Khyber Pakhtunkhwa

Health Sector Strategy

2010 – 2017

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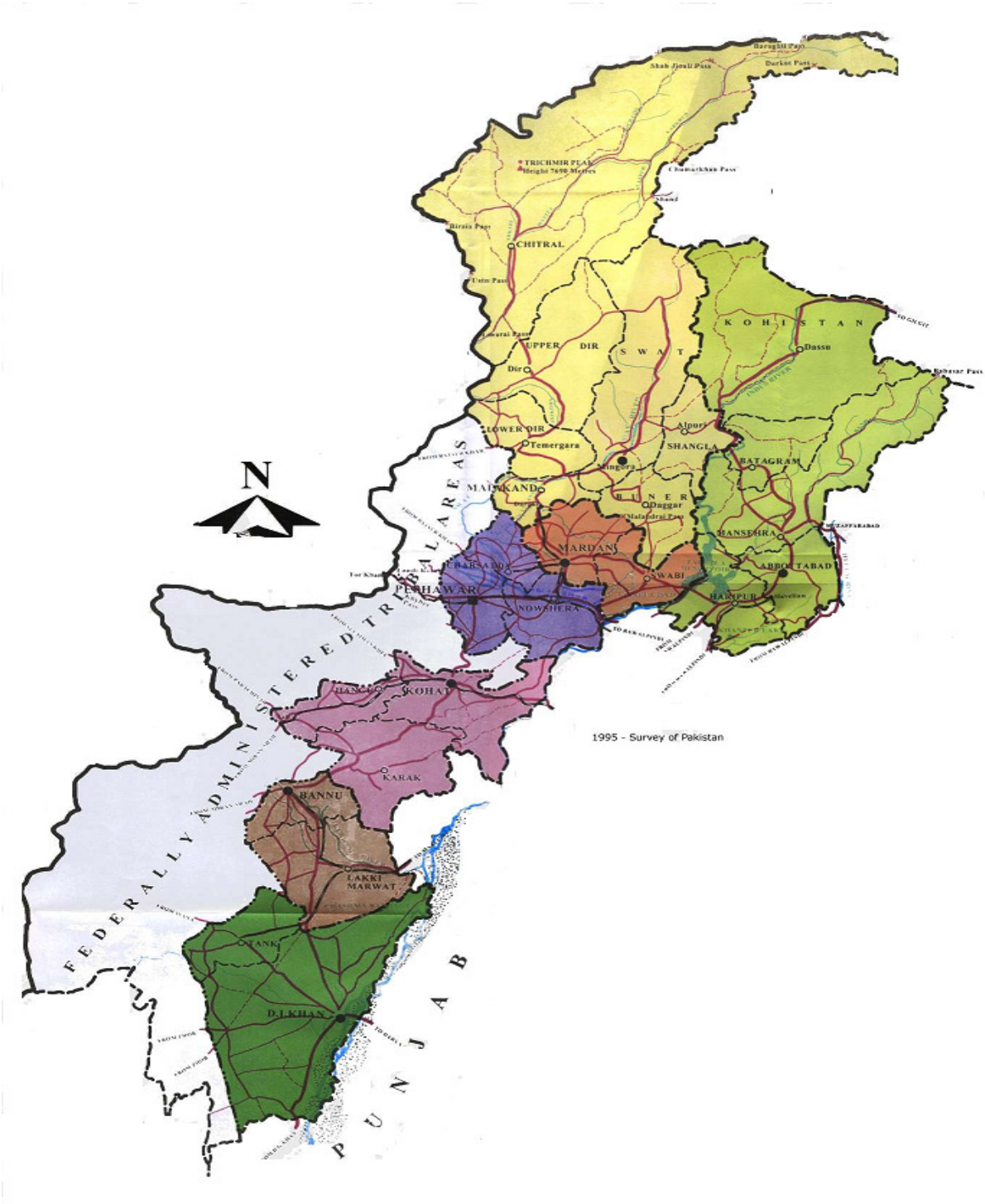
Abbreviations

ADP	Annual Development Programme
ARI	Acute Respiratory Infection
BHU	Basic Health Unit
BISP	Benazir Income Support Programme
BoD	Burden of Disease
CESSD	Communication for Effective Social Services Delivery
CDS	Comprehensive Development Strategy
CIET	Community Information Empowerment & Training
CMW	Community Midwife
CPSP	College of Physicians and Surgeons Pakistan
DAD	Donor Assistance Database
DALYs	Disability Adjusted Life Years
DHDCs	Divisional Health Development Centres
DHIS	District Health Information System
DHOs	District Health Officers
DHQ	District Headquarter hospitals
DoH	Health Department
EDO-H	Executive District Officer of Health
EmOC	Emergency Obstetric Care
EPI	Expanded Programme on Immunisation
FATA	Federally Administered Tribal Areas
FLCFs	First Level Care Facilities
FY	Financial Year
GIS	Geographical Information System
GDP	Gross Domestic Product
GoP	Government of Pakistan

HMIS	Health Management Information Systems
HSRU	Health Sector Reform Unit
IDPs	Internally Displaced Persons
IQHCS	Improving Quality of Health Care Services
IRNUM	Institute of Radiotherapy and Nuclear Medicine
KMU	Khyber Medical University
LHV	Lady Health Visitor
LHW	Lady Health Worker
LRH	Lady Reading Hospital
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCC	Medicine Coordination Cell
MCH	Mother and Child Health
MDGs	Millennium Development Goals
MICS	Multi-Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MNCH	Maternal Neo-natal and Child Health
MO	Medical Officer
MRC	Medical Rehabilitation Centre
MS	Medical Superintendent
MTBF	Medium Term Budgetary Framework
MTDF	Medium Term Development Framework
NACP	National AIDS Control Programme
NFC	National Finance Commission
NGO	Non Government Organisation
NHP	National Health Policy
NIPS	National Institute of Population Studies
NP FP&PHC	National Programme for Family Planning and Primary Health Care

NTP	National Tuberculosis Programme
NWFP	North Western Frontier Province (previous name for Khyber Pakhtunkhwa)
OOP	Out of pocket
OPD	Outpatient department
OSCE	Objective Structured Clinical Examination
PAC	Public Accounts Committee
PAEC	Pakistan Atomic Energy Commission
PBM	Pakistan Bait-ul-Maal
PCNA	Post Crisis Needs Assessment
PDHS	Pakistan Demographic and Health Survey
PHDC	Provincial Human Development Centres
PHSA	Provincial Health Services Academy
PIDE	Pakistan Institute of Development Economics
PIFRA	Project to Improve Financial Reporting and Auditing
PIPOS	Pakistan Institute of Prosthetic and Orthotic Sciences
PGMI	Post Graduate Medical Institute
PM&DC	Pakistan Medical and Dental Council
PNC	Pakistan Nursing Council
PPHI	People's Primary Healthcare Initiative
PRSP II	Poverty Reduction Strategy Paper II
PSLM	Pakistan Social and Living Standards Measurement
RHC	Rural Health Centre
Rs.	Rupees
SECP	Security and Exchange Commission of Pakistan
TB	Tuberculosis
TB DOTS	Tuberculosis Directly Observed Treatment Short Course
THQ	Tehsil Headquarter Hospital

UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WAPDA	Water and Power Development Authority
WB	World Bank
WHO	World Health Organisation
WMO	Women Medical Officer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KOHAT
KARAK
BANNU
LAKKI MARWAT
TANK
D.I.KHAN
FEDERALLY ADMINISTERED TRIBAL AREAS
PUNJAB
1995 - Survey of Pakistan

Introduction

Context

After seven years of conflict and insecurity inhibiting economic growth and social progress, the government of Khyber Pakhtunkhwa has developed a Comprehensive Development Strategy (CDS) with a vision of 'attaining a secure, just and prosperous society through socio-economic and human resource development, creation of equal opportunities, good governance and optimal utilisation of resources in a sustainable manner.[1] The CDS outlines goals, strategies and priority programmes for all sectors. To ensure coherent implementation, the priority programmes are budgeted within a newly introduced Medium Term Budgetary Framework (MTBF).

This strategy for the health sector[2] is based on the strategic directions and priorities of the CDS and has been developed by the government in consultation with stakeholders. The strategy incorporates priorities reflected in; the draft National Health Policy (2010), national policies designed to achieve the health related MDG targets of 2015, the Medium Term Development Framework (MTDF), Post Crisis Need Assessment (PCNA) and the Poverty Reduction Strategy Paper (PRSP-II).

The cost estimates of the CDS anticipate that health will receive, on average, 11% of available domestic financing.[3]

Rationale

Health systems should improve the health status of individuals, families and communities, defend the population against what threatens its health; protect people against the financial consequences of ill-health; provide equitable access to people-centred care and make it possible for people to participate in decisions

1 As expressed in the government of Khyber Pakhunkhwa 'Comprehensive Development Strategy 2010-2017', April 2010

2 Hereafter referred to as 'the strategy'

3 CDS

affecting their health and health system.[4] In Khyber Pakhtunkhwa, as in other parts of the country, the quality of health services is often poor, resulting in a waste of both government and household resources and leading to a low impact on health outcomes.

Goal and Priority Outcomes

The goal of the Health Department (DoH), to be accomplished in partnership with stakeholders is 'to improve the health status of the population in the province through ensuring access to a high quality, responsive healthcare delivery system which provides acceptable and affordable services in an equitable manner.[5] This includes achieving the targets set for the MDGs (2015). The priority areas for health from the CDS have been formulated into five health outcomes, budgeted in the MTBF. These are:

Outcome 1: Enhancing coverage and access to essential health services especially for the poor and vulnerable.

Outcome 2: A measurable reduction in morbidity and morbidity due to common diseases especially among vulnerable segments of the population.

Outcome 3: Improved human resource management.

Outcome 4: Improved governance and accountability.

Outcome 5: Improved regulation and quality assurance.

While objectives have been determined for each of the strategies, the following indicators will be tracked for monitoring the success (or otherwise) of the strategy overall.

Indicator
Infant Mortality Rate (IMR) per 1,000 live births – MDG 4
Proportion of fully immunised children – MDG 4
Maternal Mortality Ratio (MMR) per 100,000 live births – MDG 5

4 World Health Organisation

5 CDS

Contraceptive Prevalence Rate (CPR) – MDG 6
% of public healthcare institutions meeting 75% of quality standards
% population having access to the Minimum Health Service Package (MHSP) for primary and secondary healthcare services.
% population having access to preventive services/education.
Government Expenditure on health per capita.
% of staff of health department meeting the skills requirements of their position.
Policy, resource allocation and flow of funds demonstrably match the needs of target populations ascertained by the DHIS and other programme MISs.
No of analytical /monitoring and evaluation (M&E) reports generated by the Health Department.

Implementation: Key Considerations

The implementation of this strategy will contribute to provincial governance reforms, peace building and the long term reform agenda of the health sector through addressing health systems weaknesses and an enabling environment.

Implementation will improve the quality of health services through increasing resources (financial, human, material), strengthening monitoring, supervision and regulatory roles at facility, district and provincial levels; regulating quality and availability of private health sector services and developing stronger partnerships with the key stakeholders primarily the community. Resource allocation decisions will be made rationally, optimising the provision and utlisation of services and resources.

The strategy includes objectives and initiatives that contribute to more than one health outcome and include all levels of health service provision (primary, secondary and tertiary care). For example, high priority is given to dealing with emergency situations and disaster risk reduction and management. The DoH also gives high priority to the provision of a minimum basic healthcare package including promotive, preventive, curative and rehabilitative health services to the community. The aim is to use available resources efficiently and effectively to provide a high standard of care, as measured by international standards and to make healthcare affordable and accessible giving preference to the poor and marginalised. Priorities include: improving health facilities, ensuring staff

availability, providing functional equipment and continual and adequate supplies of drugs and medicines.[6]

Planned investments in housing, education, transport, water and sanitation and the provision of social protection will contribute to improved health outcomes.

The CDS provides the impetus for strong coordination and collaboration between the various sectors with the role of the Planning and Development department (P&D) being essential.

Cross-cutting strategies, for example the CDS, the Malakand Comprehensive Stabilisation and Socio-Economic Development Strategy, the Post Crisis Needs Assessment (PCNA) carried out for Khyber Pakhtunkhwa and Federally Administered Tribal Areas to promote peace building must be given consideration particularly in the development of action plans to ensure impact and efficient utilisation of resources.[7]

This Strategy addresses issues, and proposes strategies designed to improve performance across the health sector. The Strategy focuses on areas that the government can influence and on coordination with the private and non-government sector. It is recognised that acceptance of the strategy by the private, non-government sector will be voluntary.

The responsibilities of different levels of government (Federal, Provincial and District) are now undergoing a major review following the abolition of the Local Government Ordinance of 2001, the 7th National Finance Commission (NFC) award and the passage of the 18th Amendment to the Constitution. This has changed the mandate of several Federal Ministries including the Ministry of Health (MoH), and expanded the role and responsibilities of institutions and administrative structures at the provincial level effective from 1st of July, 2011. These changes will influence the terms of engagement of international partners with both the federal and provincial governments.

These developments give impetus to the plan to review the role and subsequently the organisational structure of the DoH. It is likely that the DoH will focus more in the future on stewardship, regulation of health service provision, managing potential innovations in financing mechanisms for health

6 Comprehensive Development Strategy

7 Comprehensive Development Strategy

care provision, and developing policies and initiatives that support synergies and reduce duplication in service provision between the private sector and public sector.

The Strategy Document

Part 1 of this draft strategy outlines the challenges for each health outcome.

Part 2 identifies key objectives and strategies to ensure improved health outcomes.

Part 3 gives the list of performance indicators for the strategy from 2010-2017

Part 4 gives an analysis of health expenditure including an analysis of the gap between expenditure and CDS projections.

