18906 | 80.59% |

## 3.12 Private sector facilities

The private sector makes a significant contribution in health care provision in Hafizabad District, like in the rest of the province. However, the private health sector remains largely undocumented and unregulated despite the fact that it is a substantial and major source of health services and health financing in Pakistan. District Health Office Hafizabad reports 28 private health facilities in the district, ranging from specialised private institutions to single person clinics, including hospitals, clinics, and maternity homes. A detailed list of private sector facilities is provided in Annex D.

# 4 Findings and results

The findings and results of the needs assessment study are presented in the following pages. In line with the objectives of this study, the results address areas such as: management and governance issues at provincial and district levels; district finance and budgetary allocations and how they hamper or support primary healthcare service delivery in the district; access to services through qualitative and quantitative primary research and GIS-based analysis; service delivery and coverage; and quality of services.

## 4.1 Management and governance issues at provincial level

Most of the stakeholders involved in policy decision-making in Punjab reported limited use of parameters or indicators for planning health services. An absence of collated information and cross tabulation of data coming from different sources (the PWD, the DoH, vertical programmes etc.) was stated as one of the major issues impeding effective use of evidence for decision-making. Moreover, a low quality reporting system has resulted in constrained decision-making and planning at the provincial level.

*"Primary and secondary data sources, such as MICS, PDHS and HMIS, are used for policy formation but before that there should be third party evaluation to ensure quality and reliability of data".*

However, provincial and district managers of PRSP managing BHUs in Hafizabad at District stated that the needs of the community were actually kept in view when planning the provision of health services at BHU level. OPD trends of BHUs and disease pattern of districts were monitored every month, in order to assess the needs of the community. The disease pattern of the district was verified through monthly meetings of doctors, BHU staff and other team members in the district. For further verification, secondary data sources were also consulted, and targets were set on the basis of verified data.

*"If a linkage between the Population Welfare Department (PWD) and LHWs is developed it can overcome unmet needs. We have offered PWD space in health facilities to maintain the privacy of women who don't want the community to know that she is using family planning methods. This idea was appreciated but never implemented".*

A lack of inter-provincial harmonisation between different health service programmes was the main concern highlighted by the respondents of the survey. A low level of coordination between regular health departments and vertical programmes gave rise to issues like duplication of resources and services. Most of the vertical programmes have their own management, reporting and monitoring mechanisms, and work in isolation – there is a low level of coordination across programmes.

An insufficient allocation of the budget to the health system was referred to by almost all of the respondents. The negligible expenditure on health as a percentage of GDP (2.7%, last calculated in 2012)[78] is unlikely to allow for the provision of effective and quality health services to the community. Regarding the allocation

78 http://www.who.int/countries/pak/en/

of finances, it was reported that no evidence or data was used while making a budgetary plan for a facility in a district. Moreover, the prevalence of diseases and incidences in the district were not considered during the process of allocating financial resources.

Although in Hafizabad District the entire allocated budget of BHUs was handed over to PRSP, a slow transfer of funds was reported to be one of the factors hindering the provision of quality health services to the people of the district. The delayed provision of funds affected the procurement of equipment and drugs, resulting in underutilisation of primary health facilities and a reduction in the ability to achieve targets.

Lack of management skills and capacity issues were reported at the provincial level. It was assessed by the study that provincial health managers and members of their health management teams had clinical backgrounds, but very few were trained in public health planning or health management. Furthermore, no management guidelines have been provided to the provincial managers to guide them in performing their management and leadership roles.

*"In the initial years of CMIPH, i.e. 2003–2008, the budget was provided on a regular basis. Later there were delays in the provision of the budget and for the last two years the fund flow has been equal to nothing".*

The issue of coverage, as a result of the increasing population, was reported as a major factor affecting the provision of health services. It was mentioned that initially one LHW was appointed for a population of 1200 to 1500 households. After implementation of the Devolution Plan 2001, the government increased the catchment population for LHWs to 1400, to enhance the programme coverage. For a long time, recruitment has been banned and retired or laid off or absentee staff cannot be replaced; therefore it has become impractical to cover all the targeted population. In order to achieve 100% coverage, more HR is required to cater to a population of 1400–1500. The PWD has faced the same issue, due to their limited number of outreach staff. On average, each Family Welfare Worker (FWW) used to cover two to three UCs, but with the increase in the population, FWWs have been able to achieve only 25–30% of their targets.

The study reported weak mechanisms for monitoring and measuring the performance of the health system. The lack of a monitoring system has led to a failure to achieve optimal service delivery outputs. Provincial managers highlighted issues like lack of funds and HR to carry out effective monitoring. Moreover, delays in the provision of resources mean that the health department is prevented from making regular monitoring visits and evaluation of health service providers. It was mentioned that although monitoring manuals have been designed for service providers, due to restricted resources they were not being followed. As no proper mechanism of monitoring exists, adherence to operational guidelines cannot be ensured. Moreover, no effective grievance redress mechanism has been established at health facilities. The PHC has not taken on this task, mainly because of limited resources.

## 4.2 Management and governance issues at district level

The study revealed the very limited role of the district in the development of any implementation plans, because of its weak resources and institutional capacity. No mechanism is in place to prioritise and confirm the needs of the community. Access to reliable evidence-based data sources that are needed for informed decision-making was reported as the main issue regarding attempting to understand the needs of the community.

One of the district officials agreed with these findings and stated that district officials were not consulted when health policies were formulated or reviewed. However, implementation plans and issues were discussed every month at day long sessions at the DG's office, chaired by the Director General of Health Services (DGHS).

In Hafizabad District, the management of 29 BHUs and 12 Dispensaries has been contracted out to the PRSP, a semi-government organisation under the CMIPH. In line with the agreed arrangement, the District government transferred a one line budget to PRSP to manage and operate the BHUs. It was observed that although the district had made improvements in the availability and attendance of staff, increased patient turnover, better availability of medicines and general cleanliness and maintenance of the basic health facilities, they were still facing issues in relation to the provision of quality service delivery, despite full administrative leverage. Although the entire allocated budget of BHUs was handed over to PRSP, a slow transfer of funds was reported to be one of the factors hindering the timely provision of quality health services and achieving set targets.

*"There is a shortage of skilled HR. One doctor is working in multiple BHUs, which is affecting primary health care. The rest of the staff members are also in short supply".*

Weak accountability and M&E systems were also reported to be significantly limiting health service delivery across Punjab. Hafizabad, being a PRSP district, has a relatively better M&E system: facility in-charges are required to send their monthly reports to PRSP district managers. Although PRSP claimed to be sending progress reports to EDO (H) and the DCO, a very weak supervisory and coordination arrangement was observed between PRSP and the district health department. The study further revealed that the mainstream district health department does not have any strong linkages with PRSP. The absence of supervisory and coordination mechanisms has resulted in underutilisation of available resources and ultimately poor performance in the health sector.

Due to insufficient resources, scarce HR and medicine and equipment, PRSP is facing major challenges to deliver the required service package. To address issues of an insufficient number of trained staff and to increase utilisation of BHUs, the PRSP model initially introduced clustering of BHUs to ensure the scheduled availability of a doctor. Each cluster consisted of two to three BHUs. A doctor visited each cluster on scheduled days each week. Doctors were incentivised with a better salary package for their additional workload. However, given the recent increase in doctors' salaries, the model has been modified and clustering has been discontinued. Now the PRSP modality requires a doctor at every BHU. In Hafizabad, clustering exists

only where doctors are not available and a doctor of an adjoining BHU looks after the unmanned BHU. Although PRSP has provided transport or POL to facilitate doctors' visits, it was reported that delays in the provision of finances hindered doctors' duties.

Regarding coverage by outreach staff for the provision of health services, it was specifically mentioned that there were many remote uncovered areas, as LHWs were never deployed there.

### 4.2.1 Autonomy at district level

The DCO is the head of the District Administration in each district. He has the power to evaluate the performance of the officers and direct them to achieve the set goals in the approved district action plans. The study revealed that the DCO had ample administrative authority to deal with HR and finances, but there was often political interference as regards the DCO exercising this authority. It was stated that the DCO had the authority to make decisions but limited powers to implement them, vis-à-vis the politicians in the area.

Regarding the hierarchy of the district health system, EDO (H) is at the top of the management. He manages all the health projects of the district and also coordinates implementation of vertical programmes. The DOH is next to him and specifically manages primary health care services in the district.

The study revealed that before devolution, the role of these managers was limited to executing the health plans set by the federal and provincial health ministries. However, after devolution the districts were given both financial and functional authority to manage the health services in the district. The district managers had autonomy to make health plans according to the needs of the community. However, the current study revealed limited district capacities in this regard.

Being a PRSP district, the DSM of the programme is responsible for controlling the budget of BHUs and for meeting their needs, to ensure efficient performance of health service delivery. Also in the case of poor performance of staff, he can give show cause notices or fire them, if they were appointed by PRSP. However, as the vertical programmes (like EPI, LHW, etc.) come directly under the administrative control of the EDO(H), PRSP had no authority to monitor or hire and fire vertical programme staff.



## 4.3 Procurement process

Under the PPRA Rules 2009 the procurement process is followed by the health department when procuring medical supplies and equipment. It was reported that although a specific timeframe was stipulated for each step of the procurement process, the schedule was seldom followed because of insufficient and delayed

provision of funds (see Annex E).

The study revealed that despite one of the high priorities of PRSP being to ensure availability of the required range of medicines at BHUs, so far PRSP has had partial success in the timely provision of medicines due to scarce resources and increased patient load.

*'The procurement of medicines should be based on patient load but on the ground this principle is not strictly followed'*

Flaws in planning do not allow procurement of quality medicines as the focus has always been on acquiring drugs at the cheapest rates, which compromise the quality. Improper storage for general medicines at BHUs, including light arrangements and temperature maintenance, was also highlighted in the study. The study further reported that given the delayed provision of funds by the Government, PRSP made essential drugs available to BHUs by using the money kept for contingencies. Moreover, money received against the sanctioned but vacant posts of doctors was also used for purchasing medicines.

## 4.4 Monitoring and Evaluation

Traditionally, the performance of the district managers and HCPs is judged on the basis of PERs. However, it was stated by the district officials that the reports were usually stereotyped, giving 'good' remarks to everyone, irrespective of actual performance. Even if negative remarks are mentioned in the PER for any act of gross violation of rules or any show of disobedience, these are more often expunged sooner or later. Promotions are made on a routine basis, based on seniority, and are never linked with performance, according to existing civil service rules. It was reported that the present system does not distinguish between good, average and bad performers. There is no incentive system in place to motivate managers and employees to perform better.

At BHU level, PRSP has its own monitoring and supervision mechanism in the district. It was mentioned that all health facilities are supposed to keep a daily record. District management, including the DSM of PRSP, check this record during their visits to assess the quality of health care services. PRSP Provincial teams also conduct monitoring visits. However, a lack of means of transport, security of female staff and ineffective linkages were identified as major barriers in ensuring the quality of PHCs at BHU level in the community. Moreover, the PRSP monitoring system has not been integrated into the district health monitoring system, which has led to coordination and performance issues.

The study further revealed a new mechanism for strengthening monitoring in the district, introduced in April 2014: the use of IT and tracking telecommunication (through Android phone technology). It was reported that performance of district managers were now being monitored by the provincial DoH through a Ground Packet Radio System (GPRS) system. District management (EDO(H), DHO and DDHO) were provided by the provincial government with Android phones for this

purpose in March. The information is transmitted and consolidated in the health sector dashboard maintained by the Punjab Information Technology Board (PITB). Monitoring is carried out of set parameters, such as presence of staff, cleanliness and provision of medical supplies etc.

## 4.5 Finance

It has been reported that an insufficient share of the provincial budget (Rs. 44,629.627 million in 2013–14)[79] was allocated to health, to ensure effective and quality health services to the community. Most of this was spent on tertiary care facilities – at the expense of secondary and primary health care. Thus, basic community needs were not properly fulfilled.

Under PRSP, Hafizabad District receives a one line budget from the province. The major part of this amount is transferred into the staff salaries account. The share of non-salary component allocated to the district health department is usually not enough to meet its required demand. As the PRSP model works through the deployment of one doctor in a cluster of two to three BHUs, the salary for vacant posts is contributed towards responding to contingencies, including purchasing of essential medicines.

A budgetary plan is prepared by the district for the next financial year and is usually subject to an inflationary increase of 10% or so. Furthermore, slow release of funds was reported to cause delayed procurement of equipment and drugs and hamper smooth and timely delivery of health services. This resource constraint has negatively impacted the planning and execution of training activities by the health department. The PWD also reported a similar situation. Vertical programmes were provided with their funds through supplementary grants. It was reported that the amount received on this account was also not sufficient to support all required programme activities.

### 4.5.1 Analysis of budget trends



In order to identify gaps and inefficiencies in the budgetary allocations, a budget analysis exercise was carried out by SNG, Punjab, primarily focusing on health sector budget allocations and actual expenditure incurred in Hafizabad during the last four years, i.e. FY 2010–11, 2011–12, 2012–13 and 2013–14. The analysis was based on budget documents, outpatient data, and disease patterns of the district. All the relevant documents were obtained from the district and the provincial governments. An in-depth analysis of the health sector's current budget (salary and non-salary component) was also carried out. The focus of this analysis was primary

79 Personal communication with Director Budget, DoH

health care delivered through BHUs and RHC.

### 4.5.2 District total non-development budget and expenditure analysis

The non-development budget estimates (BE) for the district were Rs.1.876 billion in FY 2010–11, which increased to Rs.2.759 billion in FY 2013–14. The non-development AE were Rs.1.644 billion in FY 2010–11, which increased to Rs.2.474 billion in FY 2013–14. Average utilisation of the budget remained above 88% during all four years.

### 4.5.3 District salary and non-salary budget and expenditure analysis

As depicted in Table 4.1, the salary share in the district budget was 92% during FY 2010–11. However, it increased to 93% during FY 2013–14. The utilisation of the salary budget was over 87% during the period, as compared to non-salary budget utilisation which was much more volatile, ranging from 77% to 122% during the four year period. This indicates room for improvement in terms of district capacity and budgeting.

**Table 4.1: Total Current Budget**

Rs. in billions

| Year | Salary | | Non-Salary | | Share in Expenditure | | Utilisation | |
|---|---|---|---|---|---|---|---|---|
| | BE | Actual | BE | Actual | Salary | Non-salary | Salary | Non-salary |
| 2010-11 | 1.876 | 1.505 | 0.141 | 0.139 | 92% | 8% | 87% | 98% |
| 2011-12 | 1.971 | 1.754 | 0.157 | 0.192 | 90% | 10% | 97% | 122% |
| 2012-13 | 2.397 | 2.143 | 0.197 | 0.204 | 91% | 9% | 97% | 104% |
| 2013-14 | 2.759 | 2.296 | 0.232 | 0.178 | 93% | 7% | 91% | 77% |

(Share of Salary, Non-salary and Utilisation)

Table 4.2 depicts the salary and non-salary share and utilisation rate over the last four years. The numbers show that the share of non-salary budget has never been more than 8% of the total health sector budget allocation. Additionally, non-salary expenditure has ranged between 7% and 10%. Also, the non-salary share has been decreasing since 2011–12. On the other hand, overall utilisation of the current budget has been between 88% and 99%.

**Table 4.2: District Current Budget**

Rs in billions

| Year | Salary | | Non-Salary | | Total | | Overall utilisation %age |
|---|---|---|---|---|---|---|---|
| | BE | Actual | BE | Actual | BE | Actual | |
| 2010-11 | 92% | 92% | 8% | 8% | 1.876 | 1.644 | 88% |
| 2011-12 | 92% | 90% | 8% | 10% | 1.971 | 1.946 | 99% |
| 2012-13 | 92% | 91% | 8% | 9% | 2.397 | 2.347 | 98% |
| 2013-14 | 92% | 93% | 8% | 7% | 2.759 | 2.474 | 90% |

(Salary and Non-salary in Percentage)

### 4.5.4 Share of health in district budget and expenditure

Table 4.3 shows the share of expenditure of the health sector / institutions in the overall district expenditure. It shows that the share of expenditure of health institutions in the total expenditure of the district remained between 16% and 18% during the four year period.

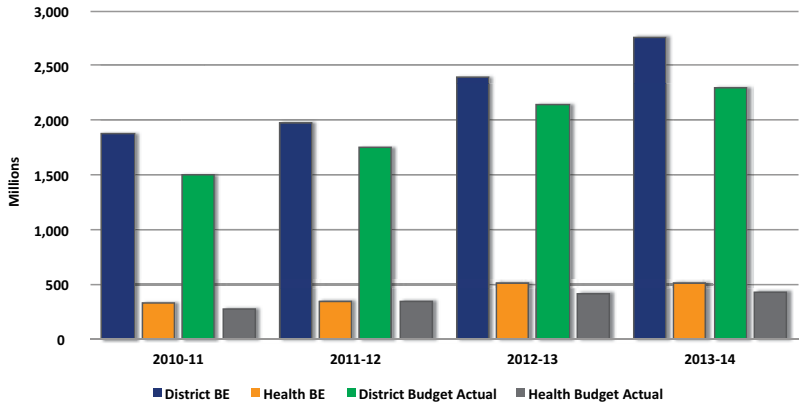
**Table 4.3: Share of Health Budget / Expenditure in Overall District Budget / Expenditure**

Rs. In billions

| Year | District budget | | Health budget | | Health budget as percentage of district budget | |
|---|---|---|---|---|---|---|
| | BE | Actual | BE | Actual | BE | Actual |
| 2010-11 | 1.876 | 1.644 | 0.327 | 0.268 | 17 | 16 |
| 2011-12 | 1.971 | 1.946 | 0.336 | 0.348 | 17 | 18 |
| 2012-13 | 2.397 | 2.347 | 0.508 | 0.419 | 21 | 18 |
| 2013-14 | 2.759 | 2.474 | 0.517 | 0.428 | 19 | 17 |

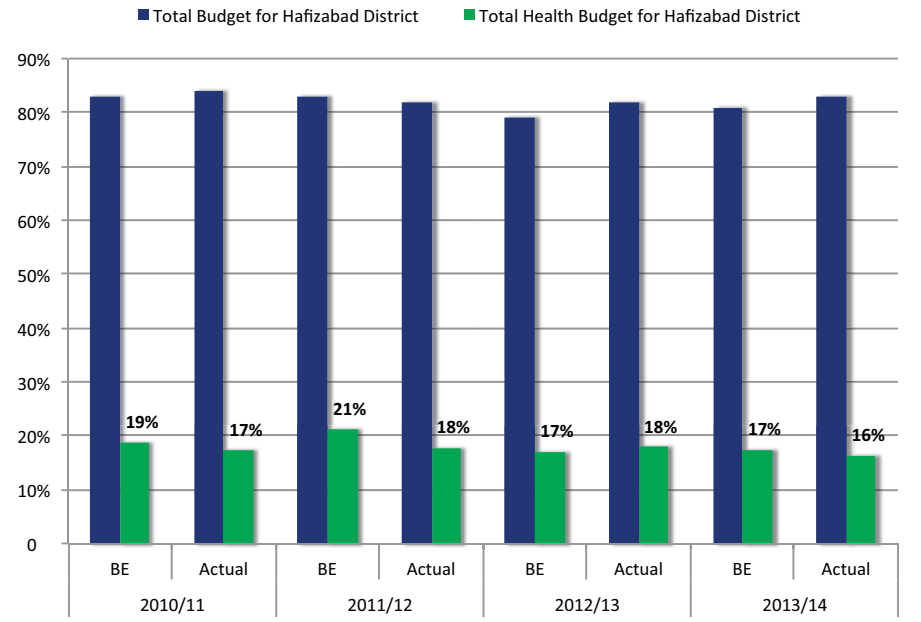
(Salary and Non-salary in Percentage)

**Figure 4.1: Share of Health Budget in District Budget**



The share of the health budget and expenditure in the overall district budget and actual expenditure is also shown in the following figure. The figure shows that the share of health in the total expenditure at district level remained between 16% and 21% during the four year period.

**Figure 4.2: Percentage Share of Health Sector in District Budget**




### 4.5.5 District health department and budgetary allocations

The district health sector mainly consists of primary and secondary health service delivery, i.e. BHUs, RHCs and THQs and DHQs. Table 4.4 below shows the BE and actual expenditure for the primary and secondary health care facilities over the period of the four financial years. The share of primary health care in total health expenditure was a minimum of 37% in 2013–14 and a maximum of 41% in 2011–12. Similarly, the share of secondary health care in the total health expenditure ranges from 30% to 51%. The rest of the budget is used for administration, other health facilities and a general nursing school, etc.

**Table 4.4: Primary Health Care and Secondary Health Care Budget**

(As Percentage of Total Health Current Budget and Utilisation Percentage)

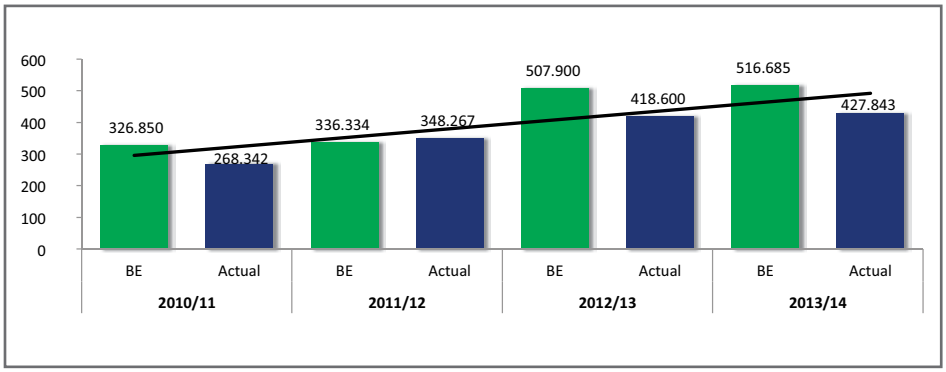
(Rs. in million)

| Years | 2010-11 | | 2011-12 | | 2012-13 | | 2013-14 | |
|---|---|---|---|---|---|---|---|---|
| | BE | AE | BE | AE | BE | AE | BE | AE* |
| Total Health Current Budget | 326.850 | 268.342 | 336.334 | 348.267 | 507.900 | 418.600 | 516.685 | 427.843 |
| Primary Health Care Budget | 134.601 | 101.017 | 133.075 | 142.461 | 164.519 | 164.108 | 164.020 | 160.004 |
| Utilisation (%) | | 75.05% | | 107.05% | | 99.75% | | 97.55% |
| Primary Health Care Percentage of Total Health Current Budget | 41% | 38% | 40% | 41% | 32% | 39% | 32% | 37% |
| Secondary Health Care Budget | 98.966 | 90.591 | 109.380 | 131.083 | 258.155 | 172.640 | 220.466 | 191.294 |
| Utilisation (%) | | 92% | | 120% | | 67% | | 87% |
| Secondary Health Care as Percentage of Total Health Current Budget | 34% | 30% | 38% | 33% | 41% | 51% | 43% | 45% |

### 4.5.6 Health current budget and expenditure analysis

The health current budget was Rs.327, Rs.336, Rs.508 and Rs.517 million during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. The year on year (Y-o-Y) increase in the budget was 3%, 51% and 2% in 2011–12, 2012–13 and 2013–14, respectively. The Y-o-Y increase in actual expenditure was 30%, 20%, and -2% in 2011–12, 2012–13 and 2013–14, respectively. The utilisation of the budget was 104% for financial year 2011–12; however, actual expenditure remained lower than the budget allocated in financial years 2010–11, 2012–13 and 2013–14, which was 82%, 82% and 83%, respectively. Generally, the utilisation of the health budget was low, with the exception of FY 2011–12 where the variation between budget allocation and expenditure was 4%.

**Figure 4.3: Health Sector Budget and Actual Expenditure**



### 4.5.7 Health salary and non-salary budget and expenditure analysis

In the district health BE salary share was 74%, 76%, 79% and 81% and the non-salary share was 26%, 24%, 21% and 19% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. Similarly, the share of salary in AE was 71%, 72%, 77% and 77%, whereas the non-salary share was 29%, 28%, 23% and 23% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. Overall budget utilisation of salary was 79%, 98%, 81% and 79% during 2010–11, 2011–12, 2012–13 and 2013–14, respectively. The non-salary budget utilisation was 91%, 119%, 89% and 99.6% during the same years. The salary and non-salary comparison, as against actual allocation, is shown in figure 4.4.

**Figure 4.4: Share of Health Sector Salary and Non-salary BE and Actual Expenditure**

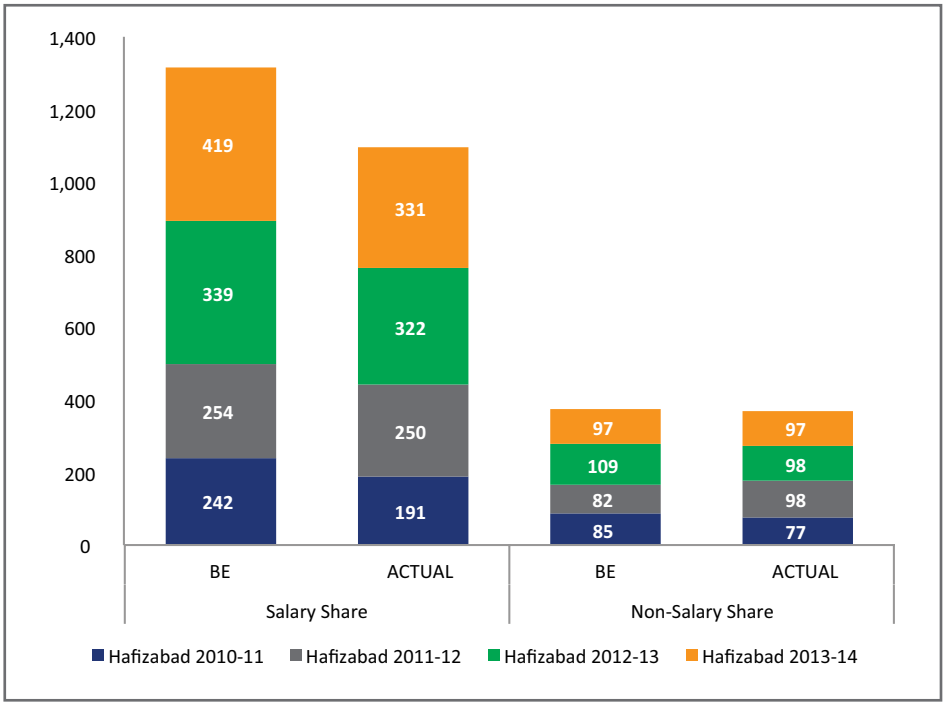
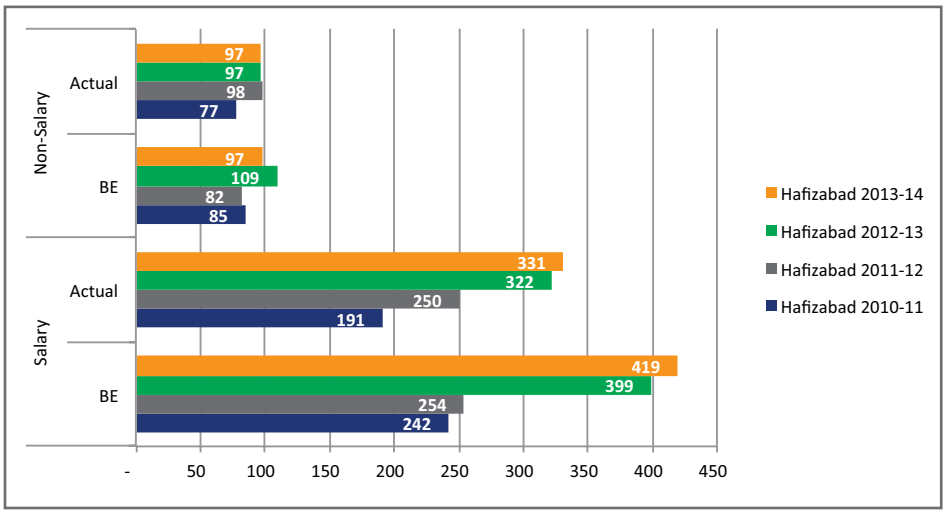


**Figure 4.5: Utilisation of Salary and Non-salary Health Budget**




The above analysis clearly shows that despite resource constraints, generally the district has been allocating an adequate non-salary budget for the health sector, particularly keeping in view the common standard that a non-salary budget be equivalent to 30% of the total health budget. However, utilisation of the non-salary budget has been quite volatile.