Part 5 provides the funding implications of the activities identified in the strategy

Part 6 provides the Implementation and Monitoring mechanism for the Strategy

Annex 1 describes the strategic development process and lists the stakeholders who were consulted.

A separate volume provides additional information on the current situation for the health sector in Khyber Pakhtunkhwa province.

Part 1. Challenges for each Health Outcome Area

Outcome 1: Enhancing Coverage and Access to Minimum Health Services especially for the Poor and Vulnerable

Challenges[8]

High Levels of Poverty and Inequity adversely affects the Health Status of the Population

The population of Khyber Pakhtunkhwa has increased from 17.7 million in 1998 to 22.2 million in 2009. In addition it is estimated that there are more than 3 million Afghan refugees living in the province.

Over half the population is illiterate[9] and 31 percent of the population is living below the poverty line with the highest levels of poverty in Shangla, Upper Dir, Bunair, Kohistan and Battagram. There is also a wide variation between districts in resource allocation, disease prevalence, malnutrition, gender inequality and illiteracy. Only 47% of the households have tap water and 61% have safe sanitation[10] leading to a high prevalence of water borne diseases.

High Out of Pocket Expenditure for Health Care

Household out-of-pocket (OOP) spending remains the main source for financing healthcare. There is minimal social protection and a lack of access to health insurance. Khyber Pakhtunkhwa's share of out-of-pocket expenditure for health

8 The issues/challenges for each health outcome were either evident in the available research, the CDS and the draft of the National Health Policy (2010), or were expressed in the consultative workshops and/or the key informant interviews.

9 As quoted in the CDS, from NWFP Development Statistics, NWFP White Paper, 2008-2009 page VII

10 As quoted in the CDS, from NWFP Development Statistics, NWFP White Paper, 2008-2009 and sourced from the Demographic Health Survey

care (76.6%) is the highest of all provinces.[11] An analysis in 2002 showed that over 90% of expenditure on drugs and medicines in the Province was private and that nearly 60% of expenditure on health was paid by households.[12] With the high percentage of people below the poverty line, the cost of healthcare can result in families becoming completely impoverished.

Conflict and Natural Disasters[13]

Recently the DoH has faced multiple challenges due to the law and order situation in the province. The DoH has had to respond to the manmade or natural disasters; maintain routine services at the district level and provide services to internally displaced persons (IDPs).[14] At the peak of the insurgency in the past three years around 2.7 million civilians were displaced due to militancy. While most have returned to their homes, it is estimated that over 260,000 people (37,000 families) have been displaced (registered and verified) from Waziristan mainly to DI Khan and Tank districts. Kurram Agency has also been insecure and a large number of families have moved as IDPs to Kohat, Hangu and Peshawar districts.

In affected areas, nearly a third of health facilities including hospitals, Rural Health Centers (RHCs) and Basic Health Units (BHUs) are damaged with an estimated reconstruction cost of Rs. 942.4 million.[15] However, a detailed technical assessment is under way which will show the real damages and cost implications.

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11 National Health Accounts 2005-6

Lorenz. C., Khalid. M., Regional Health Accounts for Pakistan- provincial and district health expenditures and the degree of districts fiscal autonomy. 2009 accessed from http://www.pide.org.pk/psde/25/pdf/Day2/Christian%20Lorenz.pdf

12 OPM Health Accounts, 2002

13 Pakistan Humanitarian Response Plan 2010, United Nations from website browsed on 12th May 2010. http://ochaonline.un.org/humanitarianappeal/webpage.asp

14 Government of Khyber Pakhtunkhwa 'Comprehensive Development Strategy, 2010-2017' April 2010

15 Preliminary Damage & Needs Assessment; Immediate Restoration and Medium Term Reconstruction in Crisis Affected Areas Prepared by Asian Development Bank and World Bank for Government of Pakistan Islamabad, Pakistan November 2009 – page 9.

The region had not recovered from the effects of the 2005 earthquake and the insurgency, when it was hit by widespread floods in July and August 2010. These natural disasters led to widespread homelessness and destruction of infrastructure.[16]

Low level of Women and Children's Health Status

Women and children are particularly disadvantaged by socioeconomic and cultural barriers with estimates of only 30% of them having access to medical care.[17] The total fertility rate is high and the contraceptive prevalence rate (CPR) is not rising fast enough to achieve the MDG goals. There is high maternal and infant mortality and services are insufficient (see challenges in Health Outcome 2 below).

Insufficient Provision of High Quality Public Health Care Services

Public as well as private services focus on curative care, with little attention to promotive, preventive or rehabilitative care. In addition, there is little known about the community's priorities in relation to primary health care services.

. Chronic staff shortages and non-availability of essential medicines is common and leads to health facilities being underutilised due to shortages of staff and supplies. In the Community Information Empowerment and Training (CIET) survey (2004), only 9% of the patients who had used a government facility had received all of their prescribed medicines.[18]

The quality of service provided by public health care providers is variable. Typically consultations between patient and health worker are short[19], antibiotics

[16] Results of a rapid assessment carried out 11 districts of Khyber Pakhtunkhwa that nearly 257,184 households have lost their homes or have been temporarily displaced.

17 http://www.ayubmed.edu.pk/JAMC/PAST/20-4/Moazzam.pdf

18 http://www.ciet.org/en/documents/projects_library_docs/2006224175348.pdf

[19] .One study found that the contact time of doctors per patient is less than two minutes. The average number of drugs per prescription was nearly 3 with only 1.5 drugs being dispensed from the facility. Half of the prescriptions contained antibiotics and 17% of patients were prescribed with injectables.

are over-used, poly-pharmacy, there is poor communication between patient and dispensing staff and inadequate dispensing techniques.[20]

There is a lack of capacity both at the provincial and the district level to respond to emergencies, epidemics and disasters appropriately. There are only a small number of ambulances available, often without trained staff. Provision of emergency services is hampered by 44% of the provincial roads and 78% of district roads being in poor or bad condition. [21] Demand for emergency services has increased after the 2005 earthquake, bomb blasts resulting in mass casualties, and the increase in road traffic accidents. While services for rehabilitation, including the provision of orthotics and artificial limbs have improved, demand is far from being met.

A significant number of people, particularly in remote rural areas have difficulty accessing primary healthcare.[22] Where there is no local facility within the community, the average distance to a health facility is about 10 kilometres in rural areas, roughly three times the distance in urban areas.[23] Given the size of the rural population in Khyber Pakhtunkhwa, there should be over 380 RHCs and over 1280 BHUs. There are however only 86 RHCs and 784 BHUs, in the province.[24]

By 2008, there were over 13,000 Lady Health Workers (LHWs) in the province providing nearly 12 million people with access to their services. Each LHW is responsible for providing care to a catchment population of around 1,000 people in rural areas. However the National Programme for Family Planning and Primary Health Care (NP FP&PHC) does not yet cover the full targeted population.

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20 http://www.jpma.org.pk/PdfDownload/381.pdf

QOC survey findings.

21 Government of Khyber Pakhtunkhwa 'Comprehensive Development Strategy, 2010-2017;, April 2010

22 The PSLM survey in 2007/08 found that 43% of the people in rural areas who sought treatment for diarrhea and who did not visit a government facility first gave as the reason that either there was no government facility or it was too far away. A further 15% said that a doctor was never available and a further 13% that the staff were not courteous.

23 MICS 2008 for Khyber Pakhtunkhwa

24 DHIS, April 2010

Weak referral system

The failure of the referral system contributes to the underutilisation of primary healthcare facilities, resulting in high unit costs. This failure can be attributed to health worker attitudes in addition to social, economic and organisational factors which need to be understood. Weak organissational and functional linkages between the district health officers and the medical superintendants of District Headquarter (DHQ) hospitals, contributes to a lack of integration between primary and secondary level health services.

Outcome 2: A measurable reduction in Morbidity and Mortality due to Common Diseases especially among Vulnerable Segments of the Population.

Challenges

Improving Access for Health Care for Women and Children

The recent Pakistan Demographic and Health survey (PDHS) has established a Maternal Mortality Ratio (MMR) for the province of 275 maternal deaths per 100,000 live births. Most of these deaths are caused by postpartum hemorrhage, puerperal sepsis or due to eclampsia. Despite the adverse conditions in the province, child mortality rates are better than the national average. The neonatal mortality rate is 41 per 1000 live births, while the infant mortality rate is 63 and under-five mortality rate is 75. The attendance of skilled birth attendants (SBAs) at delivery has increased significantly from 28 % in the MICS 2001 to 41% in the MICS 2008.[25]

At present only 50% of women in the province receive any form of ante-natal care and only 25% are receiving any form of post-natal care from a SBA (MICS 2008). There is a lack of SBAs available in the community. The new community midwife scheme will require ongoing support from the DoH for the training, deployment and establishment of community midwives (CMWs) in their communities. In 2008 there were 737 CMWs students training under the Maternal and Neonatal, Child Health (MNCH) programme and 22 graduated CMWs had been deployed to their villages in the province.[26]

A survey showed that emergency obstetric care (EmOC) services are available at only 34% of hospitals. Although 75% of district headquarter hospitals (DHQs)

25 The recall period in the present survey is for the two years preceding the survey and in the previous survey it was one year.

26 Government of Pakistan submission to 'Convention on the Rights of the Child', 1 September 2009, to the Committee of the Rights of the Child, 52nd session, www2.ohchr.org/english/bodies/crc/.../CRC.C.PAK.Q.3-4.Add.1.doc

provide comprehensive EmOC services, none of the RHCs provide these services.[27] One limiting factor in expanding coverage is the availability of female doctors.

Fertility: The total fertility rate for the province is 5.6 children (MICS 2008). The CPR was measured at 38% in the MICS 2008 and is significantly higher than the 31% measured by the same survey seven years previously. The CPR however it is not rising fast enough to achieve the national MDG target of 55% and only 20% of women are using modern methods (sterilisation, pill, IUD, injection, condom).[28] The CPR is higher in urban areas, and varies significantly between districts. The unmet need for family planning has been estimated at 26%, down from 35% in the MICS, 2000/01.

Childhood Mortality: In Khyber Pakhtunkhwa early childhood mortality rates are high; though lower than the national average. Neonatal deaths are almost entirely due to birth asphyxia, sepsis or prematurity while deaths in the post-neonatal period are mostly due to diarrhea or pneumonia. The main causes of child deaths are diarrhoea and pneumonia together with injuries, measles and meningitis (PDHS 2006-07).

Malnutrition: In Pakistan, although the entire population is at risk of malnutrition, children under the age of five years and pregnant and lactating women are the most vulnerable. The results for the province, from the latest National Nutrition Survey (2001/02) show 37% of children are underweight, 43% of children suffer from stunting and 11% are wasted.

The MICS (2008) found a higher percentage of children from rural areas are exclusively breastfed (46%) than urban areas (35%) and a dose of vitamin A supplement had been given to 63% of children aged 6–59 months in the six months prior to the survey.

Reducing the Prevalence of Communicable Diseases

Communicable diseases are the most important health problems in Pakistan. Common causes of death and illness are; acute respiratory tract infections, diarrhoeal diseases, malaria, tuberculosis and vaccine preventable infections.

27 http://www.ayubmed.edu.pk/JAMC/PAST/20-4/Moazzam.pdf

28 MICS 2008 for KHYBER PAKHTUNKHWA

Epidemic prone diseases such as meningococcal meningitis, cholera, hepatitis and viral hemorrhagic fevers are also prominent health threats.[29]

Acute Respiratory Infections and Diarrhoea: Pneumonia remains a leading cause of child mortality accounting for a quarter of all post neonatal deaths[30] with most deaths caused by a failure to seek treatment at a health facility. Diarrhoea accounts for over 10% of all deaths among children in Pakistan. In Khyber Pakhtunkhwa only 40% of children with diarrhoea are taken to a health provider, far fewer than in other provinces of Pakistan. The MICS survey (2008) found that 43% of children in Khyber Pakhtunkhwa under-five had recently had diarrhoea; only 36% of these had received oral rehydration therapy or increased fluids with continued feeding.

Polio: Pakistan is one of the four remaining countries, where polio is endemic; 29 of the 89 confirmed cases in 2009 were from Khyber Pakhtunkhwa.[31] By May 2010, seventeen cases had been reported of which five were from Khyber Pakhtunkhwa, two from Peshawar and one each from Swat, Charsadda and Lakki Marwat.[32]

Tuberculosis (TB): TB accounts for 5.1% of the total national burden of disease with approximately 1.5 million people in Pakistan living with the disease. The case detection rate in the province has improved since the launching of National TB Control Programme, and the initiation of Directly Observed Treatment Short Course (DOTS). Country wide, the detection and treatment rate has improved from under 30% in 2002 to above 80% in 2007.

HIV/AIDS: Pakistan is considered to have a low-level HIV/AIDS epidemic in general population with a prevalence rate of less than 0.1%. However,

29 Economic survey 2006-07

30 National Institute of Population Studies and Macro International Inc., "Pakistan Demographic and Health Survey 2006 – 2007," National Institute of Population Studies, Islamabad: 2008

31 Global Polio Eradication Initiative website http://www.polioeradication.org/casecount.asp

32 Senior Surveillance Officer, WHO Polio Eradication Initiative 12th May 2010.

surveillance results have found the rate to be increasing among high-risk groups.[33] Its prevention through public health education is important.