### 4.5.8 Budget allocation for non-salary (especially medicines)

The non-salary budget primarily comprises operating expenses and repair and maintenance (R&M). The operating budget includes the budget for drugs and medicines. In Hafizabad, the DG allocates funds to PRSP as a grant-in-aid for the procurement of drugs and medicines. Table 4.5 shows the utilisation of the grant-in-aid / transfer. Excessive expenditure for grant-in-aid / transfers has been reported in civil accounts FY 2011-12, which clearly reflects under-budgeting.

**It also appears that there is no criterion to determine the quantity of medicines/linkages with disease patterns. The procurement of medicines is one of the most important tasks of the district health department. It is, therefore, extremely important that this task is undertaken in the light of evidence of needs at different levels. Use of DHIS data appears to be the most feasible option in this regard.**

**Table 4.5: Non-Salary Budget and Expenditure of BHUs**

(As Percentage of Total Health Current Budget and Utilisation Percentage)

(Rs. in million)

| Years | 2010-11 | | 2011-12 | | 2012-13 | | 2013-14 | |
|---|---|---|---|---|---|---|---|---|
| Significant Head | BE | AE* | BE | AE | BE | AE | BE | AE |
| Operating Expenses | 52.63 | 41.46 | 49.89 | 49.39 | 74.45 | 58.20 | 71.99 | 67.87 |
| R & M | 1.82 | 1.10 | 1.40 | 2.07 | 2.65 | 5.13 | 7.87 | 5.33 |
| Grant-in- aid / Transfers for medicine | 22.87 | 26.87 | 23.00 | 34.50 | 21.300 | 23.600 | 3.67 | 7.00 |
| *Utilisation* | | *117%* | | *150%* | | *111%* | | *194%* |

### 4.5.9 District health current budget and actual expenditures in different sub-sectors

The district health current budget has been divided into a number of sub-sectors, i.e. Primary, Secondary, Administration, Other Health Facilities and General Nursing School. This analysis was mainly focused on the primary health care services, especially BHUs.

#### 4.5.9.1 Primary health care services

Table 4.6 provides the volume of primary health care funding in the district. Primary health care services were provided through 41%, 40%, 32% and 32% of the total health budget in the district during the four years under analysis. The actual expenditure on primary health care was 38%, 41%, 40% and 37% during FY 2010–11, 2011–12, 2012–13 and 2013-–14, respectively. Utilisation of this budget was 75.1%, 107.1%, 99.8% and 97.5% during these years, respectively. While BE show a decreasing trend in primary health care allocations, actual expenditure has mostly been on the higher side, reflecting poor budgeting during these years.

**Table 4.6: Primary Health Care Current Budget and Actual Expenditure**

(Rs. in million)

| Years | 2010-11 | | 2011-12 | | 2012-13 | | 2013-14 | |
|---|---|---|---|---|---|---|---|---|
| | BE | AE* | BE | AE | BE | AE | BE | AE |
| Health Budget District Hafizabad | 326.9 | 268.3 | 336.3 | 348.3 | 507.9 | 418.9 | 516.7 | 427.8 |
| Primary Health Care | 134.6 | 101.0 | 133.1 | 142.5 | 164.5 | 164.1 | 164.0 | 160.0 |
| Primary Percentage of Total Health Current Budget | 41% | 38% | 40% | 41% | 32% | 40% | 32% | 37% |
| *Utilisation* | | *75.1%* | | *107.6%* | | *99.8%* | | *97.5%* |

**Figure 4.6: Primary Health Care as Percentage of Total Health Budget**

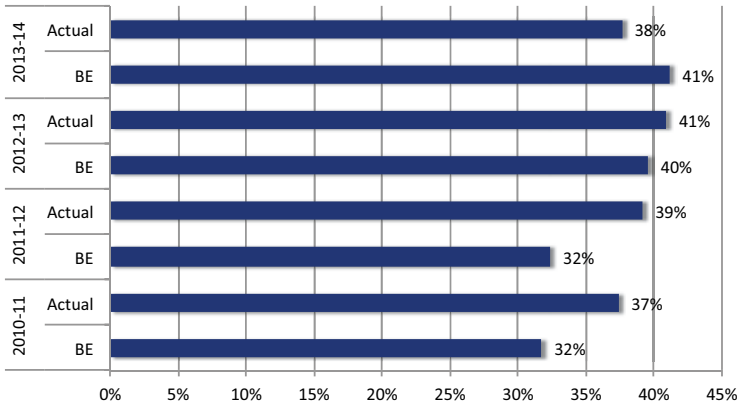
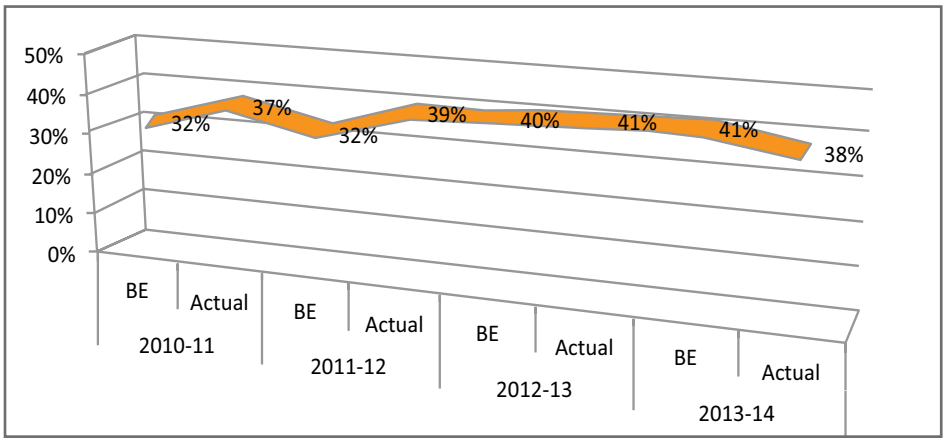



**Figure 4.7: Primary Health Care Budget Percentage Utilisation**




### 4.5.9.2 BHUs – budget and actual expenditure

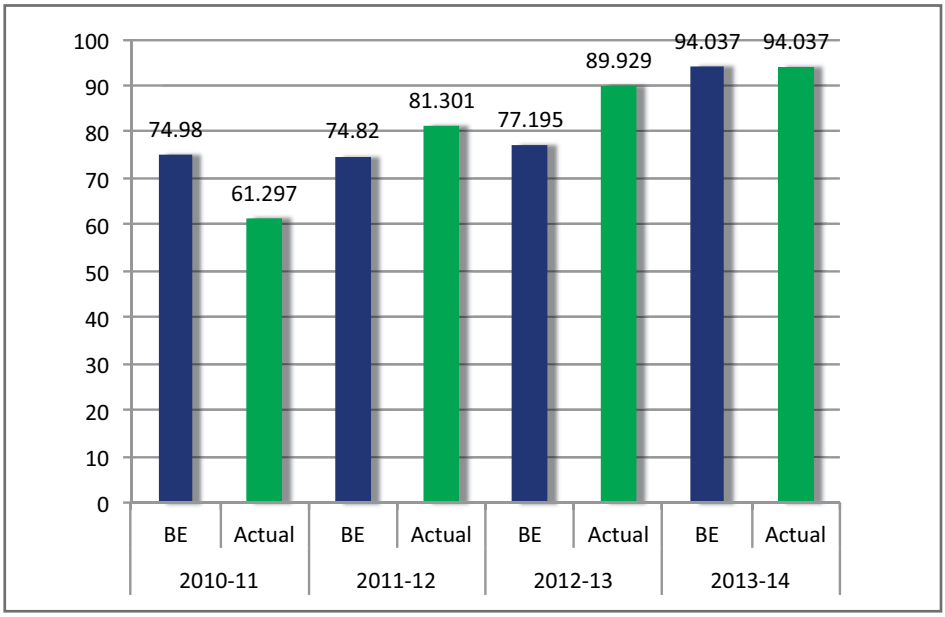
There are 31 BHUs in Hafizabad District (29 BHUs under the PRSP and two under the DG). In non-PRSP districts, BHUs are under the administrative and financial control of the DOH. By contrast, in Hafizabad funds are transferred to PRSP on a quarterly basis, for the administrative and financial management of BHUs. Table 4.7 below examines the budgetary allocations and actual expenditure for BHUs in the period under discussion.



**Table 4.7: Budget and Actual Expenditure at BHU**

| (Rs. in million) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2010-11 | | 2011-12 | | 2012-13 | | 2013-14 | |
| | BE | AEs | BE | AE | BE | AE | BE | AE |
| BHU | 74.98 | 61.30 | 74.82 | 81.30 | 77.20 | 89.30 | 94.04 | 94.04 |
| Utilisation | | 82% | | 109% | | 82% | | 109% |

Figure 4.8: Budget and Expenditure Trends of BHU [DO (H) Hafizabad]

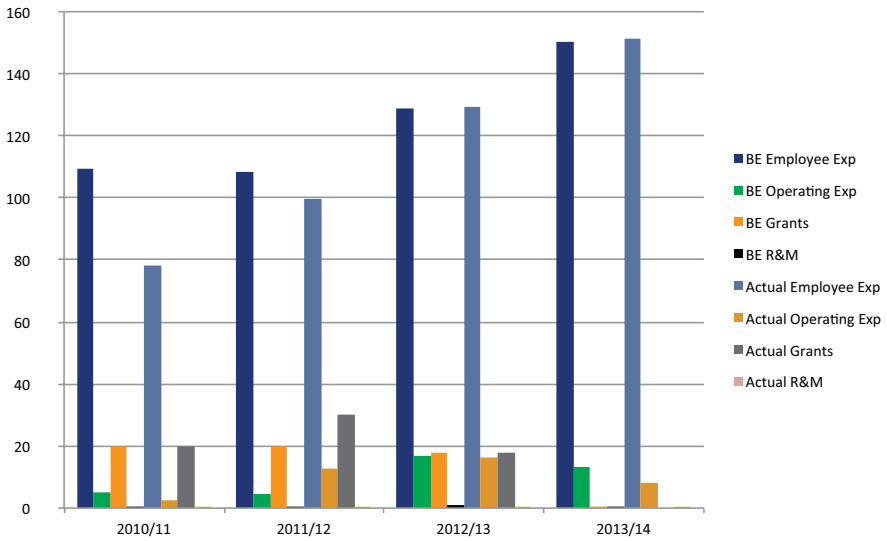



The variation between the budgeted amounts and actual expenditure for BHUs clearly reflects a lack of financial planning and absence of evidence-based budgeting for the provision of primary healthcare services during the last four years. The BHUs are responsible for providing the most important preventive and curative functions at the grassroots level. Therefore, it is important that budgeting and planning is improved at district level through the use of evidence / data.

#### 4.5.9.2.1 Major object-wise components at BHUs

Figure 4.9 below shows that while the BHU budget and actual expenditure mainly consists of employee-related, operating and R&M expenditure, most of the spending at BHUs represents salary expenditure.

**Figure 4.9: Major Object-wise Components of Budget and Expenditure in BHUs**




The data also reveal that the budgeted amount for operating expenses and for R&M falls short of sectoral needs. The situation appears even more negative when the analysis reveals that this non-salary allocation is not utilised fully.

#### 4.5.9.2.2 Procurement of medicines for BHUs

The non-salary budget, including that for vacant posts, is transferred to PRSP as grant-in-aid. Therefore, the procurement of medicine is carried out by PRSP. However, the allocation of the grant-in-aid is often not as per PRSP's demand.

#### 4.5.9.2.3 Cost per patient at BHUs

A detailed exercise has been carried out to calculate the per patient cost of treatment at BHUs. This is presented in Table 4.8 below, for the four years.

**Table 4.8: Per Patient Cost as per Original Budget and Actual Expenditure**

(Rupees)

| | 2010-11 | | 2011-12 | | 2012-13 | | 2013-14 | |
|---|---|---|---|---|---|---|---|---|
| | BE | AE | BE | AE | BE | AE | BE | AE |
| Patient cost as per total budget of BHU | 394 | 394 | 324 | 376 | 313 | 340 | 314 | 257 |
| Patient cost as per Non-salary budget of BHU | 61 | 61 | 149 | 145 | 104 | 104 | 106 | 95 |

The above table shows that the per patient non-salary expenditure ranged between Rs.149 to Rs. 61. This allocation is quite modest, keeping in view the actual need for the provision of medicines, diagnostic facilities etc. This suggests there is a need for budgeting in accordance with the needs of the sector, i.e. the number of patients visiting BHUs and the average cost of the provision of health care services.