Malaria: Around half a million people each year are affected by malaria in Pakistan with 20% of these from Khyber Pakhtunkhwa. Only 3% households in Khyber Pakhtunkhwa were found to have at least one mosquito net in their possession and a meager 0.1% actually used the mosquito net (PDHS 2006-7). The Annual Parasitic Incidence (API) however has reduced from 2.18 in 2005 to 1.5 in 2008.[34]

Hepatitis: The provincial government has recognised hepatitis as a priority health problem . A number of programmes have been developed to address hepatitis including the Benazir Health Support Programme which is being launched to provide free treatment to poor patients with hepatitis C and a National Programme for the Prevention and Control of hepatitis which was established in 2005. In Khyber Pakhtunkhwa all five distinct types of hepatitis viruses, A-E are prevalent. The current estimated prevalence of hepatitis B is 0.7852 Million and for hepatitis C is 1.1778 million. Unsafe injection and unhygienic invasive practices (dentists, barbers, beauty parlors, ear and nose piercing etc.) appear to be major causes of the disease.[35]

Increasing Morbidity and Mortality due to Non-Communicable Diseases (NCDs)

Pakistan is facing an increasing burden of NCDs. Life expectancy is increasing and there is a high prevalence of risk factors. In addition to the NCDs listed below, estimates indicate that there are one million severely mentally ill and over 10 million individuals with neurotic mental illnesses within the country. Furthermore, 1.4 million road traffic accidents (RTAs) were reported in Pakistan in 1999, 7000 of which resulted in fatalities. In 2007 a study found that there were 2.7 RTA casualties per1000 population[36]

33Government of Pakistan, Ministry of Health, National AIDS Control Program, "HIV Second Generation Surveillance in Pakistan: National Report Round I & II 2006-07," Islamabad: 2005 & 2006-07

34 Annual Parasitic Incidence (A.P.I.) = Total no. of positive slides for parasite in a year x 1000 / Total population.

35 Download from www.healthnwfp.gov.pk/downloads/hepatitis.doc on 23 June 2010

[36] **ROAD SAFETY IN PAKISTAN**June 21st, 2007
*by:***Aizaz Ahmed, PE, PTOE**

There is a lack of public awareness, health seeking behaviour and availability of treatments for conditions such as cancer, mental illness, ophthalmologic disease, obesity and related illnesses, hypertension and cardiac conditions. There is also low level of service provision, equipment, and availability of staff to address NCDs including a lack of laboratory services at the district level for routine investigations. There is also no radiation machine for the treatment of cancer in the pubilc facilities of the province.

Diabetes: The number of people with diabetes is increasing due to population growth, aging, urbanisation, and the increasing prevalence of obesity and physical inactivity. Diabetes prevalence in Pakistan is among the top ten in the world, with around 5.2 million people living with the disease in 2000 and with numbers likely to rise to 13.9 million people in 2030.[37]

Coronary Artery Disease: In Pakistan it is estimate that one in four adults over the age of 40 years (26.9%) suffers from coronary artery disease. Causal factors include the high prevalence of risk factors, including smoking (41% of men and 7% of women); high blood pressure (24% of adults), raised cholesterol (34% of people over 40 years of age), and being overweight (28% of urban and 23% of rural adults)[38]

Cancer: There are no reliable statistics available for Pakistan, but according to WHO estimates, based on 180 cases per 100,000 population, there would be over 200,000 cases expected annually. Based on this estimate, only 25-30% of these cancer cases are seen by oncologists[39]. . Treatment and diagnosis facilities are very limited.

Smoking: There are about 22 million smokers in Pakistan with 55% of households having at least one individual who smokes tobacco. Nationally, about 100,000 people die annually from diseases caused by the use of tobacco.[40]

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37 Diabetes Care May 2004 vol. 27 no. 5 1047-1053

38 Nishtar S. Population-based Surveillance of Non-communicable Diseases: 1st round, 2005; Heartfile, Ministry of Health and WHO 2006

39 Pakistan Society of Clinical Oncology (PSCO)

40 Nishtar S. Population-based Surveillance of Non-communicable Diseases: 1st round, 2005; Heartfile, Ministry of Health and WHO 2006

Child Disability: The MICS (2008) gave an estimate of 6% of children between the ages of two andnine having at least one disability ('unable to' or with 'a lot' of difficulty to see, hear, move, speak and learn). Around 26% of children who are two years old are reported as not being able to name at least one object.

Blindness: In Pakistan, 0.9% of the population is blind. In 2002-2004, the number of blind people in the province was 0.18 million[41]And the biggest cause of blindness was cataracts. Pakistan is a signatory to the global initiative "Vision 2020- Right to Sight' and has a National Programme for Control of Blindness (2005-2010).

Substance Abuse: Recent figures estimate that there are about 6 million drug addicts in the country.[42] The prevalence of opiate use has been estimated at 0.7% of the population, for both Pakistan as a whole, and for Khyber Pakhtunkhwa. The number of injecting drug usersin the province in 2006 was estimated at 8,000.[43] There is a link between injecting drug user and the spread of HIV/AIDS and hepatitis C. A further challenge is the inadequate coordination between sectors and amongst units of DoH

Health Sector Coordination: There is weak coordination between different sectors aimed at improving the health status of the population of the province. The public and private sectors need to improve coordination as do various government departments to effect improvements in public health.

Within the DoH there is a need for better coordination between health facilities, District Health Offices, hospital senior management, Director General of Health Services (DGHS) and the Health Secretariat. Collaboration needs to be improved at the policy development level to ensure efficiency and effectiveness in service delivery.[44]

Need for Greater Accountability at the District Level for Services provided to reduce Communicable Diseases

41 National Survey on Blindness and Low Vision, Ministry of Health, 2002-2004

42 Ministry of Narcotics Control (2009) Yearbook 2008-2009. Islamabad: Government of Pakistan

43 The National Assessment on Problem Drug Use, 2006

44 Management Review, External Evaluation of the National Programme for Family Planning and Primary Health Care, Oxford Policy Management, 2009

Programmes addressing communicable diseases are coordinated at the district level by the Executive District Officer – Health (EDO-H) who needs to be held accountable for the efficiency and effectiveness of service delivery.

No Linkage between Resource Allocation and Disease Burden

A disproportionate proportion of the budget is allocated to tertiary care rather than primary and secondary care despite this being where the greatest impact on reducing the burden of disease could be made. An analysis in 2005-06 in Pakistan of total public sector budgetary expenditure showed that 70% was spent on general hospitals and clinics and only 18%, on health facilities and preventative measures. [45]

There is a large variation in per capita expenditure on health between districts. The range is from Chitral with expenditure of Rs. 334 per person to Peshawar at Rs. 77.[46]

Lack of Synergies with Private Sector

Around 7% of the population in 2005-6 reported being sick or injured,[47] 94% of them consulting a health provider. The majority of those who consulted a health care provider looked to the private sector.

The lack of records from private sector providers results in the distortion of disease surveillance figures in areas such as TB.

Insufficient community involvement

A national survey conducted in 2008-09 found that 38% of citizens felt their opinions were not considered by any level of government. Districts and tehsils have not established formal processes and procedures for consulting the

45 Akram. M., PIDE working papers 2007: 32 'Health Care Services and Government Spending in Pakistan' 2007 Pakistan

46 From Analysis of district expenditures carried out for the Strategy Development.

47 PSLM, 2005/06

general public.[48] Health providers find that in some communities, a lack of engagement by the community leaders can lead to problems in promoting positive health practices such as vaccinations.

Low Coverage of Vulnerable Populations

Coverage by public health programmes which address TB, malaria, hepatitis, and other communicable diseases need to be improved to meet MDG goals. The Roll Back Malaria (RBM) strategy has not been fully implemented in high risk areas and there is a lack of public awareness and health seeking behaviour among vulnerable groups.. There is increasing prevalence of hepatitis B and C in the population. In addition there is a lack of expertise in multi drug resistance TB (MDR-TB) and TB/ HIV co-infection (TB/HIV) requiring the broadening of the National TB Programme (NTP) activities beyond basic DOTS.

The coverage of health services, including access to insecure areas and to IDPs, remains a major challenge in reducing the burden of disease to vulnerable segments of the population. The poor functioning of primary health care units contributes to the low coverage of services. There is also a lack of specific expertise in peripheral areas for communicable disease prevention and control.

In order to address this, coverage of LHWs and CMWs needs to be increased.

Risk of Blood Borne Diseases

There is the increased risk of blood-borne diseases from unsafe blood transfusion practices in public and private health facilities.

48 Cartier, W. J., Golda, A., Nayyar-Stone, R., (2009). The Possible Reversal of Decentralisation in Pakistan: State Policy and Citizen Feedback. Retrieved May 13, 2010, from http://www.google.co.nz/search?source=ig&hl=en&rlz=&q=Nayyar+Stone+Cartier&aq=f&aqi=g8g-m2&aql=&oq=&gs_rfai

Outcome 3: Improved Human Resource Management

Challenges

Weaknesses in Human Resource Management

The DoH is the second largest department in the province with more than 30,000 employees, yet the personnel section of the DoH does not have the capacity to manage core human resource management functions.

While the health sector is very dependent on the caliber of its staff, there is insufficient planning and budgeting to fill vacancies when they arise. Decision makers lack data on: the number of specialist doctors, nurses and paramedics at the district level; the number of doctors, nurses and paramedics produced each year; how many are required and where they should be employed. There are no forecasts of the skills required to provide high quality services and to staff new facilities and hospitals. Little attention is given to selection, managing for performance and providing ongoing training & skill development. For example the human resource management information system has more than 30,000 staff and is a manual system. The databases are out-of-date and unable to be used for decision making.

Shortage of Staff Prepared to Work in the Peripheral Health Facilities

Although there are adequate numbers of post graduate qualified specialists for government facilities, there is an overall shortage of specialists especially at the district level due to the unwillingness of staff to serve in remote areas, resulting in vacant positions.[49]

Shortage of Nurses and Paramedics available for Public Service Delivery

Shortages continue to exist for nurses and paramedics in the public sector.

The paramedic institutes provide a two year course, producing on average, 200 technicians each year. These cover a range of specialties and the technicians

49 See Annex 2

are primarily absorbed in the tertiary care hospitals with the exception of the health technologists who are typically employed in BHUs and RHCs.

The medical faculty has recently started a training program of "technologists" aimed towards improving the education level of technicians and offering them a university based undergraduate B.Sc. degree. The degree which is currently offered in nine specialties will prepare the students for independent practice. .

While there are an estimated 1,250 nurses being trained each year there are still vacant nursing positions in the public service and a shortage of applicants for post-graduate nursing training.

Poor Quality Postgraduate Training for Doctors

Existing tertiary care teaching hospitals cannot cope with the ever increasing demands of postgraduate medical training (not enough training slots, beds or supervisors). Currently there is a lack of oversight on postgraduate training and different examination standards exist in different medical colleges affiliated to different universities. The recently amended Khyber Medical University (KMU) act attempts to address this by requiring all medical colleges in the province be affiliated with KMU.

Issues in Ongoing Skills Training and Professional Development

The Provincial Health Services Academy (PHSA) manages six Divisional Health Development Centres (DHDCs), a nursing college, 10 schools of nursing, six paramedic institutes and four public health schools.

The in-service training mechanism introduced in the 1990's and provided through the PHSA and DHDCs is only partially functional. There are no formal policies, national standards or guidelines to ensure that health care providers have up-to-date skills and knowledge. There are also no programmes for continuing medical education and systems of re-accreditation for doctors, nurses and paramedics.

There is also a lack of professional training and development opportunities for medical and paramedic staff in peripheral areas and a lack of training for the provision of medical care at the primary health care level.

Curriculum for Health Professionals not Competency Based

All the medical, paramedic and nursing colleges are using outdated curriculum. They have not implemented the revised curriculum andsyllabus developed by

the Pakistan Medical and Dental Council (PM&DC). There are also insufficient and in some cases poorly qualified staff and/or staff who are unskilled in modern teaching methods. No structured continuing professional development facilities or on the job training for faculty are provided for students.

There are a large number of medical colleges in the private sector. The quality of education at these medical institutions is fraught with issues and generally their educational standards are considered unsatisfactory. The KMU has been mandated to monitor the examinations of private sector colleges.

Outcome 4: Improved Governance and Accountability

Challenges

Inadequate Emphasis on Stewardship Functions

Within the DoH there is a lack of clarity on the demarcation of roles and responsibilities between the provincial and the district governments. There are also ambiguities surrounding the roles and responsibilities between the Health Secretariat, the DGHS and the District Health Offices, between the DoH and the autonomous institutions and between the EDO-H and the Medical Superintendant of the Headquarter hospitals.

Lack of Results Based Decision Making

There is a dearth of management information available. Where information is collected it is not being used sufficiently to inform decision making, leading to a reduced incentive to improve data quality. There has been insufficient analysis of performance by the DoH in nationally and internationally identified priority areas andthe District Health Information System (DHIS) has yet to be implemented. Low accountability for performance and duty of care (within the DoH, to the government and to the people) is also a challenge.

Historically there has been little reporting on the performance of service provision by the DoH. Where there has been evidence of poor performance, this has not always been addressed and problems remain unresolved. Some areas where this has been evident include the. poor functioning of first level care facilities; little implementation of hospital autonomy; lack of effective information systems and the filling of vacant positions.

Lack of Clear Strategy on Public Financing and Alternate Service Delivery Models (Including Public-Private Partnership and Hospital Management)

Public-Private partnerships need to contribute to the strengthening of social safety nets in disadvantaged settings and should be set within the context of ‘social responsibility’. The delegation of service delivery, in particular essential

health services, is currently being evaluated. The contracted management of health facilities has, in the initial period, faced challenges. Problems have partly arisen due to the lack of incentives and monitoring mechanisms to ensure the delivery of preventive and promotive care[50]..

Another area of public/private partnership has been the government secondary care hospitals which are being managed by the private sector with the agreement that they will upgrade the hospital to provide tertiary care services and post-graduate training. This agreement however is not being monitored.

Poor Health Management

Patronage is still perceived as driving promotions and transfers.[51] Recruitment processes tend to be non-transparent and the performance management system is not being used for performance management. Performance management is annual, confidential and used for promotion purposes, in addition, the results are not shared with staff or used for setting targets or improving skills. The need for experienced and competent health managers with leadership qualities has led to the establishment of a Health Management Cadre. However, while the seniority lists of the officials comprising the management cadre has been notified by the DGHS there are still disputes over the selection criteria, quality of public health qualification and litigation over the seniority list. There is also limited supervision of the health facilities by either District or Provincial supervisors.

Weak Capacity to deliver on New Roles or Functions

The DoH has historically shown little capacity to deliver on new roles or functions. This will be an issue with any additional responsibilities under the 18th Amendment.

Inadequate Financial Accountability and Internal Controls

There is a lack of accountability for the efficient and appropriate use of funds for the provision of services and no internal audit function within the DoH. Access to

50 The Contracting Processes of the Health Department NWFP 2007-08

51 An Overview of the Health Sector: The Way Forward, Islamabad, Pakistan, Ministry of Health 2001

and use of additional funding for health care from the 7th NFC award, development partners, and any budget allocation arising from transfers of national programmes should be on condition of increased financial accountability.

Outcome 5: Improved Regulation and Quality Assurance

Challenges

Lack of Implementation of Quality Standards

Regulation of the health sector, both private and public is underway with the establishment in 2006 of the Health Regulatory Authority (HRA). The HRA has to-date registered around 1100 private practitioners. However, while health care standards have been developed, they are yet to be implemented. The Improving Quality of Health Care Services (IQHCS) initiative however has been launched to improve the quality of care in the public sector.

Failure to Provide a Regulated Environment

The reforms of the public health sector implemented under the National Health Policy (NHP) of 2001 focused on publicly provided health services, essentially ignoring private sector provision. Whilst private facilities are being registered, it is not based on evidence of their ability to meet quality standards.[52]

The secondary care hospitals managed under contract by the private sector are not being monitored to ensure that they are providing tertiary care and post-graduate training opportunities as contracted.

There is also no council for the registration, regulation and monitoring of paramedics.

There are many different categories of non-allopathic service providers who deal with patients in a wide variety of settings and these providers are unregulated. There are more than 50,000 Hakims/Tabibs and 450 Vaids registered with the National Council for Tibb as Medical Practitioners (Tabibs/Vaids). Registration is limited to those providers who have certificates from the National Council of Tib and the National Council of Homeopathy.

52 Final Report Quality of Health Care Survey, North West Frontier Province, Pakistan, 2007

Inadequate Drug Control

Drug procurement is a major element of health expenditure (mainly out-of-pocket). The Drug Control Administration inspects facilities involved in production, distribution, sale and dispensing of medicines to ensure adherence to relevant regulations regarding drug price controls. The Drug Control Administration however does not have sufficient monitoring capacity.[53] In addition, drugs are not being registered by their generic names as required in by the Drugs Act 1976; quality control laboratories do not meet WHO standards; there is no legislation for ayurvedic, herbal products (not defined as drugs) and there is no standardisation for the manufacturing and sales of products, provided by alternative health care providers. Drug Rules for Khyber Pakhtunkhwa were last developed in 1982 and except for minor amendments have not been revised.

Food safety is not ensured and the incidence of food borne diseases is increasing unchecked. Unhygienic conditions and attitudinal issues further aggravate these problems. In addition, drinking water is not fit for drinking and water borne diseases are causing morbidity and mortality.

As a paradox, legislation does exist to address food safety such as the Food Act although this is yet to be implemented due to the cross-departmental responsibilities involved.. The lack of collaboration among the relevant departments (Health, Food, Agriculture, Public Health Engineering Department and Local Government) has resulted in implementation lacunae. The area of Water and Sanitation is also neglected by the health sector. No elaborate policies and strategies prevail to address and implement the standards for drinking water.

53 The Network Consumer Protection 'Prices, Availability and Affordability of Medicines in Pakistan' August 2006

Part 2. Key Objectives and Strategies for each Health Outcome

Outcome 1: Enhancing Coverage and Access to Essential Health Services, especially for The Poor and Vulnerable.

Key Objectives by 2017

1. At least 70% of the population will have access to the Minimum Health Service Package (MHSP) for primary and secondary healthcare services.
2. Increase the contraceptive prevalence rate (CPR) to 55%.
3. Each Division of Khyber Pakhtunkhwa will have a functional category A hospital (tertiary care hospital).
4. 60% of the population will have access to Accident and Emergency services, meeting optimum standards, within forty five minutes of their residence.
5. 40% of the population living below the poverty line will have a form of social protection against catastrophic health expenditures.
6. 40 % of people with non-communicable diseases will receive quality care and have access to preventive education.

	Strategies	Actions
1.	Implement the MHSP at Primary Health Care Level	a) Include services in the MHSP to be provided by all primary health care units and outreach services e.g. BHUs, RHCs, LHWs, CMWs, Expanded Programme on Immunisation (EPI) technicians. In addition to ongoing services at the primary health care level, emphasis will be given to the following: • Revitalising the delivery of family planning services in public sector health facilities with a mechanism for forecasting contraceptive requirements and ensuring the uninterrupted supply of contraceptives to the facility, LHWs and CMWs, • Mental health • Health education • Dental care • Non-communicable diseases • Management of notifiable diseases. b) Finalisation and costing of MHSP at Primary level. c) Re-designate first level care facilities (e.g. Civil Dispensary (CD) and mother and child health(MCH) centre to BHUs) in the light of MHSP. d) Conduct an assessment and identify gaps in service provision against the MHSP at primary level. e) Develop a comprehensive proposal for filling in the gaps. f) Upgrade health facilities on the basis of need and according to criteria established by the DoH. This may include a new design for health care facilities depending on services agreed in the MHSP and quality standards. g) Develop a communication strategy to ensure the community is aware of the services to be provided.

2. Increase consideration for Equity in decisions on Resource Allocation	a) Allocate resources for the primary level according to health status, demography and poverty level of a district. For the secondary level, resources to be allocated according to performance indicators which will include but not be limited to outpatient services , bed occupancy rate and average length of stay, cost effectiveness of a programme/ policy, and poverty levels. b) Resource allocation and its criteria should be reviewed every two years. c) Strengthen the implementation of Output Based Budgeting in the DoH. d) Improve estimates on the incidence and prevalence of diseases with analysis based on surveillance systems, surveys, the DHIS and on poverty levels as measured by the relevant institutions/departments such as the Federal Bureau of Statistics (FBS) and by the Benazir Income Support Programme (BISP).
3. Improve Emergency Response	a) Strengthen accident and emergency (A&E) response centres with defined standard operating procedures in all DHQ hospitals. b) Ensure the availability of skilled staff and equipment for A&E. c) Establish trauma care and burn units at divisional /teaching level hospitals.
Development and Implementation of a MHSP at Secondary Level.	a) Develop a MHSP at secondary level proper costing. b) Include in the secondary care service package the necessary staffing levels/skills mix, equipment and supplies. c) Re-designate secondary level care facilities in the light of MHSP. d) Upgrade health facilities on the basis of need and according to criteria established by the DoH. This may include a new design for health care facilities depending on services agreed in the MHSP and quality standards e) Outline pathways for referral and handling of emergencies using information communication technology (ICT) with an objective of improved linkages with primary and tertiary level facilities. f) Include in the package: dental care; psychiatric services; treatment and management of NCDs and rehabilitative services.

	g) Conduct an assessment against the package and develop a proposal for filling the gaps. h) Pilot tele-health to support the provision of specialised care to the poor in remote areas of the province i) Define the management structure and expertise required to ensure high quality provision of these services at District and Tehsil Headquarter hospitals and recruit and train accordingly. j) Explore other options to improve services at the secondary level such as district hospital autonomy and contracting out of hospitals .
4. Define a Mechanism to protect the Poor and Underprivileged Population by reducing Out of Pocket Expenditure	a) Analyse existing services in terms of safety nets or free services to the poor community and develop a feasible proposal The proposal will asses tje different options of risk pooling and social protection, implementing the most suitable option. Options may include a micro health insurance scheme for coverage of indoor services for the poor or launching a voucher scheme to improve access to a defined package of services for the poor. , b) The ultimate objective of any intervention will be to move towards universal coverage and a reduction in OOP expenditure c) The DoH will collaborate with the BISP, Zakat, Baitul Maal and other Poverty Reduction programmes in the province to ensure efficient and effective use of funds in the health sector. d) Pilot tele-health to support the provision of specialised care to the poor in remote areas of the province .
5. Construction and Up gradation of Hospital/Facilities on Need Basis	a) Mapping of facilities and hospitals in the public and private sectors. b) Identification of appropriate sites for the construction of new facilities and the upgrade of existing facilities against an approved feasibility criteria. c) Focus on the provision of Specialised Health Care to address emerging and prevailing health problems. d) The construction of specialised units, hospitals and institutions will be considered on priority especially in those areas where even private sector is not providing services. e) Explore the opportunities of purchasing services from the private

		sector under a public private partnership arrangement.
6.	Improve Rehabilitation Services	a) Strengthen rehabilitation services through the provision of support to Benazir Hospital in Peshawar, Ayub Medical College, PIPOS and the Paraplegic Centre. b) Provide selected rehabilitative services including ensuring appropriate staffing from tertiary care hospitals up to the Tehsil Headquarter Hospital (THQ). c) Establish and develop, properly equipped rehabilitation centres at Type A divisional hospitals with relevant sentinel sites at district level).

Outcome 2: A measurable reduction in Morbidity and Mortality due to Common Diseases especially among Vulnerable Segments of the Population
Key Objectives by 2017
1. Reduce the maternal mortality rate to 140 per 100,000 live births.??? 2. Reduce the infant mortality rate to 40 per 1000 live births with an emphasis on reducing newborn deaths.???? 3. 10% reduction in the prevalence of underweight children under 5 through the use of nutrition intervention programmes. 4. Increase exclusive breastfeeding to 65%. 5. 90% of children under five to receive vaccinations according to EPI schedule. 6. Reach zero transmission of the polio virus by 2011. 7. 90% of children under five to receive appropriately timed Vitamin A supplementation. 8. Reduce the prevalence rate of hepatitis B and C in the general population to less than 5%. 9. Increase the detection of TB cases to over 70% of sputum positive cases. 10. 85% of registered TB cases cured using DOTS. 11. 25% reduction in the number of malaria cases by implementing the RBM Strategy. 12. Maintain the prevalence rate of HIV/AIDS to less than 1% among vulnerable groups.

Strategies	**Actions**
1. Integrate National Health Programmes into a Package of Services provided at Primary, Secondary and Tertiary Levels.	a) Review the PC 1s of different projects. b) Develop a proposal for an integrated programme whilst keeping the prioritised areas and programmes/projects in consideration c) Implement one or two programmes focussing on the priority areas of MDGs in the shorter term until the full implementation of the MHSDP. d) In the longer term, run these services as an integral part of the MHSP for Primary Health Care (in Outcome 1).

2. Develop Institutional mechanisms to ensure Inter-sectoral/ Departmental Collaboration to improve the Health Status of the Population	a) Strengthen institutional mechanisms to increase collaboration between sectors through the following steps: • Form an interdepartmental coordination committee on health. This committee will comprise the relevant departments, headed by the Minister of Health. • Review by the Annual Development Programmes (ADPs) Planning and Development (P&D) department of relevant departments, to promote synergies in areas affecting health. b) Strengthen cooperation and collaboration within the DoH through: • Coordinate meetings at secretariat level with autonomous institutions including the Health Sector Reform Unit (HSRU), planning cell, monitoring and evaluation (M&E) Cell, DGHS and all other allied institutes on regular basis. • Draft Budget and ADP may formally be shared with the committee with representation from the relevant institution. Their inputs may be incorporated before submitting to the Finance and P&D Department. • Quarterly meetings of different programmes and EDO-Hs under the chairmanship of the DGHS.
3. Develop and Implement a Strategy for Nutrition intervention.	a) Finalise and approve a Nutrition Programme including appropriate interventions to improve nutrition, especially of women and children. b) Promote exclusive breastfeeding in the province through raising public awareness using media, and promotion of breastfeeding in all hospitals, health facilities and outreach services. c) Develop the capacity of relevant staff to identify and manage malnourished children at early stage. d) Ensure the availability of relevant supplies as part of MHSP at Primary and secondary levels.

4. Develop and Implement a Strategy for reducing Neonatal Deaths.	a) Include improvement of newborn health as an important element of the MHSP at primary and secondary level. b) Develop the capacity of relevant staff to identify and manage neonatal problems appropriately. c) Implement necessary training e.g. Integrated Management of Neonatal and Childhood Illnesses (IMNCI) training at all levels of the public health care system and facilitate the training of private providers. d) Raise public awareness through the media and LHWs to recognise danger signs in newborns and the importance of seeking early healthcare. e) Establish Neonatal Intensive Care Units (NICUs) with appropriately trained staff at least at all division level hospitals.
5. Implement the Strategy for reducing Hepatitis B&C	a) Establish screening and diagnostic centres at all teaching and DHQ hospitals. b) Improve healthcare provider and community knowledge on the mode of spread of hepatitis B&C and on preventive measures. c) Establish safe blood transfusion practices in all public and private sector hospitals and blood banks. d) Establish a hospital waste management system in all public sector hospitals. e) Strengthen routine immunisation services for the hepatitis B vaccine for infants through the provision of immunisation in children under one using the Expanded Program of Immunisation infrastructure. f) Promote hepatitis B vaccinations amongst adults. g) Facilitate/ provide treatment facilities for poor patients .

6.	Improve Emergency and Epidemic Response.	a) Establish a budget line for the additional burden of emergencies and IDPs. b) Strengthen Surveillance systems in Health Sector.
7.	Assessment of Disease Burden	a) Regular scientific studies on the burden of Disease will be conducted. b) Appropriate interventions on the basis of studies to reduce the burden will be introduced. c) Ensure the distribution of funds as per the burden of disease and utilisation of institutions and facilities.