## 4.6. Access to services

### 4.6.1 Primary survey findings

*"Women said that the transport system should be improved for women so that they can get treatment from any medical facility especially during pregnancy".* BHU-KOT Nikka

Majority of the respondents during FGDs stated that in the case of remotely located BHUs, accessibility had become a major problem. The conditions of most of the roads to remotely located BHUs were poor and transport was not available all the time. Even in the case of available transport, a high cost was highlighted as another issue in relation to accessing remote BHUs. Respondents shared that, as people living in villages could not afford to rent a vehicle, they preferred seeking services from nearby TBAs.

However, in the case of BHUs located nearby, people were willing to seek health services from them as they could approach the facility even by walking or by motor cycle.

The limited opening times of BHUs (from eight to two o'clock) were mentioned as another issue regarding accessing services from BHUs by the majority of the community respondents. Even women who could go to BHUs by foot stated that as BHUs did not offer services for 24 hours and were closed after two o'clock, they had to take patients to private or city hospitals.

Sociocultural issues were identified as other hindering factors in relation to accessing health care facilities. Women have to either seek the permission of their mother in law or have to wait for some male member of their family to accompany her to visit the facility. They are not allowed to go out of their houses alone. Moreover, if a male doctor is appointed at the facility, a woman is not allowed to receive health services from him. Here it seems pertinent to point out that in BHUs where doctors are available they mostly are male.

CEIs revealed that the mean distance of their residences from a BHU is 3.7 km (±2.1km; median distance 4 km). As the CEI were conducted with respondents who could access the facility, it was reported that within one km, all of the citizens travelled by walking. However, within 3 km half of the citizens walked and the other half used cycles, but beyond 3km all used motorbikes to reach the BHU. 17% of the citizens were reported to travel on a bad road to the facility. Also these clients (92%) were found to be repeatedly utilising the services from the facility. Moreover, 47% stated that the main reason for their visit was the access to the facility; 50% reported that both access and affordability were the reasons for their visit. The rest were minor reasons.

### 4.6.2 GIS analysis

#### 4.6.2.1 Travel time to the nearest BHU

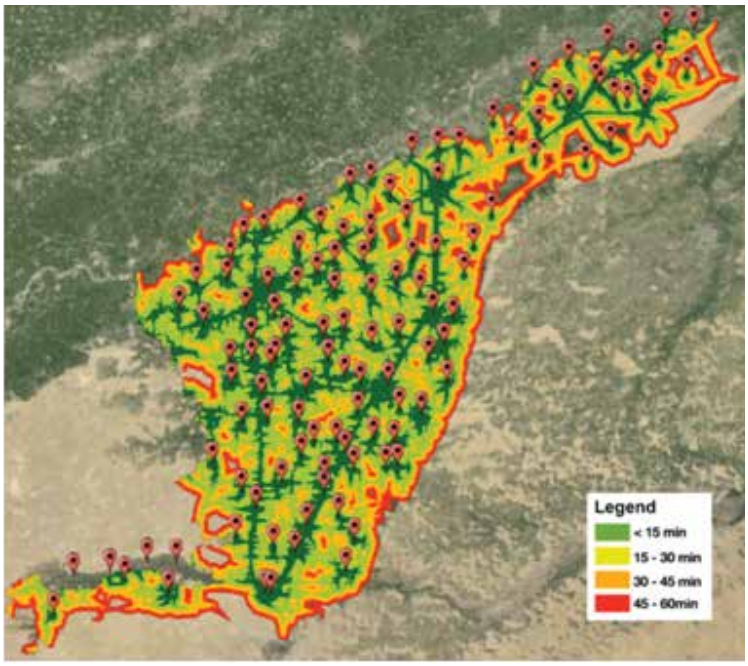
In this component, access is defined in terms of the time it takes to travel to the nearest BHU. Time is estimated based on travel speed on and off roads.

The road network is derived from a crowd-sourced road layer [80] that categorises roads into nine types, namely primary highway, major arterial, minor arterial, secondary road, local road, controlled access, limited access, non-traffic and terminal. Each category was assigned an average speed of travel using a motor vehicle. Where roads were not available, an average walking speed of 3 km/h was assumed. Based on these speeds, an average 'cost', i.e. time of travelling on each road, was estimated.

By using spatial least cost distance calculation algorithms with this cost layer, a surface was generated that represents the minimum time it takes to travel to a health facility from any location in the district.

##### 4.6.2.1.1 Results and analysis

**Figure 4.10: Access to health facilities by travel time – Hafizabad**




80 TPI has an offline version of the road layer provided by Google that was last updated in 2012.

**Figure 4.11: Examples of potentially underserved villages in Hafizabad**


Figures 4.10 and 4.11 depict regions that are within 15, 30, 45 and 60 minutes of travel time to the nearest BHU. Uncoloured regions are those that are beyond 60 minutes of a health facility and therefore represent potentially underserved areas. Any settlements lying in these regions do not have realistic access to a public health facility. Some examples of potentially underserved villages (with latitude-longitude coordinates) are:

- Sakhi (32.010372, 73.502198)
- Thatta Jahid Amir Wala (31.987189, 73.37770)

#### 4.6.2.2 Distance to the nearest BHU as the crow flies

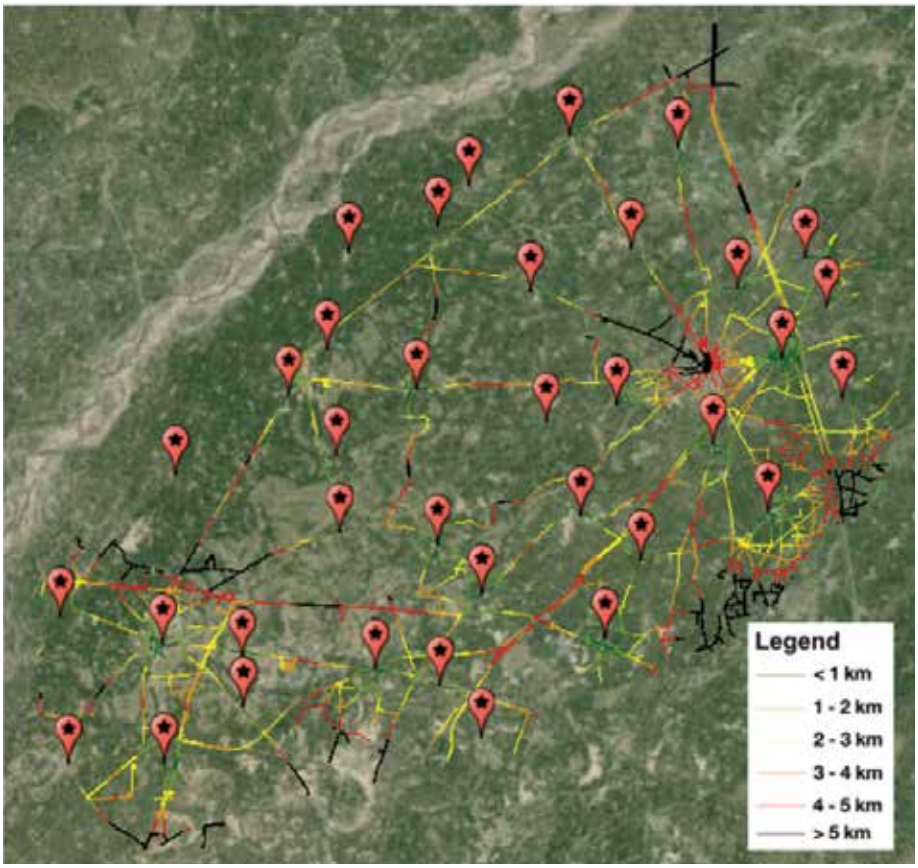
In this component, access is defined according to how far a citizen is from the nearest health facility by straight-line distance.

This was calculated by creating circular zones of one km radii up to five km around each health facility. These zones were subsequently overlaid with the road network to identify the roads falling in each zone, as well as those roads that are beyond a five km radius of any health facility.

##### 4.6.2.2.1 Results and analysis

In figure 4.12 settlements served by the road segments in black are those that are beyond five km of straight-line distance of the nearest health facility, and can be considered as underserved regions.

Figure 4.12: Straight-line distance to the nearest health facility – Hafizabad




#### 4.6.2.3 Travel distance to the nearest BHU by road

In this component, access is defined according to how far a citizen has to travel from any location along the road network to reach the nearest health facility, assuming that she or he travels along roads where they are available and on foot otherwise.

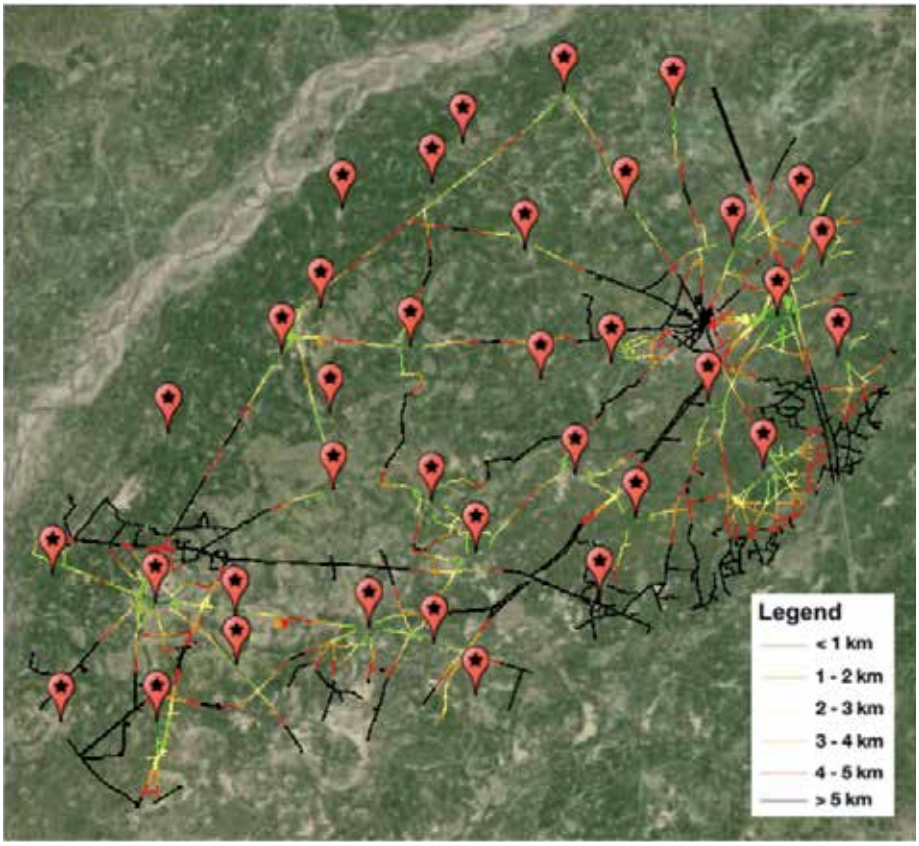
Using a crowd-sourced road network layer and spatial least cost distance algorithms, the minimum distance that needs to be travelled to reach a health facility along roads was calculated. Road segments were then categorised according to this minimum distance.



##### 4.6.2.3.1 Results and analysis

In figure 4.13 settlements served by the road segments in black are those that are beyond five km of distance that a citizen needs to travel to reach the nearest health facility, and can be considered as underserved regions.

Figure 4.13: Travel distance by road to the nearest health facility – Hafizabad




## 4.7 Service delivery and coverage

*"The issue of shortage of medical staff must be addressed on a priority basis as at times patients come to BHUs in a serious condition and the medical staff are not present at the BHU".*

BHU In-Charge, Jandrara

*"At times delays occur in procurement of medicines and release of budget because an application is sent to DSM-PPHI and the evaluation process takes time, which is responsible for time wastage."*

Many service delivery gaps at the facility level were reported, which need to be remedied to bring improvements in primary health care services. The study found insufficient financial resources and lack of staff for delivering the current provincial government approved and announced service package. The majority of facility in-charges reported unavailability of trained staff at their BHUs, due to which provision of primary health services at BHUs was not possible.

Although the situation of medicine availability was reported to be better at BHUs, this was a common complaint for many respondents. Therefore, unavailability of medicines and equipment was highlighted as another issue in relation to providing services to the community. Moreover, the quantity of provided medicines only caters to the needs of a small proportion of the population. It was stated that although many of the BHUs had basic equipment, like weighing machines and blood pressure apparatus, such basic equipment was still missing in a few facilities. Additionally disposable gloves, sterilised-delivery kits, iodine, spirit were also reported to be missing in some BHUs.

Regarding health services in a BHU, many of the women mentioned seeking ANC either from BHUs or LHWs in the district. They mentioned the availability of iron tablets, folic acid, TT vaccination and health counselling about nutrition. For children under five years, almost all participants mentioned polio drops, vaccination and treatment of common ailments. However, if sickness lingered, the parents would take their child to private clinics or hospitals for treatment because of a distrust of the public sector health system. No special services are provided to women, children and minorities; also no additional budget has been allocated in this regard.

It was stated that in district Hafizabad, LHWs/Health Houses (HHs) cover around 65–70% population. Moreover, even these LHWs are not playing an effective role due largely to lack of effective M&E and incentive frameworks. Many HHs are also not centrally located and have unrealistic and unmanageable targets.