Outcome 3: Improved Human Resource Management
Key Objectives by 2017
1. 90% of budgeted positions in the DoH are filled through a transparent and competitive selection process. 2. 70% of all staff meets the skill requirements of their position. 3. All medical colleges should fulfil minimum criteria for recognition by Pakistan Medical and Dental Council and meet the quality standards. 4. All nursing and paramedic institutes would be registered with their relevant registering bodies and meet the quality standards.

Strategies	Actions
1.Strengthen the Personnel Section to Perform Human Resource Management Functions Optimally	a) Review the current functions and staffing of the personnel section with a view to reorganising it in order to improve its human resource management functions. b) Personnel section will facilitate decision makers by providing necessary evidence. In the first three years of operation, the personnel unit will be responsible for: c) Streamlining/updating information regarding currently employed professional and technical staff. This information will be linked with the GIS DHIS and PIFRA. d) Development of a Human Resource Development plan covering: a. Forecasting of human resource needs based on the human resource requirements of the department. b. Budgeting of staffing requirements for professional, medical and technical staffing for all public health institutions in the province. c. Developing an overall policy for the management of the education of medical, nursing and paramedic and allied fields including continuing professional development. d. A costed plan of action to fill the gaps where feasible. e. A mechanism for regular updating and reviewing the plan. Improve the availability of appropriately skilled human resources for service delivery

	Develop policies and rules for staffing peripheral health institutions with appropriately skilled staff and female service providers including nurses. This might require enhanced salaries, career opportunities, perks and privileges, providing reasonable accommodation, high quality schooling for children and security. Explore the proposal to train male nurses. Explore the options of rotating those undertaking postgraduate training through district health facilities. Develop a continuing medical education mechanism for all nursing, medical and paramedical staff linked to career development. Develop/establish a council for the registration of paramedics and accreditation of paramedic institutes.
2. Improve the Quality of Training	Develop and implement a competency based curriculum at all levels. The DoH will direct and facilitate the respective institutions/bodies in reorienting their curricula and training to being competency based, with enhanced exposure to the community, and with responsiveness to local needs and compliance with international standards. Establish a department of medical education in each medical college. Review the assessment and examination systems of the training institutions to bring them in to line with national/international standards (e.g. , SEQs, OSCE and internal evaluation). Establishment of a skills workshop in each training institute for ensuring medical students, nurses and paramedics practice and develop skills initially on manikins instead of patients. Consult with the PMDC and CPSP to explore the feasibility of: • PGMI monitoring all postgraduate medical training in the province. • Ensure that the MBBS exams in all medical colleges in the province (private and public) are conducted by KMU to ensure a consistent standard and for KMU to be funded accordingly. • Improve linkages and knowledge sharing by pairing each district to a teaching institution so that the latter can provide technical support and supervision to the former.

Training Institutes to provide compulsory induction, promotion and refresher courses under the supervision of the PHSA and DHDC. These should include knowledge on government rules and regulations, essential functions to be performed, job descriptions, communication and ethics, and guidelines for national and international commitments such as the MDGs.

Introduce continuing medical education, in medical and nursing education at all levels with links to promotions.

Improve the quality of nursing through the:

- Introduction of a B.Sc. Nursing as a standard requirement for nurses as well as the introduction of a range of post-graduate nursing qualifications.
- Provide stipends for post-graduate nursing education.

Outcome 4: Improved governance and accountability
Key Objectives by 2017
1. To be accountable to the government and citizens of Khyber Pakhtunkhwa for providing health services which meet the established service standards and serve the target population. 2. 80% of the reports of the DHIS would be received on time according to protocols. 3. Policy, resource allocation and flow of funds demonstrably match the needs of target populations ascertained by the DHIS and other programme MISs.

Strategies	Actions
1. Strengthening of Stewardship Function	Review by the DoH of its roles and responsibilities. Make necessary changes for improved functioning at the provincial and district level. Restructure the DoH in the context of its new roles and responsibilities including drug control and disease surveillance. Organise in a coherent and integrated manner the policy and planning functions of the DoH; planning and policy reform; monitoring and evaluation; health financing; human resources and health legislation. Strengthen the fiduciary-assurance functions of the DoH, including financial management and procurement.
2. Improved Accountability and Transparency	Enable community and stakeholder participation in decision making processes, including budget preparation and strategic review processes. Regular financial monitoring by the Departmental Accounts Committee (DAC) and the Public Accounts Committee (PAC). Establish an internal audit unit with the capacity to conduct regular internal audits using a risk management approach. Conduct regular external audits by the Accountant General's office, including systems and performance audits. Ensure regular reviews of health outputs and budget utilisation, to be conducted by the PHSC. Align partners' projects with policy outcomes of the Health Strategic Plan and later on as part of the provincial ADP. Develop an annual donors' plan with mechanisms for joint accountability.

		Establish a legal unit to handle litigation cases and provide advice on the review of rules and regulations for health care provision, legislation relating to health issues (e.g. tobacco, breast milk substitutes, blood transfusion, patients rights issues, drug and food acts). Medical Ethics
3.	Improving Results Based Management	Implement fully the MTBF in accordance with this strategy. Employ appropriately skilled personnel for budget and financial management positions within the DoH. Implement the DHIS ensuring adherence to data flow protocols and data validation. Integrate all national programmes information systems into the DHIS and establish functional linkages between all levels of operation (facilities, district, provincial management). Establish a Provincial Health Information Management Unit to: • Conduct data analysis for assessing progress on indicators. • Improve the quality and utilisation of information available for decision making from different sources and prepare policy options for informed decision making. • Manage the DHIS. • Collate data from the M&E reports and from programme MISs (until such time as they are integrated into the DHIS). • Manage the DoH website. • Disseminate information on services and performance including budgeting and expenditure information to the population and to the media. • Develop E-government: using ICT and particularly the internet to achieve better governance, making it more efficient, user oriented and transparent.
4.	Efficient and Effective Supply Management Systems	Operationalise the provincial public procurement rules (PPR) and build the capacity of staff to implement these rules. Establish a procurement and logistics management cell in the DoH. Develop a procurement and logistics management plan (2010-2017)

		based on a needs assessment exercise for all of the provinces covering drugs, diagnostics, equipment and biological supplies. The plan will ensure the continuous supply/replacement of each item to ensure service quality and patient safety. Establish biomedical workshops for each division to institutionalise equipment maintenance scheduling.
5.	Improved Health Management	Recruit on merit; ensure an internal/external competitive and transparent process to select project managers, EDOs-H and other management staff. Computerise the database of all health staff including information on transfer and posting and link with the PIFRA human resource database. Provide regularly performance assessments with feedback to all health staff. Implement the policy for the development of a health management cadre.
6.	Health Financing And Alternative Models of Service Delivery	Implement the MTBF fully at the provincial and district level. Develop a health financing policy with objectives of promoting social health protection and reducing OOP Expenditure with clear guidelines including capacity for implementation, management and enforcement. Develop Policy and guidelines to ensure effective public/private partnership for management of public health facilities. Plan the construction of new public health facilities only where there is insufficient capacity in both the private and the public sector to provide basic health services. Develop policies and guidelines for 'purchase' of services from the private sector by the government in areas where high quality private sector service providers are available. In all such arrangements provision for safety nets for the poor would be an essential element. Decide the future of the PPHI model and other similar models in the light of the policy for public/private partnership. Promote the decentralisation of decision making to public sector hospitals, especially for human resource and financial management with the provision of support and appropriate planning. There will also

	be a monitoring mechanism with performance assessments and reviews of lessons already learned established. Pilot different models of health financing on the basis of research to reduce OOP expenditure, for example: voucher schemes and micro-health insurance with the aim of universal coverage. Review the policy of using DHQ Hospitals by private medical colleges for teaching. Where the partnership is to be continued the respective hospitals shall be improved to the standard of a high quality tertiary care hospital.
7. Building Capacity	Review the capability of DoH to implement the strategic plan and accordingly restructure and build capacity for implementation. Provide management training and development for the health management cadre according to a schedule listed in the Health Management Cadre rules. Provide refresher training for all management staff (planning, monitoring, DDO and procurement).

Outcome 5: Improved regulation and quality assurance
Key Objectives by 2017
1. 70% of private health care institutions are registered with the Health Regulatory Authority. 2. 70% of all public healthcare facilities meet the quality standards established by the DoH 3. 30% of the registered private sector healthcare facilities meet the quality standards established by the DoH. 4. 95% of collected drug samples meet the drug quality standards. 5. 30% reduction in incidence of food borne illnesses.

Strategies	**Actions**
Implement the 'Quality Strategy' over the next five years with agreed areas of action where efforts can be focused for Improving Quality.	Implement the quality strategy in a phased manner in all districts over the next five years. Institutionalise the quality process in the system by establishing a proper set up for the purpose. Tied grants will be used to provide incentives for the implementation of priority standards in public sector.
1. Health Regulation	Mapping of all Private Health institutions. Register all new clinics with the HRA once mapping is completed. Facilitate the registration of providers and then monitor standards. Provision of information materials and seminars on the regulations and standards by the Health Foundation. Implement the quality strategy of the DoH and disseminate the strategy as a public communications document. Distribute, launch and communicate the quality strategy to civil society as well as within the DoH. Identify specific arrangements for publicly reviewing progress to the quality strategy should be identified.
2. Drug Regulation	Improve the quality assurance and inspection system. Devise and implement a strategy for drug regulation based on the redistribution of roles following the 18th Constitutional Amendment. Formulate the legal framework, policies and procedures for

	strengthening the pharmaceutical and supplies management system. Strengthen the drug testing laboratories and establish an Appellate Laboratory. Promote the establishment of pharmaceutical manufacturers in the province who adhere to good manufacturing practices. Implement standard pharmaceutical practices including promoting the use of generic drugs in both public and private sectors. This would include purchasing and promoting generic drugs for the public health facilities.
3. Food Regulation	Clarify the role of the Food Department and the DoH regarding the implementation of the Food Act. Conduct a study to identify key issues regarding food safety. Strengthen the food analysis laboratory to ensure proper analysis of samples.

Part 3. Performance Indicators

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 1									
Health Outcome 1 Key Objective 1 (CDS+ MDG Goal) CPR	Contraceptive prevalence rate	40%	45%	50%	53%	55%	55%	55%	PIHS/MICS
Health Outcome 1 Key Objective 2 (CDS MDG Goal) Skilled Birth Attendant	Delivery by skilled birth attendant	55%	65%	75%	85%	90%	90%	>90%	MNCH reports, MICS
Health Outcome 1 Key Objective 3 MHSP	Percentage with access to MHSP at Primary level.	-	25%	45%	50%	55%	60%	>60%	

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 1 Key Objective 4 MTBF (1.4)	% of those below the poverty line with social protection against catastrophic health expenditures	-	10%	15%	20%	25%	30%	40%	
Health Outcome 1 Key Objective 5	A functional category A hospital in each division of Khyber Pakhtunkhwa	1	2	3	4	5	6	7	HD reports
Health Outcome 1 Key Objective 6 Emergency and Trauma services	Percentage of population with Functional A&E centre within a half an hour drive from their residence	20%	25%	30%	35%	40%	50%	60%	DIHS, HD reports
Health Outcome 1 Key Objective 7	Percentage of people with NCDs receiving quality care and access to preventive education	10%	15%	25%	30%	35%	35%	40%	DHIS
Health Outcome 1 MTBF (1.1) Primary Care	Primary health care facilities -daily OPD attendance								DHIS

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 1 MTBF (1.1) Primary Care	Primary health care- no. of new facilities established as per needs								
Health Outcome 1 MTBF (1.2) Secondary Care	Secondary health care facilities- daily OPD attendance								
Health Outcome 1 MTBF(1.2) Secondary Care	Secondary health care- no. of indoor patients								
Health Outcome 1 MTBF (1.3) Tertiary Care	Tertiary health care- bed occupancy rate								
Health Outcome 1 MTBF (1.3) Tertiary Care	Tertiary health care- average length of stay								

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 1 MTBF(1.5) Specialised services	No. of specialised hospitals completed	1	1	1					
Health Outcome 2									
Health Outcome 2 (CDS+ MDG Goal) Key Objective 1 Infant Mortality Rate	Infant mortality rate (per 1000 live births)	60	55	50	45	40	38	35	PDHS, MIMS
Health Outcome 2 CDS, MDG Key Objective 2 Maternal Mortality Rate	Maternal mortality ratio (per 100,000 live births)	250	200	180	160	140	138	135	PDHS, MIMS
Health Outcome 2 Key Objective 3	Reduction in prevalence of underweight children							By 10%	MICS, NNS
Health Outcome 2 Key Objective 4	% women exclusively breastfeeding	45%	50%	55%	60%	65%	65%	65%	MICS

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 2 (CDS + MDG Goal) Key objective 5 MTBF(2.5) EPI	Proportion of fully immunised children	66%	68%	70%	80%	>90%	>90%	>90%	MICS, CES
Health Outcome 2 Key Objective 6	% transmission of polio virus	<2	0	0	0	0	0	0	Surveillance reports
Health Outcome 2 Key Objective 7	Percentage of children receiving vitamin A supplementation	80%	85%	90%	90%	90%	90%	90%	MICS
Health Outcome 2 Key Objective 8	% population with hepatitis B and C	<5%	<5%	<5%	<5%	<5%	<5%	<5%	Survey, DHIS
Health Outcome 2 MTBF (2.3 a) Hepatitis B&C	No. of patients treated for hepatitis B&C	7768	7500	7500					Programme reports
Health Outcome 2 MTBF (2.3 b) Hepatitis B&C	No. of patients registered for hepatitis B&C	15,000	11,000	10,500					Programme reports

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 2 Key Objective 9 MTBF (2.1) TB	Incidence of TB/100,000 people								
Health Outcome 2 Key Objective 9 MTBF (2.1a)- TB	Case detection rate for T.B	72%	74%	76%					
Health Outcome 2 Key Objective 9 MTBF (2.1-b) TB	Treatment success rate for TB	90%	90%	90%					
Health Outcome 2 Key Objective 10 MTBF (2.2) Malaria	Reduction in no. of cases of malaria							By 25%	

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 2 Key Objective 10 MTBF (2.2) Malaria	% of population in malaria risk areas using malaria prevention and treatment measures							75%	
Health Outcome 2 MTBF(2.2) Malaria	No. of slides-Malaria	380000	400000	420000					
Health Outcome 2 Key Objective 11 MTBF(2.4) HIV/AIDS	Prevalence rate of HIV/AIDs amongst vulnerable groups	<1%	<1%	<1%	<1%	<1%	<1%	<1%	Surveys
Health Outcome 2 MTBF (2.4a) HIV/AIDS	No. of registered patients with HIV/AIDS	650	700	750					
Health Outcome 2 MTBF(2.4 b) HIV/AIDS	No. of advocacy campaigns conducted	25	30	35					

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 3									
Health Outcome 3 Key Objective 1	Fill budgeted positions	85%	85%	90%	90%	90%	90%	90%	DHIS, HD reports
Health Outcome 3 Key Objective 2	% staff meeting skill requirements of their positions	-	40%	50%	55%	60%	65%	70%	HD reports
Health Outcome 3 Key Objective 3	All medical colleges recognised by PMDC							100%	
Health Outcome 3 Key objective 4	No of schools registered by the Pakistan Nursing Council (PNC) and Paramedic Council.							100%	
Health Outcome 3 MTBF(3.2)	No. of staff trained (induction, refresher and promotional)	228	450	600					
Health Outcome 4									
Health Outcome 4 Key Objective 1	Published Annual Performance Review against strategic plan and MTBF								

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 4 Key objective 2	Timely Reporting in DHIS according to protocols							80%	
Health Outcome 4 Key objective 3 Evidence based decision making	Key decisions have a transparent evidence base								
Health Outcome 4 MTBF (4.2b) Evidence based decision making	No. of review meetings held by M&E Cell	4	4	4					
Health Outcome 4 MTBF (4.1) Primary, Secondary and Tertiary Healthcare services	No. of facilities implementing quality standards	80	180	240					Maybe shift to Outcome 5?

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 4 MTBF (4.3 a) Planning and policy making	No. of reviews by planning cell	4	4	4					
Health Outcome 4 MTBF (4.3 b) Planning and policy making	No. of Policy proposals based on evidence submitted by HSRU	4	5	5					
Health Outcome 5									
Health Outcome 5 Key Objective 1 Regulation	% of private healthcare institutions registered with HRA			35%	55%	70%	80%	90%	HRA reports
Health Outcome 5 Key Objective 2 a MTBF (5.1) Quality Assurance	% of public healthcare institutions meet quality standards			35%	55%	70%	80%	70%	HRA reports

Source	Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Means of verification
Health Outcome 5 Key Objective 2 b Quality Assurance	% of registered private sector health care facilities which meet standards							50%	
Health Outcome 5 Key Objective 3 MTBF (5.2) Drug Control	% of Drug samples tested in laboratory which meet quality standards	1,500	1,500	1,500				95%	
Health Outcome 5 MTBF (5.3) Food Control	No. of legal actions taken on poor quality samples.								

Part 4. Health Expenditure

Health Financing and Expenditure

Health Financing

The Comprehensive Development Strategy costs the priority health measures for the province at Rs 106 billion which represents 11% of the total Rs 960 billion CDS outlay over the next seven years. Of the total cost: Rs 60 billion is for recurrent costs and Rs 46 billion is for development costs. The CDS envisages that 46.25% of the total cost of the priority health measures equivalent to Rs 49 billion will be funded through international support.

The CDS costs the health insurance and voucher schemes for the province at Rs 16 billion which represents 1.67% of the total Rs 960 billion CDS outlay over the next seven years and are reflected separately under the priority measures for Social Protection.

The CDS states that the interventions related to MDG 6 are financed through the Federal Government's vertical programmes and, as such, have not been reflected in the CDS costing. The CDS allows for Rs 21 billion for vertical programmes over the next seven years. This cost does not reflect the additional burden of Rs 7 billion for the next seven years which has arisen due to the recent decision by the Supreme Court to double the salary of the LHWs.Thus in total the cost of the vertical programmes for the next seven years would be Rs 28 billion.

The cost of the Polio Eradication Initiative (PEI) was not included in the CDS as the 18th Amendment had not been promulgated at that time. Under the new scenario there is a lot of uncertainty regarding the source of financing of the Polio Eradication Initiative. However the cost of PEI is reflected in the Health Sector Strategy as it is one of the priority areas for health interventions.

None of the costs reflected in the CDS take into account the impact of inflation over the next seven years.

The 7th National Finance Commission Award has been signed in December 2009. This represents the agreement over the annual distribution of financial resources among the provinces of Pakistan by the Federal Government. The new award comes into effect from

2010-11. In the first year under the new NFC award the provincial share of the divisible pool would increase from 47.5% to 56%. For the remaining years under the award this increases to 57.5%.

Under the new formula, Punjab will receive 51.74%, Sindh 24.55%, Khyber Pakhtunkhwa 14.62% and Balochistan 9.09% from the Federal government.[54] Due to this increased % allocation, the share of federal government allocations (including net hydel profits) are expected to be around Rs 154 billion compared to Rs 83 billion in 2009-10[55] an increase of about 86%. This increased inflow from the federal government (including net hydel profits) has resulted in a significant increase in allocations for the health sector though not in the same proportion as noted above. The total provincial health budget (recurrent and development) has increased from Rs.8.4 billion in 2009/10 to Rs. 12.5 billion in 2010/11 i.e. an overall increase of 48%. The recurrent budget has increased from Rs.4 billion in 2009/10 to Rs.5.9 billion in 2010/11 (an increase of 47%) and the development budget has increased from Rs. 4.3billion to Rs. 6.6 billion in 2010/11 (an increase of 53%).

Private vs. Public Expenditure The latest provincial health accounts were compiled as part of the National Health Accounts – Pakistan 2005-06 by the Federal Bureau of Statistics. According to the provincial health accounts, total health financing/expenditure in Khyber Pakhtunkhwa, during the FY 2005/06 was Rs. 28,177 million. Of this total public sector financing/expenditure was Rs.6,630 million (23.5% of the total). [56] Private financing/expenditure, which mainly includes the private households' OOP payments, was Rs. 21,547 million (57% of the total).[57] Therefore the ratio of public financing/expenditure to private financing/expenditure was rather high at 1 to 3.25. **Per capita expenditure on health** by the Provincial and District governments in 2008/09[58] was Rs.471 (US$5.98). This

54 According to the CDS, the government of KHYBER PAKHTUNKHWA was receiving 83% of its revenue from Federal sources.

55 Finance Department – White Paper 2010-11

56 Federal, Provincial,District Health Department and other ministries, departments, State Owned Enterprises and foreign aid

57 Provincial Health Accounts included as part of the National health accounts – Pakistan 2005-06.

58 Using a projected population figure of 23,295,611 for 2009

rose to Rs.542 (US$6.88) with the addition of federal funds and to Rs. 581 (US$7.38) with the addition of the development partner's contributions.[59] [60]

Health Expenditure Analysis from 2005/06 to 2009/10

District expenditures

Table 2 below shows the nominal recurrent expenditure which the districts spent on health over the last five years.

Table 1 Nominal recurrent expenditure (Rs. millions) by the District Governments on Health, funded by the Government of Khyber Pakhtunkhwa FY 2005/06 to 2009/10

Expenditure	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Health Recurrent Expenditure	2,132	2,396	2,982	3,531	3,166	14,207
Total District Expenditure	23,849	28,205	31,173	35,257	40,247	158,731
Health Recurrent Expenditure as a proportion of Total District Expenditure	8.9%	8.5%	9.6%	10%	7.9%	9.0%
Additional Expenditure under Peoples Primary Health Initiative (PPHI)	0	0	37	70	142	249
Total Health Expenditure in District	2,132	2,396	3,019	3,601	3,308	14,456

Note: Reported expenditure was obtained from the District Appropriation Accounts prepared by the Accountant General. PPHI is a federal program supporting 12 districts in Khyber Pakhtunkhwa

The District Health recurrent expenditure was expended on hospitals, RHCs, BHUs, Mother and Child Health Centers, EPI, malaria, the TB Control Program and administration divided

59 The total expenditure on health in Pakistan in the National Health Accounts of 2005-6 was estimated to be US$18 per capita, of which the public sector expenditure was US$ 4 per capita. This is far below the figure of US$34 proposed by the Commission on Macroeconomics and Health to provide an essential package of health services

60 Over the last 15 years, public health expenditures have increased by 50% in nominal terms, however taking into account population increase and inflation, real expenditure as a percentage of GDP has stagnated at 0.55 to 0.58%. The FY 09 total expenditure on the health sector through the PRSP channel declined to Rs 26,819 million down from Rs. 61,127 million in FY08.

in to salary and non-salary items. For FY 2009-10 the expenditure on salary items was Rs 2,735 million and expenditure on non-salary items was Rs 431 million.

Provincial expenditures

Over the five years the total expenditure of the Khyber Pakhtunkhwa provincial government for health increased in nominal terms from Rs. 3,357million to Rs.6,228 million (Table 3). The increase in nominal non-development expenditure from 2005/06 to 2009/10 was from Rs. 2,077million, to Rs.4,453 million during 2009/10. However the largest increase is under the development component where the expenditure increased from Rs.1,280 million in 2005/06 to Rs.3,882 million in 2008/09 (an increase of 203%)[61].

Table 2 Nominal Expenditure (Rs. millions) by the DoH, funded by the Government of Khyber Pakhtunkhwa FY 2005/06 to 2009/10

Expenditure	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Health recurrent expenditure	2,077	2,531	3,191	3,554	4,453	15,806
Health development expenditure	1,280	2,195	3,140	3,882	3,492	13,989
Total Health expenditure	3,357	4,726	6,331	7,436	7,945	29,795
Total Provincial Expenditure	90,917	94,632	109,857	139,338	138,823	
Health Department expenditure as a proportion of total expenditure of Provincial Government	3.7%	5%	5.8%	5.3%	5.7%	

Note: Reported expenditure was obtained from the Appropriation Accounts of Government of Khyber Pakhtunkhwa (prepared by the Accountant General). 2009-10 expenditure up to end May 2010 only.

The Provincial DoH expenditures were expended on hospital services, drug control, training and research institutions, university/colleges/institutions, drug testing and food laboratories and administration and divided between salary and non-salary expenditure. The salary expenditure comprises of the pay and allowances of officers and their staff. The non-salary expenditure comprises of operating expenses, repairs and maintenance, transfers and travelling allowances.

[61] The increase in funds has primarily been invested in construction of new hospitals; improvement and up gradation of health facilities and procurement of equipment & furniture etc for new and upgraded health facilities

Table 3 Real Adjusted Expenditure (Rs. millions) by the DoH, funded by the Government of Khyber Pakhtunkhwa FY 2005/06 to 2009/10

Expenditure	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Recurrent nominal	2,077	2,531	3,191	3,554	4,453	15,806
Recurrent real	2,077	2,331	2,690	2,570	2,295	11,963
Development nominal	1,280	2,195	3,140	3,882	3,492	13,989
Development real	1,280	2,021	2,647	2,807	1,800	10,555
Total provincial health expenditure nominal	3,357	4,726	6,331	7,436	7,945	29,795
Total provincial health expenditure real	3,357	4,352	5,337	5,377	4,095	22,518
CPI	7.92	7.77	12	20.77	11.49	
Inflation	100	107.92	115.69	127.69	148.46	

Note: Reported expenditure was obtained from the Appropriation Accounts of Government of Khyber Pakhtunkhwa (prepared by the Accountant General). This expenditure does not include expenditure in health at the District level.

As can be seen from the above table, due to the high rate of inflation in recent years the purchasing power of the Rupee has eroded to nearly half of its purchasing power in FY 2009-10. Thus in real terms the government will have to double its outlay on health in nominal terms in FY 2010-11 in order to keep pace with the rate of inflation and provide the same level of health services it provided in 2009-10. As noted above, the overall health outlay in nominal terms has increased by only 48%. This increase is insufficient to maintain the level of services currently provided to the public and needs to be doubled in order to keep pace with the rate of inflation.

Combined Expenditures

The combined expenditure of district, provincial, federal, and development partners is shown below in Table 5.

Table 4 Combined Expenditure (Rs. millions) in Health Sector of Khyber Pakhtunkhwa in 2007/08 and 2008/09

Expenditure	2007-08	2008-09	Total
District Government	3,019	3,601	6,620
Provincial Government	6,331	7,436	13,767
Federal Government	1,392	1,668	3,060
Development Partners	1,543	838	2,381
Total combined expenditure	12,285	13,543	25,828

Note: Reported expenditure was obtained from the Appropriation Accounts 2007-08 and 2008-09 of Government of Pakistan and Khyber Pakhtunkhwa. Development partners expenditures obtained from the Development Assistance Database. www.dadpak.org [62]

The combined expenditure in the health sector increased from Rs.12,285 million in 2007/08 to Rs.13,543 million in 2008/09, an increase of Rs.1,1,258, or 10%. The increase in expenditure was due to increased funding by the provincial government.