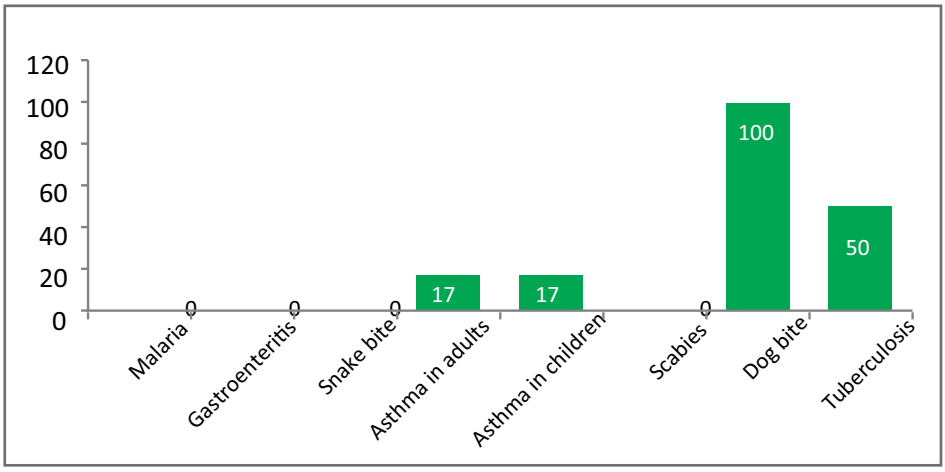
Regarding laboratory or diagnostics tests, the majority of the respondents reported the availability of pregnancy and blood sugar tests. However, the overall referral system was found to be weak. No ambulance services are available for the community to access BHUs and for referrals from BHUs to higher health facilities.

Majority of the vaccinators mentioned poor arrangements to maintain cold chains for vaccines. They reported having water coolers filled with ice bags to store vaccines. In the case of accessing far-flung areas, ice was not available – making it difficult to maintain a cold chain. Power outages were reported to be another major point of concern regarding the preservation of vaccines.

The quantitative study revealed that the population coverage of Hafizabad District in terms of general diseases reported by BHU in-charges seemed to be adequate for most of the prevalent diseases. However, it fell short in covering asthma (adults and children) and tuberculosis. Only one BHU (17%) was found to be uncovered. The rest of the BHUs maintained the appropriate treatment inventory vis-à-vis the disease set. Malaria, gastroenteritis, and scabies were found to be fully covered. Snakebite was also fully covered by the BHUs. Anti-rabies vaccine was not found anywhere but this could be because of the fact that this item was not present in the EHSP medicine list. The services and stocks (medicines, equipment and allied) were found to be appropriately present for ANC, delivery care, postnatal care and family planning in most of the facilities.

**Figure 4.14: Percentage of BHUs with a gap in availability of treatment for prevalent diseases of Hafizabad District**

n=6 BHUs




### 4.7.1 Services related to pregnancy

Test kits for haemoglobin and protein in urine were not available in any of the BHUs. However, all of them were found to be conducting pregnancy tests, blood sugar and blood pressure tests. 67% of the BHUs have a weighing scale. Only 60% of the BHUs provide ANC supplements (folic acid and iron) to pregnant women. This shows that diagnostics and medicines of ANC do not adequately cover the population. The main issue regarding maternal management is a poor referral system: only one BHU (17%) offers this, though all maintain a referral register. Complete delivery kits were present in all the BHUs. However, oxytocin was found in only 83% of them.

### 4.7.2 Vaccines (TT, BCG, OPV, Pentavalent, measles and pneumococcal)

Vaccines were present in all the five sampled BHUs run by PRSP. However, they were found to be missing from the BHUs run by the District Government, Hafizabad.

**Table 4.9: ANC coverage by BHUs having appropriate facilities and HR in Hafizabad District**

| n=6 BHUs | | |
|---|---|---|
| Reported facilities in the BHUs | % of BHUs where appropriate facilities were available | % of BHUs having appropriate HR |
| Pregnancy test | 100% | 100% |
| Blood sugar | 100% | 100% |
| Haemoglobin | 0% | - |
| n=6 BHUs | | |
| Pregnancy test | 100% | 100% |
| Blood sugar | 100% | 100% |
| Haemoglobin | 0% | - |

| Table 4.9: ANC coverage by BHUs having appropriate facilities and HR in Hafizabad District | | |
|---|---|---|
| n=6 BHUs | | |
| Reported facilities in the BHUs | % of BHUs where appropriate facilities were available | % of BHUs having appropriate HR |
| Protein in urine | 0% | - |
| Equipment | | |
| Weighing scale | 67% | 100% |
| BP apparatus | 100% | 100% |
| Medicines | | |
| Iron and Folic acid | 60% | 100% |
| Record keeping | | |
| ANC card | 100% | |
| Referral register | 100% | |
| Referral system | 17% | |
| Delivery | | 100% |
| Ergometrine 0.2mg/ml | 66% | |
| Oxytocin 10 IU/ml | 83% | |
| Misoprostol 200mcg | 33% | |
| Delivery kits | Complete | |
| Normal delivery | 100% | |
| Episiotomy | 100% | |
| Delivery register | 100% | |
| Family planning | | |
| Male condoms | 100% | 100% |
| IUCD | 83% | |
| Pills | 50% | |
| Resuscitation | 83% | 83% |

## 4.8 Quality of services



It was stated by many BHU in-charges that no document specifically on quality services has been shared with them; instead, only verbal instructions were given to ensure quality health services in BHUs. A lack of trained staff was another issue relating to providing quality services that was identified. A need to recruit efficient and skilled staff for vacant posts was stressed. Non-liveable conditions of staff residences have led to absenteeism of staff. Non-availability of clean and safe water and electricity was reported at BHUs.

Non-availability and compromised quality of medicines was stated as the main issue for underutilisation of BHUs. However, regarding the attitude of service providers,

the majority of the respondents, including minority groups, seemed satisfied. They stated that they were treated with dignity and attention.

The quantitative study showed that around 75% of the clients who visited BHUs in Hafizabad were examined by male doctors (the in-charge of the facilities) and 25% by LHVs. Likewise, around 60% of the citizens reported that they waited for not more than five minutes. Another 33% waited for around 10 minutes. Nevertheless, none waited for more than 15 minutes.

All of the clients paid for the services offered by BHUs. Similarly, all of them received all the medicines from the facility. Around 17% of the clients were advised to take a diagnostic test, which was conducted at the facility. 10% of the clients reported that they were referred to a higher facility. In a varying degree, all the clients reported being satisfied with the overall BHU experience.

# 5 Discussion and conclusions

## 5.1 Conclusions

This study conducted an in-depth situation analysis of the district health status to assess if the existing public health delivery system could respond to the health needs of the community, including minority groups, both efficiently and effectively. The findings, both of primary and secondary data, budget and GIS-based analyses, have revealed gaps in coverage, accessibility and quality, particularly with reference to maternal and child health care. Moreover, gaps were also identified in processes, from policy and planning down to the implementation level. The key findings are analysed and discussed in the following paragraphs.

### 5.1.1 Management and governance issues at provincial/district level – conclusions

**Lack of use of data and evidence to plan health services**

Most of the senior management at the provincial health department currently involved in policy and decision-making processes are not appropriately utilising data for the provision of health services to the community, although these datasets very much exist. Moreover, the DoH has already developed MSDS and recently updated the EPHS, but the latter has not yet been given significant importance in decision-making regarding the allocation of appropriate medicines and diagnostic facilities.

Though provincial and district managers of PRSP, who are running the BHUs in Hafizabad, reported using data for planning health services at primary level, the health outcomes and indicators obtained from the literature review do not support their claim in this regard. The use of evidence is mostly found to be lacking at both provincial and district levels and disease incidence or prevalence is not taken into consideration when setting targets. This seems to be attributed to a number of factors, namely:



1. Questionable quality of data generated at the health facility, as paramedics, who lack the capacity to understand the value of quality and the importance of complete and correct data entries, run most of the facilities. The issue is compounded by the fact that validation exercises are seldom conducted.

2. The existing disease coverage model is outmoded and fails to provide accurate health picture. For instance, 'Mouza/ village population' is not considered while estimating coverage since the addresses of patients/clients is not reported in DHIS. The geographical spread, therefore, cannot be

estimated correctly. Moreover, repeated visits of patients are not accounted for in the reporting, which considers repeated visits of the same person for different ailments as a visit of a new patient.

3. There are also capacity issues regarding the analysis and correct use of data at both provincial and district levels.

**No mechanism in place to prioritise and confirm the needs to the community**

The study revealed the poor capacity of the provincial and district health management team for carrying out community needs assessments. This disability leads to incorrect prioritisation of issues and inappropriate decision-making that inaccurately matches on the ground realities and community needs.

**Lack of structural integration**

The findings point out poor inter-departmental linkages as no structural and functional integration exists between the DoH, the PWD, and other departments. In spite of structural flaws in the reporting mechanism, functional intra-departmental linkages are reported to be in place among the district management team, including district coordinators of vertical programmes, but such integration is nearly non-existent as regards community outreach (e.g. between LHWs and CMWs and LHWs and FWWs). Consequently, this results in less than expected output and referrals to health facilities.

**Lack of redress mechanism and accountability**

There is neither an effective redress mechanism nor an accountability system in place at the facility and district level, nor any mechanism set for rewarding performers and taking habitual non-performers to task. The absence of these mechanisms adversely affects both demand and supply, contributing to underutilisation of the services offered at public sector health facilities.

### 5.1.2 M&E – conclusions

Although interventions have been made to bring improvements in the monitoring system, through embracing digital technology, in the absence of trained personnel, functional equipment and logistics support, it will be difficult to sustain the initiative to achieve a meaningful outcome.

### 5.1.3 Finance – conclusions

Funds are transferred from the province to the districts through the Provincial Finance Commission, as a single line transfer. Given that the health sector does not enjoy the required priority, funds released by the province to the district are always short of the demand – even though the DoH receives a reasonable share among 13 competing departments (17.7% estimated for 2013–14). Furthermore, there is

sometimes delayed release to the health department by the district authorities, which causes issues in carrying out planned activities and meeting targets. The paucity of required funds adversely affects both health outputs and outcomes.

### 5.1.4 Service delivery and coverage – conclusions

Though PRSP claims to have undertaken some significant interventions to ensure the availability of trained staff or the provision of medicines at BHUs the community needs are very pressing and outstrip these interventions. A proper training centre is not available at the district. Despite this, the study showed that it was reported that some improvements had been made, in the presence and punctuality of staff, increased patient turnover, and better availability of medicines.

### 5.1.5 Quality of services - conclusions

The district continues to face issues in the provision of quality service delivery, mainly due to scarcity of funds, lack of effective coordination, a lack of supervisory and accountability mechanisms in the district, a compromised quality of HR, poor quality of medicines, a low level of or zero training activities, demotivated managerial and technical staff and less than scheduled monitoring activities for lack of POL. The net result is underutilisation of services plus a loss of Disability Adjusted Life Years (DALYs).

## 5.2 Recommendations

The following recommendations are presented, based on the discussions in the foregoing sections of the report regarding the core areas of governance, access, and quality of primary health care services. As this is a needs assessment report an attempt has been made to present only those recommendations that are practicable, without addressing the policy domain. However, some recommendations can only be implemented by policy interventions. The details are as follows:



### 5.2.1 Management and governance issues at provincial/district level – recommendations

**Capacity development for data and evidence-based planning of health services in line with needs of the community**

One of the findings of the study was that there is a limited use by health sector managers of parameters or indicators for planning health services. Additionally, it was also found that they had limited capacity to analyse and use evidence-based information.

Therefore, it is recommended that the health planning capacity be enhanced in the short-term through outsourced TA. In the long-term, the institutionalisation of health planning within the DoH, especially at district level, is recommended.

Additionally, the strengthening of the existing planning cells, supported through trained HR and linking with data resource units, would ensure evidence-based planning and decision-making in the health sector. The Punjab Health Sector Strategy (2012–2020) proposes setting up a Knowledge Store Unit – a comprehensive data-clearing warehouse. It is recommended that these units be established at the earliest opportunity, to help augment planning at the provincial and district levels.

Finally, improvement in the quality of data collected and included in DHIS will also increase the comfort level of health sector planners: they will be more inclined to use the data for planning purposes. Therefore, it is recommended that some measures be taken to improve the authenticity and validity of the data reported in DHIS.

**Structural integration of vertical programmes**

One of the findings of the study was that the low level of integration between the mainstream health department and the vertical health programmes has raised issues such as duplication of resources and services. It was found that most of the vertical programmes have their own management, reporting and monitoring mechanisms, and are generally working in isolation, with minimal coordination with other programmes and district health staff. In order to minimise duplications and wastage of resources, it is recommended that a coordination mechanism be developed which effectively links the vertical programmes, the DoH and the PWD at the district level. Additionally, the model of District Health Population Management (DHPMT) could be adopted to ensure that these issues are reduced. In the long run, the functional integration/synergy of the vertical health care programmes at the provincial and district levels is recommended.

### 5.2.2 M&E – recommendations

The study indicated inadequate M&E of health service delivery outputs. A robust M&E system is proposed for the primary health care sector, through the use of mandatory checklists, feedback, and follow-ups. Additionally, highlighting the issues of mortality and morbidity, based on evidence, can further help in this regard.

Moreover, setting targets and costing activities can play an important role in achieving the objective of improved health care. Therefore, target setting through KPIs is recommended. Accordingly, for this purpose, a robust M&E framework/mechanism can be implemented and – through health reforms – a mechanism of accountability can be devised based on KPIs, to improve the health status. The setting of targets can form the basis for performance contracts between the provincial and district health authorities, in order to monitor progress.

### 5.2.3 Finance – recommendations

The study also found that insufficient budget allocations are made for the provision of health services. Additionally, at the district level, disease prevalence and incidence is not considered during the process of allocating financial resources. Moreover, the findings indicated that there is a slow transfer of funds and an absolute lack of planning for the timely procurement of medicines as per patients' needs.

It is recommended that the district vigorously pursue additional budget allocations through the preparation of evidence-based district action plans for the health sector. Furthermore, clearly defined targets, specific activities and pre-set indicators could help to attract the sufficient funds. The timely release of the budget at the provincial and district levels will also ensure that the available funding is transferred and utilised efficiently.

In the long-term, it is recommended that needs-based budgeting be linked to performance, outputs, and outcomes at the district level.