The federal government provided funds medicines and contraceptives through health programmes, in particular, the NP FP&PHC and MNCH. Assistance was provided in-kind for the EPI, hepatitis, TB and malaria, programmes. The Federal Government provided funds for civil works in FY 2007/08 (Rs. 131.150 million), but not in 2008/09.

The Federal Government increased its overall funding to the provincial government from Rs. 1,392 million in 2007/2008 to Rs. 1,668 million in 2008/2009, an increase of 20% .

62 Although the development partners and donors expenditures might have been higher, but only expenditure reported on the official website has been used.

Allocation vs. Expenditure

Figure 1 Provincial Health Allocation vs. Expenditure FY 2005/06 -2009/10

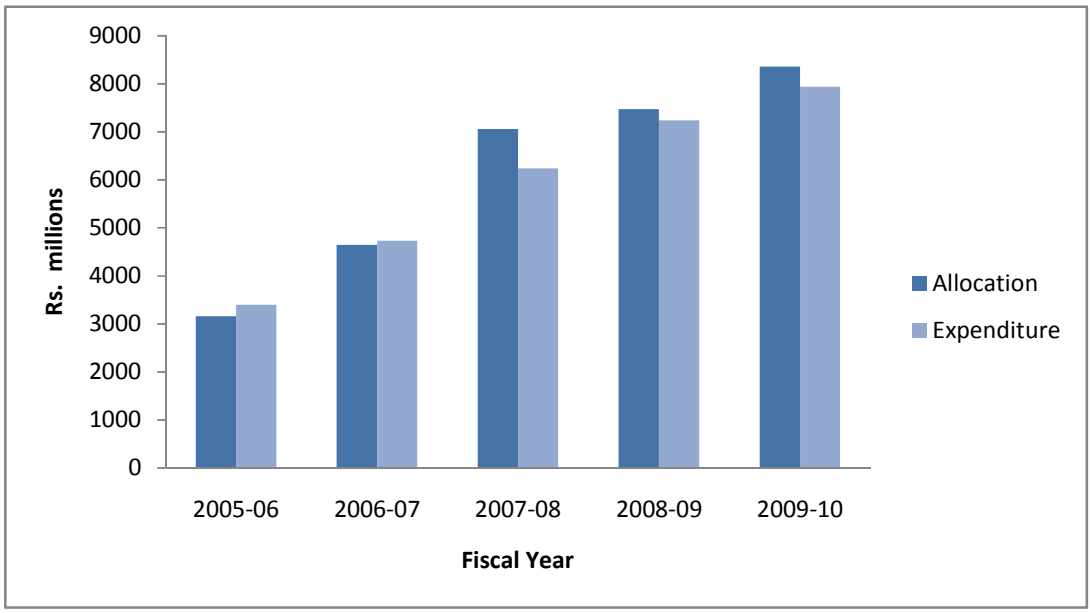
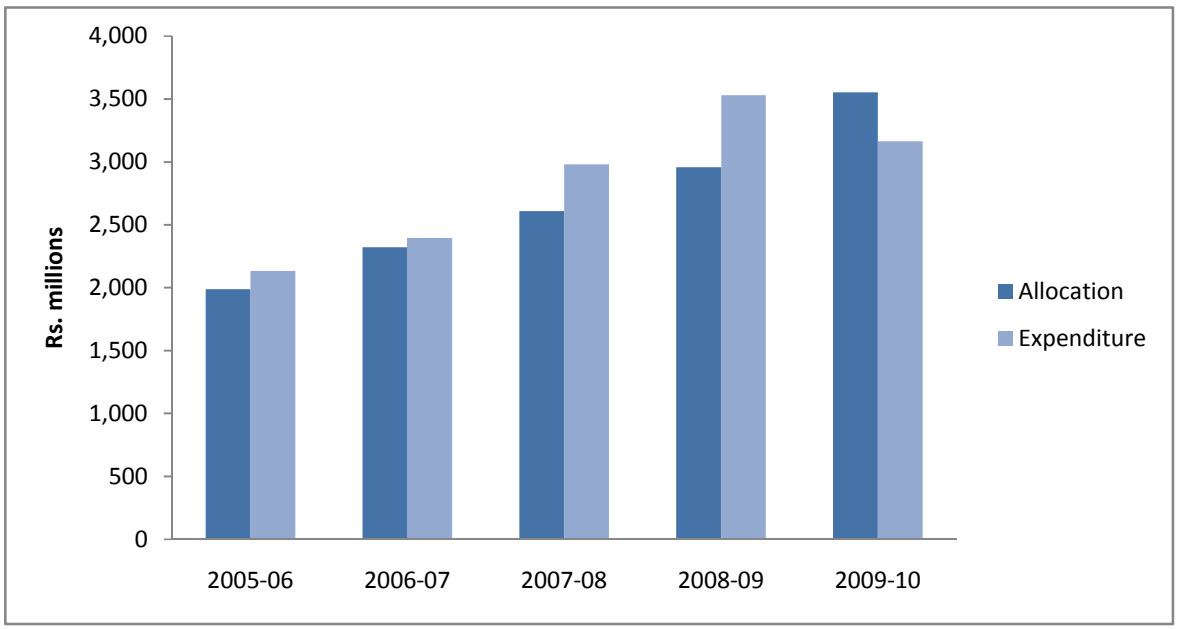


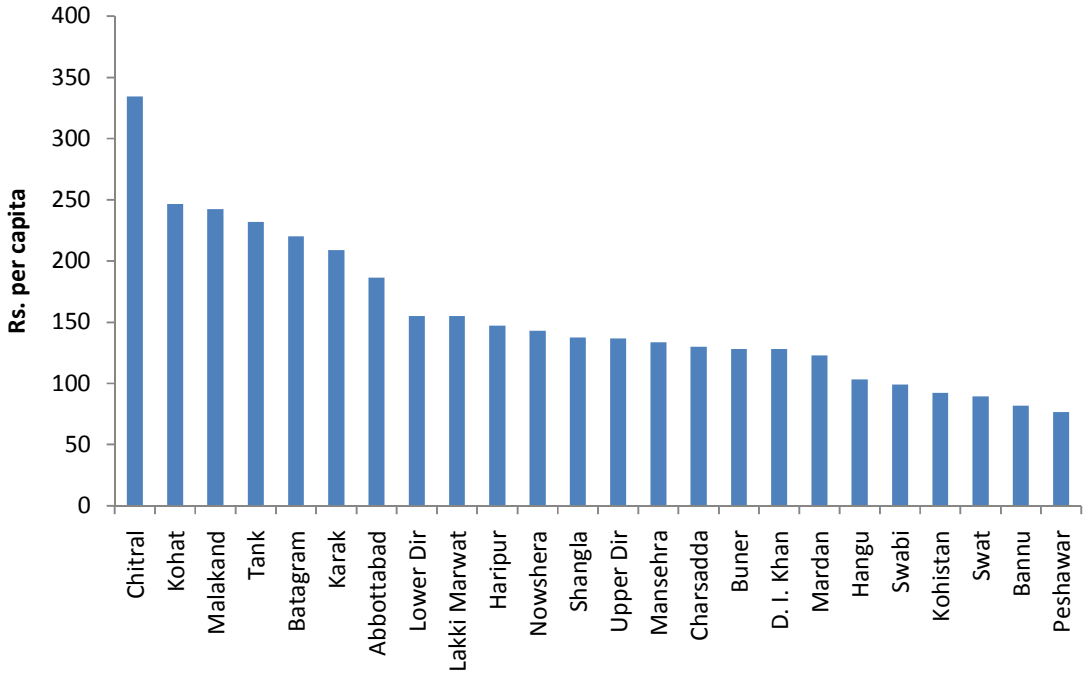
Figure 2 District Health Allocation vs. Expenditure FY 2005/06 -20009/10



Variation in Health Expenditure between Districts

There is a large variation in per capita expenditure between districts. This expenditure does not take into account federal input via programmes such as the PPHI[63], NP FP&PHC or for Provincial inputs. The range is from Chitral with expenditure of Rs. 334 per person to Peshawar at Rs. 77 (Figure 3).

Figure 3 District Health Expenditure per Capita 2009/10



Notes Projected population figures from 1998 census, for 2009 District expenditure for 2009/10 from Accountant

63 The PPHI districts are Chitral, Upper Dir, Malakand, Mardan, Charsadda, Peshawar, Nowshera, Swabi, Haripur, Karak, Kohat.

Part 5. Funding Implications

Costing of Priority Health Measures

Since the compilation of the CDS, the basis for the costing of the priority health measures have been further refined. These have formed the basis of extensive discussions with the DoH to arrive at the costs required to implement the priority health measures (Outcomes 1 to 5) as noted in the Table 6 below:

Table 5 Costing of Priority Health Measures (Rs. millions) in the Health Sector of Khyber Pakhtunkhwa FY 2010/11 to 2016/17 in Rs. Millions (R=recurrent, D=development)

Outcome	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2010-17	
	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D
1	2,424	6,282	2,690	21,220	3,013	22,315	3,375	25,505	3,780	29,108	4,233	33,279	4,741	38,054	24,256	175,764
2	9	4,573	10	5,626	5	6,025	5	6,748	6	7,558	7	8,465	7	9,480	48	48,474
3	2,794	1,650	2,900	1,691	2,761	2,082	3,092	632	3,463	708	3,879	793	4,344	493	23,233	8,050
4	205	175	230	196	257	220	288	246	323	275	361	308	405	345	2,068	1,766
5	172	140	448	146	564	163	492	28	629	31	529	0	592	0	3,426	508
Total	5,604	12,820	6,277	28,878	6,600	30,805	7,252	33,159	8,201	37,680	9,009	42,845	10,090	48,373	53,032	234,562

Note: Increase in overall cost over the CDS cost is due to the inflation factor which was not taken into account in the CDS costing.

Assumptions: Outcome 1

1. Projected population millions in 2009: 23.3 million.
2. Population growth rate 2.8 % per annum.
3. Cost of MHSDP as per DoH: Rs. 340.
4. Rate of Inflation: 12 % per annum.
5. Population and MHSP Cost Projections:

Year	Population	MHSP	Secondary HSP	Tertiary HSP
2009	23.3	340	680	1020
2010	24.0	381	762	1142
2011	24.6	426	853	1279
2012	25.3	478	955	1433
2013	26.0	535	1070	1605
2014	26.7	599	1198	1798
2015	27.5	671	1342	2013
2016	28.3	752	1503	2255
2017	29.1	842	1684	2525
Utilisation % as per DoH discussions		100%	10%	5%

6. Infrastructure Assumptions(CDS):

Rs. Millions	BHU			RHC			Total
Description	Cost/Unit	Units	Sub-total	Cost/Unit	Units	Sub-total	
Phase 1 (year 1&2)	1	784	784	3	86	258	1,042
Phase 2 (year1&2)	5	784	3,920	10	86	860	4,780
New Construction (year 3-7)	30	75	2,250	150	25	3,750	6,000
Total			**6,954**			**4,868**	**11,822**

7. Workshop-bi annual, DOH office, 3 days and 60 participants. Staff and equipment requirements-Rs 2 million as per Qabil Shah Khattak-Admin/Finance Officer-HSRU
8. Three person team for 150 days@ Rupees 40,000/day on average plus consultation workshop and logistics etc.
9. Two person BCC experts for 50 days@ Rupees 30,000/day on average plus field survey and logistics (Rs 2 million). Dissemination of strategy through radio, focus groups and printed material (Rs 10 million).
10. Extrapolated recurrent and development expenditure for all 4 hospitals based on expenditure of PIPOS.
11. Two additional grade 16 officers plus training (Rs 100,000 pa) in all (19+125=144) hospitals up to THQ hospitals.
12. One person for 100 days @ Rs 40,000/day plus logistics etc.
13. As per Finance Dept white paper 2010-11 provincial revenue for 1% war on terror are expected to be Rs 15 billion. Assumed 10% of this amount will be allocated to health interventions.
14. One person for 100 days @ Rs 40,000/day plus logistics etc.

15. DHQ Hospitals (21) @ Rs 500 million each (CDS Back up docs) over 7 years. Per year Rs 1,500 million or 3 hospitals.

Assumptions: Outcome 2

1. Rate of Inflation 12 % per annum.
2. One person for 100 days @ Rs 40,000/day plus logistics etc.
3. In house quarterly meetings, 1 day activity but 3 sessions and 60 participants. Staff TA/DA and food requirements: Rs 1.75 million as per Qabil Shah Khattak-Admin/Finance Officer-HSRU.
4. In house quarterly meetings, 1 day activity. Staff TA/DA and food requirement: Rs 1 million.
5. Bi-Annual meetings, 1 day activity. Staff TA/DA and food requirement: Rs 1 million.
6. Includes Surveillance cost (Rs 17.1 million/month); Provincial Immunisation Day cost (Rs 110 million/day=Rs 37 million operational cost+Rs 77 million vaccine cost).Three rounds YR1; six rounds YR2 & four rounds thereafter.

Assumptions: Outcome 3

1. Rate of Inflation 12 % per annum.
2. 500 Postgraduate practicing doctors@ Rs 20,000 stipend (http://the news.com.pk-Doctors support NWFP Body-16th June 2009).
3. One person for 90 days @ Rs 40,000 and logistics.

Assumptions: Outcome 4

1. Rate of Inflation 12 % per annum.
2. Due to lack of available details at this stage, the BESD-MTBF-2010-13 overall estimates were spread across the component strategies along with any specific cost information obtained from CDS documents.

Assumptions: Outcome 5

1. Rate of Inflation 12 % per annum.

Funding of Priority Health Measures

The funding sources for the priority health measures are the provincial governments own resources, its share of Federal Government allocations, grant in aid, net profit from hydel and foreign grants and loans. Table 6 below shows the current and projected levels of funding based on the Budget Estimates for Service Delivery-MTBF-2010-13 funding levels and the resulting funding gap. As noted in the CDS, 46.25% of the total costs of the priority health measures are expected to be funded through international support. Using this assumption Table 6 shows the level of funding which will be required by the government and donors to sustain the priority health measures during the next seven years.