### 5.2.4 Access to services – recommendations

The study found that most of the roads to remotely located BHUs were of a poor condition and regular transport to them was not available. Furthermore, in the case of remotely located BHUs, accessibility is a major problem. Additionally, the non-affordability of transport by the community also hampers access to health facilities.

Therefore, it is recommended that innovative approaches be adopted to resolve issues of access, such as the deployment of mobile health units at strategic locations or telemedicine. Moreover, measures for efficient patient transport, through arrangements such as community emergency ambulances made available through CES, are also recommended.

In the long-term, it is recommended that the mapping of health facilities through GIS be carried out, with the objective of synchronising the placement of the health facilities with the community needs. Furthermore, the issues of affordability of health services for the poor segments of the community should be addressed by using pro-poor initiatives like voucher schemes. Linking a voucher scheme with a community-based transport model could additionally help in improving access to health facilities.



### 5.2.5 Service delivery and coverage – recommendations

The study found that the successful coverage of the needs of a growing population was reported as a major challenge in the adequate provision of health services at the district level.

In the short-term, it is recommended that a rethinking of the service delivery system take place, through the use of innovative approaches such as community midwives, pairing of TBAs and LHWs, and involvement of the private sector and NGOs. The

matching of the burden and distribution of disease at the district level is also recommended.

In the long-term, it is recommended that the options of out-sourcing health services, fostering PPPs, and implementing health insurance models be considered.

The implementation of the task-shifting concept is also proposed, being the redistribution of tasks among health worker teams to enhance their capabilities. Additionally, the possibilities of using telemedicine and mobile health (mHealth) to address the issues of coverage and access can also be explored.

### 5.2.6 Quality of services – recommendations

The study found the non-availability of appropriate and trained HR, especially women, to be a key challenge in relation to the provision of quality health services.

In order to address the issues regarding the quality of health services in the short-term it is recommended that the PHC be made fully operational so that it can contribute at all levels of service delivery in the public health sector, as envisaged in its Act.

Additionally, in the long-term it is recommended for there to be implementation and strict compliance of MSDS and operationalisation of DHAs, along with periodic skills development training for the staff of primary health care facilities in the various jobs/responsibilities assigned to them, to address quality issues.

Finally, it is proposed that PBF be introduced, with pre-set indicators to measure the quality of health services. This can potentially result in a substantial improvement in the quality of health services.

## 5.3 Non-salary budgetary proposals

In the light of the needs assessment findings, the following major issues in primary health service delivery were identified that had a direct linkage with budget allocation:

- Non-availability of medicines/supplies/lab investigation;
- Missing facilities (such as equipment for diagnosis /testing) at BHUs;
- Areas with poor access to health services;
- Lack of resource provision for vaccination; and
- Underutilisation of BHUs – non-availability of skilled attendants

To address these issues the following detailed budgetary proposals are put forward:

### 5.3.1 Access to services – non-salary budgetary proposals

**Medical camps**

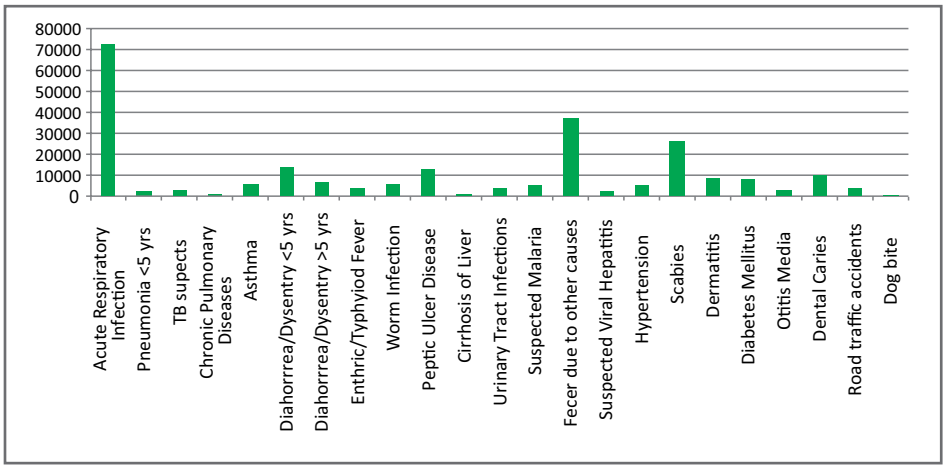
The needs assessment study also examined access to health services in the district through a GIS-based analysis. This identified areas with poor access to health services. It is advisable that the district government makes special arrangements to reach out to such communities periodically, if a more permanent arrangement cannot be made right away. Therefore, the holding of medical camps in such areas is recommended. Considering the fact that the PRSP already arranges medical camps for underserved areas of the district, setting up these camps would require minimal logistical support and cost as the medicines and equipment available at BHUs can be used for such camps. In order to establish medical camps, an indicative allocation of Rs.1.0 million is proposed for the FY 2014–15 budget of the district.

### 5.3.2 Service delivery and coverage – non-salary budgetary proposals

**Medicines/supplies/lab investigations**

An analysis was carried out of the patient load and disease pattern at the BHU level in the district. This analysis clearly indicates the presence of a large number of acute respiratory infection (ARI) patients in the district. The graph below also shows the number of patients at OPD facilities and the disease pattern in the district. It is clearly evident from the graph that a large number of ARI patients visited the BHUs in the district.

**Figure 5.1: Disease Pattern and OPD at BHUs in Hafizabad**




When investigated further, it was found that ARI medicine for children with ARI and asthma were not available at the facility. This is indicative of the fact that apparently when procuring and distributing medicines at various BHUs in the district, the data

on the burden of disease is not used, even though this data is collected by the DGHS, Punjab, and PRSP. As a result, the budgetary allocations made for the procurement of medicine are also misplaced and are not backed by any hard concrete data.

In order to address the above issues, it is imperative that adequate funds are allocated and released to PRSP, to enable it to provide medicine at the primary level health care facilities, keeping in view the burden of diseases and thus the requirement for medicines for those diseases.

To align budgetary allocations with the burden of disease, and to ensure that the essential supplies and basic diagnostic facilities are available at the primary health care level, the following calculations were carried out using the weighted average cost formulae for the cost of drugs/medicines, supplies and lab investigations.

The weighted average cost for provision of these services, except equipment, at BHUs has been calculated at Rs.62/- per unit.[81] Using this weighted average per BHU, it is possible to calculate the funding requirements for providing these services at the primary health care facilities in the district. For calculating the cost of medicines, 25% has been added to the requirement of medicine as buffer stock[2]. Table 5.1 provides the proposed budgetary allocation for the provision of medicine, supplies and basic diagnostic facilities at BHU level in the district, using the average number of patients visiting BHUs and multiplying this by the average cost per patient and further enhancing the product by a factor of 1.25 to ensure the availability of a buffer stock of medicine to offset price fluctuations / delays in future procurement.

**Table 5.1: Proposed Allocation per BHU for Medicines/Supplies/Lab Investigations**

(Rupees)

| Total patient load and per BHU | Weighted Average Per Patient Cost | Multiple for buffer stock | Medicine, supplies and lab investigation cost per BHU |
|---|---|---|---|
| 238,943 | 62 | | 14,814,466 |
| 7,706 | 62 | | 477,772 |
| | | | **Including buffer stock (1.25)** |
| 238,943 | 62 | 1.25 | 18,518,085 |
| 7,706 | 62 | 1.25 | 597,215 |

The above table clearly indicates that Rs.14.8 million is needed to provide the supplies and basic diagnostic facilities at all the BHUs in the district and the average cost per BHU is around Rs.477,772/-. Therefore, during FY 2014–15 Rs.14.8 million

81 The weighted average cost used for calculations here has been worked out in ***Department of Health, Government of Punjab report titled: Costing of Essential Package of Health Services (Primary Healthcare Facilities in Punjab), 2012***. The calculation of the weighted average cost is a three step process:

Calculation of a multiple of per unit service cost for a service × No. of expected cases of that service

Take the sum of the multiples calculated in step one

Divide the sum computed above by the total number of cases to obtain the weighted average cost of services.

The international literature on the subject recommends that a buffer stock of medicines be maintained in the range of 15% to 25%.

is needed for the provision of requisite medicines at the BHU level to address the burden of disease and patient load at those facilities. However, if a buffer stock is also taken into account, a total of Rs.18.52 is required to address the issue. This would be in addition to other operating expenses and M&R. It is further recommended that the allocated budget be distributed among BHUs on the basis of patient load instead of by using a constant or incremental budget approach.

### Source of funding (internal)

The budget analysis for Hafizabad District carried out by SNG Punjab indicated certain areas where the utilisation rate of the budget has been very low; therefore the above requirement can be met from areas where the budget utilisation has historically been very low. Furthermore, the budgets allocated to DHQ, THQ and RHCs were analysed and it was found that there was substantial over-budgeting (and resultant savings) in the salary component at this level (Table 5.2). This over-allocation can easily be diverted to fund BHU medicines, supplies and lab investigations.

**Table 5.2: Budget and expenditure trend**

(Rs. in million)

| Years | 2013-14 | | 2012-13 | | 2011-12 | | 2010-11 | |
|---|---|---|---|---|---|---|---|---|
| Major Object | BE | AE | BE | AE | BE | AE | BE | AE |
| RHC Salary | 76.772 | 64.553 | 69.484 | 57.544 | 53.434 | 48.126 | 54.486 | 37.076 |
| THQ Salary | 45.026 | 28.454 | 40.750 | 28.664 | 23.425 | 24.088 | 19.139 | 17.322 |
| Operating Cost (RHC) | 19.184 | 10.673 | 16.980 | 16.275 | 4.391 | 12.670 | 4.735 | 2.425 |
| *Medicines (L.P) at RHC* | *14.250* | *6.304* | *14.010* | *13.220* | *1.675* | *10.325* | *1.675* | *0.908* |
| *Operating Expenses at THQ level* | *8.945* | *4.407* | *6.971* | *7.119* | *2.866* | *5.826* | *2.366* | *2.118* |



### Missing equipment

The needs assessment study revealed that some required equipment / basic diagnostic facilities were not available at BHUs, except for blood pressure and weight measurement equipment. To provide the missing equipment at BHU level, EPHS-based costing of equipment has been used to work out the funding requirement for BHUs.

Table 5.3 shows the standard equipment cost at each facility (BHU), with depreciation applied. The equipment maintenance cost has also been calculated in this table using 10% depreciation for equipment per year.

| Table 5.3: Standard Cost of Equipment and related M&R for a BHU | |
|---|---|
| Rupees | |
| Total cost of Equipment per BHU | 1,600,261 |
| Equipment Maintenance Cost Per BHU | 19,836 |
| Total Cost for 31 BHUs | 49,608,091 |
| Equipment Maintenance Cost | 614,916 |

In the needs assessment exercise undertaken by SNG, an Android-based survey of equipment availability at the sample BHUs was also carried out. Based on the survey, a list of missing equipment was developed for six BHUs out of 15 BHUs. Using the list of missing equipment for sampled BHUs (see Annex B). The District Government can extrapolate the cost of missing equipment for all 31 BHUs in the district. It would, however, be better to conduct a comprehensive assessment of missing facilities, to estimate the funding requirement for the provision of missing facilities / equipment in all BHUs in the district.

**Source of funding (external)**

The provincial ADP 2014–15 includes a scheme titled 'Purchase of Missing Equipment and Hospital Furniture etc. for Primary and Secondary Care Hospitals in Punjab'. An allocation of Rs.350 million has been made against this scheme during FY 2014–15. The district government could approach the provincial health department to provide the share of Hafizabad District for providing missing equipment at BHUs in the district. However, alternatively it is proposed that the district government allocate funds for the provision of missing equipment in a phased manner using its own sources.

**Resource provision for vaccination**

One of the issues identified by the SNG Programme when undertaking a review of the business process of EPI was that necessary facilities, especially POL for motorcycles, at an approved scale, are not provided to vaccinators – who are mainly responsible for the implementation of EPI activities. A review of the budget reveals that there is an allocation for the provision of POL to the vaccinators; however, apparently this is not being disbursed. One of the reasons for non-disbursement is probably the fear that the POL fund would be misused. In order to ensure that this does not happen, it is proposed that a separate allocation be made in the budget for provision of POL to vaccinators, and that petrol be issued through the use of fleet cards to vaccinators.



### 5.3.3 Quality of services – non-salary budget proposals

**District Health Development Centre (DHDC)**

One of the main reasons for underutilisation of BHUs is a lack of qualified staff in

these facilities. The government has established DHDC in each district with the mandate of conducting training for health sector employees. However, a DHDC has not been established in Hafizabad District. A DHDC needs to be established, including developing a training schedule and robust monitoring mechanism to gauge its performance. Meanwhile, Hafizabad District can also take advantage of the adjoining DHDC centre. It is proposed that a non-salary allocation for this purpose be allocated during the next financial year, 2014–-15, under the EDO (H), to ensure funding for the capacity building of primary health care staff in Hafizabad District.

# ANNEXES

# Annex A Methodology

## Literature review

Before launching the needs assessment exercise, the team reviewed the available literature and secondary data to plan needs assessment exercise and to avoid any duplication. The following literature and data sources were reviewed before developing instruments for data collection:

- Socio-economic data / profile of Hafizabad District
- Sector service delivery performance status in the district, based upon KPIs – the sources of this secondary data include Sector MIS data, PSLM, MICS 2007 and MICS 2011, sector roadmaps and performance charts
- Punjab Health Sector Strategic Plan 2012–20
- Punjab Health Sector Operational Plan
- Three Years' Rolling Plans of Hafizabad District
- MSDS
- EPHS
- Demand side survey conducted by AWAAZ
- Health Facility Assessment Report
- Charm project report on 24/7 BHUs
- Expenditure trends of the health sector of Hafizabad District government
- Other reports on the financial management of Hafizabad District government



The literature review included reference to case studies of primary health programmes in Pakistan or other countries where service delivery issue(s) had been handled well through pilot interventions or by introducing an innovation in service delivery.

## Key stakeholder assessment

An assessment of stakeholders identified incentives, viewpoints, and problems in the provision of

primary health care service. This assessment covered the following stakeholders:

1) Citizens: men and women who are the recipients and beneficiaries of public sector services.
2) Frontline service providers: who are actually based in service delivery units, responsible for providing services, and are in direct connection with people in the area, such as LHWs, vaccinators etc.
3) Service delivery managers: who manage the service delivery units and are responsible for meeting and managing the needs and expectations of the people.
4) Policy-make**rs**: who ensure that sector services are compatible with the needs of the people.

## Data collection tools

The health sector needs assessment involved the collection of data and information on various aspects of service delivery from multiple stakeholders. A composite methodology and various data collection tools were used, as summarised below:

## KIIs

KIIs involved one to one interviews with key stakeholders, including policy-makers (provincial level) and service delivery managers (district level) / government staff. The interviews aimed to gather a better understanding of the supply side of the sector services, and possible concerns (including regarding the budget) that affect the performance of service providers in designing, managing and delivering the sector services. These key stakeholders include:

**Policy-Makers**: The Provincial Health Department, the PHC, Health Sector Policy and Strategic Planning Unit (PSPU), PWD, CMIPH, and the National Programme for Family Planning and Primary Health Care.

**Service Delivery Managers:** DCO, Executive District Officer (Finance and Planning), EDO (H), District Population Welfare Officer and District Representative of the National Programme for Family Planning and Primary Health Care, and District Manager PRSP.



## FGDs

The FGDs involved discussions with citizens – especially women, girls, minority groups, and frontline service providers – to assess the demand side of service provision. They covered the needs and expectation of the people from the service providers. The FGDs included:

- Citizens (general public users of sector services)
- Women and girls

- Minority groups
- Frontline service providers (medical officers and paramedical staff based in BHUs and outreach staff)

## Field observations

Field observations involved visiting (randomly selected) sampled service delivery units to assess the state (including physical infrastructure) of service delivery units. A comprehensive checklist was used to assess if:

- service delivery units were physically capable of performing their functions;
- frontline service providers were available in the units and are serving; and
- citizens – especially women, girls and minority groups – were accessing these units for needed services.

## CEIs

CEIs were designed to assess how satisfied service beneficiaries are with the services provided at BHUs, the attitude of staff and the location of BHUs etc.

### Selection criteria of BHUs for CEIs

- One BHU was randomly selected in each Tehsil
- Three males and three females were selected at each BHU on the basis of the following criteria:
    - 1–14 years (with attendant for child of <5y)
    - 15–49 years
    - Above 50 years

### Mystery client interviews

Mystery client interviews were included in the survey to gather detailed information about how patients were treated at health facilities.

### Selection criteria at BHUs for mystery client interviews

One BHU was randomly selected from each tehsil for mystery client interview**s**.

### Sample size

The collection of data and information on people's needs related to the provision of health care services was carried out through a literature review, KIIs, and FGDs with policy-makers, service delivery managers, frontline service providers, and citizens. The sample size was determined using the purposive sampling technique, by taking into account the patient load and distance from the headquarters of the health facility. The details are as follows:

**Table A.1: Detailed sample size of stakeholders**

| Stakeholder | Assessment Tool | Sample Size |
|---|---|---|
| | | Hafizabad |
| Qualitative Sample | | |
| Policy-Makers (At provincial level) | KIIs | 06 |
| District Managers | KIIs | 08 |
| Facility In-charges | Semi-structured Interviews | 06 |
| Service Providers and Service Beneficiaries<br>(Medical and paramedical staff at BHU, outreach staff and citizens) | **FGDs**<br>Staff: Facility and outreach<br>Community: Men and women<br>Minorities: Men and women | 07<br>3<br>2<br>2 |
| Quantitative Sample | | |
| Beneficiaries | CEIs | 12 |
| Mystery Client | Mystery Client Interviews | 02 |
| Facility In-charges | Observation Checklist | 6 |

### Selection of BHUs

A purposive sample of BHUs was selected to ensure maximum representation of different types of BHUs, i.e. BHUs with a high patient load and low patient load and BHUs near headquarters (HQ) and BHUs far from HQ.

**Table A.2: Selection criteria for BHUs**

| BHUs | Hafizabad |
|---|---|

| | |
|---|---|
| High patient load and far from HQ | 2 |
| Low patient load and far to HQ | 2 |
| High patient load and near to HQ | 1 |
| Low patient load and near to HQ | 1 |
| Total | 6 |

A sample of three BHUs was selected from each tehsil with similar representation i.e. two tehsils of Hafizabad (see Annex C).

### Field work methodology

A scheme of the field work is summarised in the table below:

**Table A.3: Data Collection at Provincial and District Levels**

| KIIs | | |
|---|---|---|
| **Level** | **Department** | **Respondent** |
| Provincial | ▪ Provincial Health Department, Punjab<br>▪ PSPU:<br>▪ Health Care Commission<br>▪ CMIPH:<br>▪ PWD<br>▪ National Programme for Family Planning and Primary Health Care (LHW Programme) | ▪ Additional Secretary (Tech)<br>▪ Programme Director<br>▪ CEO<br>▪ Programme Director<br>▪ Secretary PWD<br>▪ Provincial Programme Coordinator |
| **KIIs** | | |
| **Level** | **Department** | **Respondent** |

| | | |
|---|---|---|
| District | ▪ District Government<br>▪ DoH<br>▪ Department of Finance and Planning<br>▪ PWD<br>▪ National Programme for Family Planning and Primary Health Care (LHW Programme)<br>▪ PRSP | ▪ DCO<br>▪ DOH<br>▪ EDO (H)<br>▪ EDO (Finance and Planning)<br>▪ District Coordinator – PWD<br>▪ District Coordinator –LHW Programme<br>▪ DSM – PRSP |

## Table A.4: Data Collection at Facility and Community Level

| Technique | Hafizabad District |
|---|---|
| Semi-structured Interviews **(with check list)** | ▪ Six semi-structured interviews with in-charges of BHUs/doctors<br><br>Observation of physical infrastructure, medicines and equipment of BHUs, with focus on maternal and child health (through checklist developed on smart phones) |
| FGDs | *Seven FGDs overall FDGs:*<br><br><u>Three FGDs with HCPs</u><br><br>▪ One FGD with Women Medical Officers (WMOs)/ LHVs/midwives<br><br>▪ One FGD with LHWs/ CMWs<br><br>▪ One FGD with CDC Supervisor/Vaccinator/Sanitary Inspector<br><br><u>Four FGDs with community</u><br><br>▪ One FGDs with male members<br><br>▪ One with women, girls<br><br>▪ One with minority male<br><br>▪ One with minority female |
| Observation Survey | <u>Observation survey of six BHUs</u> on android-based customised software, and by using checklist, involved:<br><br>▪ Survey of physical infrastructure of BHUs<br><br>▪ Assessment of staffing, medicine and diagnostic facilities, and comparing with standards<br><br>▪ Provision of service delivery with the help of mystery clients |
| CEIs | Six (three males and three females) from each of two selected BHUs (12 CEIs) |
| Mystery Client Interviews | 2 mystery client interviews |
| **Technique** | **Hafizabad District** |

| | |
|---|---|
| Teams | Three teams were deputed in the district, each comprising three members, as below:<br>a) Doctor/ Team Leader: 1<br>b) Moderator/FGD Expert: 1<br>c) Note Taker/Community Worker: 1 |

**Training of field teams**

The training of interviewers and supervisors was conducted from 1st to 3rd May 2014. The training consisted of instruction on interviewing techniques and field procedures, a detailed review of the qualitative and quantitative questionnaire content in separate groups, instruction, and practice through mock interviews between participants in the classroom. Actual field simulations were conducted in Sheikhupura District by practising interviews with respondents.

**Data management and analysis**

Two senior members of the Contech team and the field supervisor were in the field during the data collection. Data checking was done on a daily basis simultaneously as the data collection was going on. The field supervisor conducted data editing at the time of collection of questionnaires from the interviewers. For questions where additional information was provided, the codes were given by the senior member prior to electronic data entry.

After the data were edited the completed dataset was double entered using a data entry programme designed in the software Epi data version 3.1. Two data entry operators simultaneously entered the data. The senior member performed a consistency check of the two datasets and corrected any discrepancy between them.

Regarding the qualitative analysis, a framework was developed for the qualitative component of the study, which was based on the key themes related to the needs assessment of the community regarding primary health care services. The qualitative data was translated and transcribed for analysis. Qualitative software, Atlas.ti, was used for analysis of the qualitative data. A comprehensive list of codes was prepared, which was used for the coding of the data in the software. After the coding, the narrative was sorted into the pre-identified themes. These findings were then analysed according to the objectives of the study, as stipulated in the research proposal.

## Annex B Financial Impact of Missing Equipment in Six BHUs, Hafizabad District

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Adult ambu bag and mask | No | Yes | Yes | No | No | Yes | 3 | 3,500 | 10,500 |
| Adult stethoscope | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 550 | - |
| Adult weighing scale | No | Yes | Yes | Yes | No | Yes | 2 | 550 | 1,100 |
| Adult weighing scale | No | Yes | Yes | Yes | Yes | Yes | 1 | 1,000 | 1,000 |
| Ambu bag for infant | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 3,500 | - |
| Ambubag for child and adult | No | No | Yes | Yes | Yes | Yes | 2 | 3,500 | 7,000 |
| Autoclave / boiler | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 45,000 | - |
| Baby weighing scale | No | Yes | Yes | Yes | Yes | Yes | 1 | 3,500 | 3,500 |
| Baby weighing scale | No | Yes | Yes | Yes | Yes | Yes | 1 | 3,500 | 3,500 |
| Bedpans | No | No | Yes | Yes | Yes | No | 3 | 500 | 1,500 |
| Bench fibre glass | No | Yes | No | Yes | Yes | Yes | 2 | 2,500 | 5,000 |
| Blood pressure apparatus | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 4,500 | - |
| Breast pumps | Yes | No | Yes | Yes | No | No | 3 | 2,000 | 6,000 |
| Chair for health worker | No | Yes | Yes | No | Yes | Yes | 2 | 1,000 | 2,000 |
| Cold box refrigerator for EPI | No | No | Yes | Non-functional | Yes | Yes | 3 | 17,000 | 51,000 |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Computer with accessories, including internet access | No | No | No | No | No | No | 6 | 75,000 | 450,000 |
| Couscous specula (Small, Medium, Large for each category) | Yes | Yes | Yes | Yes | No | No | 2 | 800 | 1,600 |
| Dressing drum | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 500 | - |
| Dressing scissors | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 100 | - |
| Dressing trays | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 400 | - |
| ENT diagnostic set | No | Yes | Yes | Yes | Yes | Yes | 1 | 300 | 300 |
| Episiotomy scissors | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 600 | - |
| Examination couch | No | Yes | Yes | Yes | Yes | Yes | 1 | 100,000 | 100,000 |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Forceps artery | Yes | No | Yes | Yes | Yes | Yes | 1 | | - |
| Forceps artery curved | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps artery straight | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| forceps cheatle | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps sponge holding | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps tissue – plain | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps tissue – Toothed | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Forceps non-toothed tissue | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps non-toothed tissue – eight inches | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Forceps outlet | Yes | Yes | Yes | Yes | Yes | Yes | 0 | | - |
| Sponge holding forceps, outlet forceps, tissue forceps – plain, tissue forceps – toothed, toothed tissue forceps – eight inches, cheatle forceps | Yes | No | Yes | Yes | Yes | Yes | 1 | 150 | 150 |
| Foetal stethoscope | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 500 | - |
| Gas burner | No | No | No | No | No | No | 6 | 11 | 66 |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Gas stove/ cylinder | No | Yes | No | No | No | No | 5 | 500 | 2,500 |
| Glucometer | No | Yes | No | No | No | No | 5 | 4,000 | 20,000 |
| Haemocyto meter | No | No | No | No | No | No | 6 | 4,000 | 24,000 |
| Hemoglobino meter | No | No | No | Non-functional | Yes | Yes | 4 | 450,000 | 1,800,000 |
| Ice box | No | No | Yes | Non-functional | Yes | Yes | 3 | 7,000 | 21,000 |
| Ice packs | No | No | Yes | Non-functional | Yes | Yes | 3 | 100 | 300 |
| ILR/deep freezer | No | No | Yes | Non-functional | Yes | Yes | 3 | 45,000 | 135,000 |
| IUD insertion kit | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 1,500 | - |
| IV stand | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 450 | - |
| Kidney tray-large size | Yes | No | Yes | Yes | Yes | Yes | 1 | 200 | 200 |
| Labour / Delivery Table with washable plastic cover | No | Yes | Yes | Yes | Yes | Yes | 0 | 10,000 | - |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Nebuliser | No | Yes | Yes | Yes | Yes | Yes | 1 | 5,000 | 5,000 |
| Needle holder forceps | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 100 | - |
| Normal delivery set | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 10,000 | - |
| Office chairs | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 3,000 | - |
| Office rack wooden | No | No | Yes | Yes | No | No | 4 | 1,500 | 6,000 |
| Office table with three drawers | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 2,000 | - |
| Oxygen gas cylinders | No | Yes | Yes | Yes | Yes | Yes | 1 | 20,000 | 20,000 |
| Oxygen source (portable cylinder or central wall supply), with mask / nasal cannula, tubing, flow meter | No | Yes | Yes | Yes | Yes | Yes | 1 | | - |
| Oxygen tubing and masks | No | Yes | Yes | Yes | Yes | Yes | 1 | | - |
| Patella hammer | Yes | No | No | Yes | Yes | Yes | 2 | 400 | 800 |
| Patient's stool | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 1,000 | - |
| Pinard fetoscope | No | No | Yes | No | No | No | 5 | 100 | 500 |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Pressure cooker autoclaves | Yes | No | Yes | Yes | Yes | Yes | 1 | 4,000 | 4,000 |
| Refrigerator | No | Yes | Yes | Yes | No | No | 3 | 40,000 | 120,000 |
| Revolving stool | No | Yes | Yes | Yes | No | No | 3 | 600 | 1,800 |
| Room thermometer | No | No | No | No | No | No | 6 | 1,000 | 6,000 |
| Scalpel handle and blades | Yes | No | Yes | Yes | Yes | Yes | 1 | 100 | 100 |
| Scissors | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 100 | - |
| Scissors | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 100 | - |
| Straight scissors | No | Yes | Yes | Yes | Yes | Yes | 3 | | - |
| Screen four fold | No | No | No | Non-functional | No | No | 6 | 3,000 | 18,000 |
| Shadow less lamps | No | Yes | Yes | Yes | Yes | Yes | 1 | 38,000 | 38,000 |
| Sim's vaginal speculum – single and double ended (each of small, medium and large size) | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 300 | - |
| Sims speculum double blade | Yes | No | Yes | Yes | No | Yes | 2 | 300 | 600 |
| Sims speculum single blade | Yes | Yes | Yes | Yes | No | No | 2 | 300 | 600 |

| Equipment | BHU Baka-Bhatia | BHU Jindraka | BHU Kot-Nakka | BHU Mahdi-Abad | BHU Nadala-Khan | BHU Rasulpur Tarar | Number of Instruments Not available | Per Unit Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Standard surgical set (for minor procedures like episiotomy stitching) | Yes | Yes | Yes | Yes | No | Yes | 1 | 8,000 | 8,000 |
| Steel Almirah | No | Yes | Yes | Yes | No | Yes | 2 | 6,000 | 12,000 |
| Steriliser | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 100,000 | - |
| Stethoscope | Yes | Yes | Yes | Yes | Yes | Yes | 0 | 550 | - |
| Stretcher | No | No | Yes | Yes | No | Yes | 3 | 10,000 | 30,000 |
| Suction and evacuation set (SNE) | No | No | Yes | Yes | No | Yes | 3 | | - |
| Table for vaccine supplies | No | No | Yes | No | No | Yes | 4 | 5,000 | 20,000 |
| Table lamp | No | No | No | No | No | No | 6 | 500 | 3,000 |
| Timing device/watch with second hand | No | No | Yes | No | Yes | Yes | 3 | 1,000 | 3,000 |
| Vaccine carrier and ice pack | No | No | Yes | Non-functional | Yes | Yes | 3 | 1,600 | 4,800 |
| Weighing Scale, spring | No | No | Yes | No | Yes | Yes | 3 | 1,000 | 3,000 |
| Total | | | | | | | | | **2,952,416** |

# Annex C  Selection of BHUs in District Hafizabad

| Tehsil-1 (Hafizabad) | | | |
|---|---|---|---|
| | HL | LL | **T** |
| Far from HQ | BHU Mehdi Abad | BHU BakaBhattian | **2** |
| Near to HQ | BHU Nidhala Khan | 0 | **1** |
| R | | | **0** |
| Total | **2** | **1** | **3** |
| **Tehsil-2 (Pindibhattian)** | | | |
| | HL | LL | **T** |
| Far from HQ | BHU RasoolPurTarar | BHU Jandraka | **2** |
| Near to HQ | 0 | BHU KotNakka | **1** |
| R | | | **0** |
| Total | **1** | **2** | **3** |

* Limits for distance: <20 Near to HQ, >20 Far

**Key:**

HL: High patient load

LL: Low patient load

# Annex D Private Health Facilities in Hafizabad District

| Sr. No. | Name of Private Health Facility | Bed Strength |
|---|---|---|
| 1 | Sherazi Hospital | 20 |
| 2 | SajidaGhuman Hospital | 20 |
| 3 | Fatma Memorial Hospital | 20 |
| 4 | Akram Hospital | 20 |
| 5 | Ali Polly Clinic Hospital | 20 |
| 6 | Naeem Hospital | 20 |
| 7 | AbidBhatti Children Hospital | 20 |
| 8 | Bilal Hospital | 18 |
| 9 | Ammar Hospital | 20 |
| 10 | Bashir Hospital | 12 |
| 11 | Kamran Surgical and Gynaecological Hospital | 20 |
| 12 | Sultan Children Hospital | 13 |
| 13 | Latif Memorial Hospital | 7 |
| 14 | Amin Hospital | 10 |
| 15 | SadiqueDoast Hospital | 10 |
| 16 | Shabbir Hospital | 5 |
| 17 | Heart Care Centre | 6 |
| 18 | Farooqi Memorial Hospital | 5 |
| 19 | Maryam Habib Hospital Hafizabad | 8 |
| 20 | Sadique Mughal Laser Specialist Eye Hospital HFD | 4 |
| 21 | ZamZam Hospital Hafizabad | 10 |
| 22 | Nasir Medical Complex | 10 |
| 23 | Wahla Family Hospital | 30 |
| 24 | Islam Memorial Hospital | 8 |
| 25 | Yaqoob Hospital PindiBhattian | 10 |
| 26 | BakhatBhri Hospital | 7 |
| 27 | Al-Meraj Hospital | 10 |
| 28 | Al-Shifa Hospital | 20 |

# Annex E  PRSP – Procurement Procedure

**A:** **Medicine**

1– **Rate contract:**

Project Support Unit, PRSP, provides the rate contracts for all medicines. These rate contracts are similar to the rate contracts made by public sector health institutions and the firms are also the same. These rate contracts are sent to the district support units (DSUs) of the concerned districts.

2– **Medicine orders:**

The medicine orders are placed with the firms by the concerned DSUs. Orders are placed on the basis of consumption at health facilities. A future increase in demand and the available budget are also considered. However, the approval is received from PSU, Lahore.

3– **Medicine receipt:**

On receipt of medicine from the firm, the quantity and all specifications are verified in accordance with the rate contracts.

4– **Drug Testing Laboratory (DTL) sampling:**

Random samples of the medicines received are collected batch-wise from the received medicines. The quantity of samples is in accordance with the rules the DTL. The samples are subsequently sent to the DTL for testing.



5– **Medicine distribution:**

The medicines are distributed on receipt of DTL reports. The distribution plan is prepared in light of the requirement of health facilities. Vehicles are arranged by DSUs to provide medicines to health facilities on the doorstep.

6– **Payment:**

On receipt of a DTL report, the payment procedure of the medicines is initiated by respective DSUs. Requests for making payments to the firms is made to the PSU with all supporting documents. On receipt of approval from the PSU, payments are made to the firms through cross cheques.

**B: General items**

The procurement procedure for general items like equipment, hospital furniture etc. is the same as that for medicines except for the fact that samples of DTL are not collected and payment is made after physical verification of general items. The rest of the payment and distribution process and order placing practice remains the same.

# Annex F  Glossary of Terms

**Access (to health services):** the perceptions and experiences of people as to their ease in reaching health services or health facilities in terms of location, time, and ease of approach.[1]

**Basic Health Unit (BHU):** The BHU is located at a UC and serves a catchment population of up to 25,000. Services provided at BHUs are promotive, preventive, curative and referral. Outreach/ community-based services are part of the package provided by the BHU. BHUs provide all primary health care services along with integral services that include basic medical and surgical care, Childhood Disintegrated Disorder (CDD), Child Development Centre (CDC), ARI, malaria and TB control. Maternal Child Health (MCH) services are also part of the services package provided at BHUs. BHUs provide first-level referral to patients referred by LHWs. BHUs refer patients to higher level facilities as and when necessary.

BHUs also provide clinical, logistical and managerial support to LHWs. They also serve as a focal point where community and the public sector health functionaries can come together to resolve issues concerning health.[2]

| Staff/Category | BHU | BHU 24/7 |
|---|---|---|
| Medical Officer (MO)/WMO | 1 | 1 |
| Scholl Health and Nutrition Supervisor | 1 | 1 |
| Medical Assistant/Health Technician | 1 | 1 |
| LHV | 1 | 3 |
| Dispenser | 1 | 1 |
| Midwife | 2 | 2 |
| Sanitary Inspector | 1 | 1 |
| Naib Qasid | 1 | 1 |
| Chowkidar | 1 | 3 |
| Aya | 1 | 2 |
| Sanitary Worker (M/F) | 1 | 2 |

1 http://www.who.int/healthsystems/hss_glossary/en/

2 www.health.punjab.gov.Pk/?q=outreach-services

| | | |
|---|---|---|
| Driver | - | 2 |

**Burden of Disease (BOD):** BOD is "an aggregate measure of the years of healthy life lost by a population due to all episodes of disease and injury occurring in a given year". It is a direct measure of the prevailing health problems. BOD helps in determining the problem-based health needs of the population, which in turn determine nature of services to be provided at all levels of care.[3]

**Community Midwives (CMWs):** CMWs are specially trained SBAs who are equipped to conduct normal home delivery under safe and clean conditions.

The CMW model includes the following functions:

- Providing individualised care to the pregnant women throughout the maternity cycle and the newborn, in her own environment and helping her with self-care
- Monitoring the physical, social and emotional wellbeing of the pregnant woman as needed
- Taking appropriate action with the resources available
- Providing guidance and counselling to the community for healthy habits, and involving the family in preparation for childbirth and for unforeseen emergencies
- Identifying actual or anticipated conditions, requiring medical attention and making timely referrals.[4]

**Cold chain:** The cold chain refers to the storage and transport equipment that enables vaccines to be kept at a cold temperature from the point of manufacture to the point of use in an immunisation session or a clinic.[5]

**Coverage**: The extent of interaction between the service and the people for whom it is intended. Coverage is not limited to a particular aspect of service provision but ranges from resource allocation to the achievement of the desired objective.[6]



3 MSDS

4 Dynasoft.org/mnch/cmw.php, National MNCH Programme, Ministry of Health, Government of Pakistan

5 http://www.unicef.org/immunization/index_42071.html

6 http://www.who.int/healthsystems/hss_glossary/en/index2.html

**Essential Package Health Services (EPHS):** The EPHS or minimum health package refers to a set of the most cost-effective, affordable and acceptable interventions for addressing health conditions, diseases, and associated factors that are responsible for the greater part of the disease burden of a community. [7]

**Immunisation:** Immunisation is carried out under the EPI Programme which is a WHO and UNICEF assisted programme. The objective of the EPI Programme is to immunise children against vaccine-preventable childhood diseases and women against neonatal tetanus. Immunisation is done at the health facilities, outreach sites and through mobile teams, to provide immunisation services for children against measles, diphtheria, tetanus, polio, TB, Pertussis, and Hepatitis B. In addition, mothers of child bearing age receive five doses of TT or two doses during pregnancy.[8]

**Lady Health Workers (LHWs):** LHWs are paid women from local communities who are trained to support maternal and child health services, as well as provide communities with basic promotive, preventative, curative services related to: hygiene, family planning (including contraceptives), nutrition, care of common diseases and basic data collection. [9]

**Minimum Service Delivery Standards (MSDS):** MSDS are defined as "minimum level of services, which the patients and service users have a right to expect". MSDS include a minimum package of services, standards of care (level specific) and mandatory requirements/system specifications that must be complied with and which are vital to ensure the delivery of these services.[10]

**Minority groups:** A small group of people within a community, differing from the main population in race, religion, language or political persuasion. [11]

**Primary Health Care (PHC):** PHC is "Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-determination".[12]

**Essential components of primary health care**



There are eight essential components of the primary health care approach. These are given below:

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7 Lesotho Health Sector Reform.2003.Government of Lesotho, Ministry of Health and Social Welfare

8 www.health.Punjab.gov.Pk/?q=outreach-services

9 Country Case Study: Pakistan's Lady health Worker Programme: Scaling up Education and training for Health Workers, WHO

10 MSDS

11 www.ohchr.org/EN/issues/Minorities/pages/internaltional law

12 MSDS

- Education concerning prevailing health problems and the methods of preventing and controlling them
- Promotion of safe food supply and proper nutrition
- An adequate supply of safe water and basic sanitation
- Maternal and child health care, including family planning
- Immunisation against major infectious diseases
- Prevention and control of locally endemic diseases
- Appropriate treatment of common diseases and injuries
- Provision of essential drugs

**Public health:** Public health refers to all organised measures (whether public or private) to prevent disease, promote health and prolong life among the population as a whole. Public health is concerned with the total system and not only the eradication of a particular disease. The three main public health functions are:

- The assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities.
- The formulation of public policies designed to solve identified local and national health problems and priorities.
- To assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services.[13]

**Quality:** Quality improvement means taking a snapshot of the whole system, paying close attention to individual service users and the community at large, and emphasising delivering effective, efficient, accessible, acceptable, equitable and safe health care service to all.[14]



**Rural Health Centres (RHCs):** RHCs have 10 to 20 inpatient beds and each serves a catchment

13 http://www.who.int/trade/glossary/story076/en/

14 WHO ,2006

population of up to 100,000 people. RHCs provide promotive, preventive, curative, diagnostic and referral services along with inpatient services. RHCs also provide clinical, logistical and managerial support to the BHUs, LHWs, MCH Centres, and Dispensaries that fall within its geographical limits. RHCs also provide medico-legal, basic surgical, dental and ambulance services.[15]

**Standardised Medical Protocols (SMPs):** SMPs are defined as "Standard steps to be taken by a health facility during medical or surgical management of a patient".[16]

**Standard Operating Procedure (SOPs):** SOPs are defined as "Detailed description of steps required in performing a task".[17]



15 www.health.Punjab.gov.Pk/?q=PHC

16 MSDS

17 Ibid.