Table 6 Funding of Priority Health Measures (Rs. millions) in the Health Sector of Khyber Pakhtunkhwa FY 2010/11 to 2016/17 in Rs. millions

	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2010-17	
	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D
Total Needs (A)	5,604	12,820	6,277	28,878	6,600	30,805	7,252	33,159	8,201	37,680	9,009	42,845	10,090	48,373	53,032	234,562
Funding Available (B)	5,941	6,571	6,535	7,228	7,189	7,951	7,907	8,746	8,698	9,621	9,568	10,583	10,525	11,641	56,363	62,340
Funding Gap (A-B)		6,249		21,650		22,854		24,413		28,060		32,263		36,732		172,221
Potential Funding																
Government		3,359		11,637		12,284		13,122		15,082		17,341		19,744		92,569
Donors		2,890		10,013		10,570		11,291		12,978		14,922		16,989		79,652
Total		6,249		21,650		22,854		24,413		28,060		32,263		36,732		172,221

Note: R=recurrent, D=development

Part 6. Implementation, Monitoring and Evaluation Mechanisms

Implementation

To ensure that the strategy is implemented, detailed activity and project plans will need to be designed and a PC-1/proposal prepared to secure the technical, human and/or financial resources required.

Implementation will require the strong involvement of the Additional Secretary (Development), and the HSRU. Given the current work commitments of these senior members of the DoH, it is proposed that an Implementation Assistance Team be located within the DoH, funded by a development partner for two years. This would include two dedicated experts, a Health Sector Management Specialist, a Financial Expert and an Office Manager. The role of the team will be to support the DoH in developing project proposals, terms of references for technical studies, surveys and other related activities. The team will develop monthly, quarterly and annual progress reports on the implementation of the strategy.

Monitoring and Evaluation

The strategy needs to be monitored to ensure implementation. The government of Khyber Pakhtunkhwa is currently developing a more comprehensive M&E system linked to budget reform (MTBF). The M&E of the strategy will be consistent with the M&E process of the CDS.

Performance Indicators: To assess progress, the targets and indicators of the CDS are core to the health sector strategy. There are also additional indicators to be monitored that will provide information on the implementation of strategies designed to impact on the five health outcomes (Part 3. Performance Indicators).

Annual Report and Review: An annual report reviewing implementation progress will be provided to the Minister for Health, by the Secretary of Health. This report will be prepared by the Provincial Information Management Unit.

This report will be used as a basis for an annual review. The annual review process should be based on data collected through annual performance reports from units and programmes within the Khyber Pakhtunkhwa health sector. It should also rely on the health information and budget systems.

This review will ensure that additional services and major initiatives are included in the strategy. It is expected that there will be changes as the 18th Amendment is implemented. Advances in technologies and processes that will lead to changes in some strategic initiatives such as the budget process (with the implementation of the MTBF at the District level and implementation of the DHIS) will provide further information for decision making and policy development. The annual review will also enable insecurity and natural disasters, and their consequences, to be taken into account.

Monitoring Committee: It is proposed that a Monitoring Committee to monitor progress on the strategy be established, headed by the Secretary of Health with the HSRU as the secretariat.

Proposed members include:

1. Secretary of Health (Chairman)
2. Additional Secretary (Development) Health
3. Additional Secretary (Establishment) Health
4. Director General Health Services
5. Chief Executive of an autonomous tertiary care/teaching hospital
6. Representative of KMU
7. Chief Planning Officer
8. Chief, HSRU (Secretary)
9. Director of PHSA
10. Chairman of the HRA
11. Director Monitoring and Evaluation Cell
12. A private sector medical professional
13. A delegate of a reputed health sector NGO
14. A consumer rights expert representing patients/consumers
15. A representative of professional associations of doctors, nurses and paramedic staff.

This committee should meet quarterly and review progress against agreed milestones. The proposed terms of reference are as follows:

a Oversee and steer the implementation of the Health Sector Strategy.

b Grant approval to work-plans, goals/outcomes, indicators, project proposals and other documents submitted with regards to the implementation of the strategy.

c Review the provisions of the strategy on annual basis to approve and ask for modifications in light of changing scenarios (e.g. post 18th amendment).

d Monitor progress on the implementation of the strategy.

Next Steps

Key activities for finalising and implementing the health sector strategy

Activity	Timeline	Responsibility
Finalise draft of strategy	15 January 2011	Consultants/ HSRU
Approval of the strategy by DoH	30 January 2011	Secretary/ Minister Health
Publish and disseminate the strategy	28 February 2011	HSRU
Finalise ToRs for the Health Sector Strategy Monitoring Committee (HSSMC) and notify committee	15 February 2011	Secretary of Health
Meeting of the HSSMC	20 February 2011	HSRU
Recruit technical assistance (TA) team for support of the strategy	28 February 2011	Secretary of Health
Develop the Activity Plan with priorities for year 1	30 March 2011	TA Team/ HSRU
Develop implementation/ project plans for each strategy/ outcome	30 April 30 2011	TA Team/ HSRU
Provide inputs to preparation of ADP/ OBB in view of the strategy	May 2011	TA Team/ DoH
Review progress and revise strategy – if needed	December 2011	HSSMC

Annex 1: Stakeholder Consultation

Strategy Development; the Process

Strategy Development Team

In 2010, the Secretary of Health established a task force to formulate a strategy for the health sector in Khyber Pakhtunkhwa. The strategy was to take into account, the health status of the population, the current services being provided and the availability of resources and then develop strategies for action. To support the work of the task force, a consultancy team was contracted by the Technical Resource Facility funded by UKAid (formerly DFID) of UK and AusAid to work closely with the Health Sector Reform Unit (HSRU).

Major Activities

Initially the activities of the task force and the consultancy team focused on defining the outcomes for the health sector and defining and costing outputs for each outcome to support the DoH's budget submission for the 2010/11 budget.

The situation analysis, identification of challenges, formulation of key objectives and strategies were developed from; stakeholder consultations, key informant interviews, and literature review.

Consultative Workshops, held in April in Peshawar, were attended by representatives of all major stakeholders from the public and non-government sectors including; decision makers, service providers, civil society and academia and from all levels; health centres, district and provincial. The purpose was to identify challenges facing the health sector and to provide input into the development of initiatives to achieve targets. Communication for Effective Social Services Delivery (CESSD) and HSRU held two community consultations in May. The first consultation was held in Peshawar for districts Peshawar, Mardan and Swabi with 96 participants (36 women and 60 men) and the second one in Kohat for districts Kohat, Abbottabad, Haripur, Nowshera with 130 participants (50 women and 80 Men)

Strategy Development Workshop, a two day workshop to share the findings of these workshops and to progress the development of the strategy was

organised in June with the senior managers of public sector and partner organisations at the provincial and federal level.

Key Informant Interviews were conducted with managers within the DoH including those managing public health programmes and hospitals.

Data was sourced from major surveys conducted or approved by government, research from medical universities and the World Health Organisation.

Risk Matrix

P= probability, S = significance

Risk			Mitigation Strategies
The Health Sector Strategy will be implemented in an environment of economic hardships, realignment of linkages between different levels of government and uncertainties due to security situation. There is a strong possibility that the economic and security situation constraints may lead to disruptions in the Strategy implementation.			It will be important for the government and other partners to mitigate this risk by building strong ownership and buy-in of different levels of government, private sector and development partners through enhanced awareness and understanding of the important elements of the strategy. Strong support from a wide range of external donors and development partners would help meet this risk.
There are apprehensions that the conflict, which is primarily taking place in remote and difficult terrain, of the province and adjoining areas of FATA will prove to be protracted. At the same time, the war in Afghanistan is growing in intensity. Targeting programs in conflict affected areas, as the Strategy proposes, greatly increases the exposure to risks. Deterioration in security across the entire country is also possible. In this			Strong engagement of health department with senior political, administrative and LEAs to coordinate efforts in health sector with security situation. Use of the PCNA as a means of conflict analysis. Increased involvement of the communities in planning and oversight of the health sector initiatives so that

context, attracting foreign investment will remain a challenge and the conflict will continue to be a drain on the resources and attention of the Government and people of the province.			these are seen as community owned and not as 'outside' interventions.
The large increase in spending by government & other partners leads to blockages and delays in Government service delivery and increases the risks of mismanagement due to weak implementation capacity.			Realistic annual plans/PC-1s. Closer coordination and synergies with other partners, sectors and the option of outsourcing of services wherever possible.
Inadequate management capabilities and information systems			Provision of adequate funding for organisational development. Initiate health department review on priority basis.
Uncertainty around decentralisation/devolution which could lead to districts having decision making and planning functions thus minimising provincial government authority, where some local governments are not willing to adopt the strategy.			Annual planning process to take such developments into consideration.
Ineffective targeting of the poor & vulnerable.			Effective link mechanisms to poverty data bases ; use of self-selection in design of package
Lack of effective mechanisms for assuring good quality of services & regulations			Strengthened HRA and quality plan.

Determining Strategic Priorities

The criteria for developing the strategies under each health outcome were as follows:

a) Will the strategy contribute to addressing the health issues of the population especially the poor and vulnerable (women and children)?
b) Does the strategy effectively address a major public health issue?
c) Is the strategy responding to community needs?
d) Does the strategy contribute towards strengthening of the health system?
e) Is the strategy in line with the policy documents, international commitments and reform agenda of the government?
f) Is the strategy in accordance with the governments manifesto?
g) Is the strategy likely to attract support?
h) Is the strategy financially feasible and sustainable?
i) Can it be accomplished within the current DoH management capacity?
j) Are any additional resources available (material, human and financial)?

This set of criteria could be used by the DoH for identifying priorities in its regular planning process.

List of Consulted Stakeholders

The following stakeholders were consulted in the development of this strategy. There is a separate report for the district level community consultations.

1	Dr Ghulam Hazrat	MO –Dir Upper
2	Ms Nasim Akhtar	LHV –Dir Upper
3	Dr Zafar Ahmad	GM-AKHSP
4	Dr Maqsood Ahmad	EDO (H) Buner
5	Dr Shafeul Malik	District Coordinator NP/EPI
6	Mian Irshad	Admin Officer, EDO Shangla
7	Dr Saeeda Saeed	Principal Public Health School Nishtarabad
8	Mr Hameed ur Rehaman	DSM, PPHI , Malakand
9	Dr Aman ullah	SMO Incharge THQ Hospital Matta (Swat)
10	Ms Abida	LHS NP&PHC Charssada
11	Dr Nadeem Ahmad	Project Director-IQHCS
12	Dr Shahzad Faisal	DMS KTH

13	Dr Akhtar Said	Coordinator (DEPRU) Swat.
14	Dr Nasreen Asghar	WMO –CD Bhana Mari Kohat road Peshawar.
15	Dr Wakeel	MS DHQ Temergara
16	Ahmad Shah	JCS-DHQ Temergara
17	Dr Shaukat Ali	Distt TB Officer Peshawar
18	Dr Rafiullah	Distt Coordinator Swat
19	Dr Noorulmabood	Deputy DHO Peshawar
20	Dr Jamshad Ahmad	M.S Emergency Statalite Hospital Nahaqi
21	Mr Imran Ulllah Khan	Drup Inspector Charssada
22	Dr Khurshid Ahmad	Bice Pricipal SGTH Swat
23	Dr Saeed Ahmad	RMO –RHC Shagram (Chitral)
24	Dr Lubna Tahir	WMO-DHQ Taimargara
25	Dr Allah Yar	DTO –Charssada
26	Dr Saeed Gul	AD- (P-I) DGHS
27	Dr Hidayatullah	EDO Health Dir Upper
28	Dr Obaid ur Rahman	Coordinator –HSRU
29	Dr Azmat ullah Khan	Coordinator –HSRU
30	Dr Tahir Nadeem	Director M&E Cell
31	Mr. Jamal Afridi	JSI/Paiman
32	Muhammad Ishfaq	MIS Officer/ IQHCS
33	Dr SherQayyum	EDO H Chitral
34	Dr Israrulllah	Vice Principle –DHDC Chitral
35	Dr Shabina Raza	Chief HSRU
36	Dr Shaheen Afridi	Deputy Chief HSRU
37	Ms Akhtar Bano	Lecturer/PGCN/KMU, Peshawar
38	Dr Ruhullah Jan	Director Health –DGHS
39	Dr Qazi Afsar	AD-EPI

40	Dr Shahid Younis	Coordinator-HSRU
41	Dr Ambreen Qazi	Health Officer –UNICEF
42	Dr Talat jabeen	WMO-DHQ Taimargara
43	Dr M Saleem Khan	Dy Program Manger RBM
44	Dr Adnan Taj	DMS- LRH
45	Dr Tariq Saleem Marwat	District Coordinator NP for FP & PHC Laki Marwath
46	Malik Rab Nawaz	Social Worker Ustarzai Payan kohat
47	Abdul Hameed	Coordinator HMIS EDO(H) Kohat
48	Dr Muhammad Sher Khan	D EDO (H) Kohat
49	Akhtar Jehan	Assistant Director Nursing
50	Dr Khalid Iqbal	Programme manager Roll back Malaria programme
51	Sabir Ali	Chief Drug Inspector Health Dept
52	Dr Shakoor Rahman	M/O Health Dept
53	Dr Nazish	WMO DHQ Hango
54	Dr Samia Saeed	WMO women and children hospital Kohat
55	Dr Abid Jamil	Director Medical Education PGMI, Peshawar
56	Dr Umar Naseer	MO RHC Distt Karak
57	Dr Siraj Muhammad	Secretary Medical facility Peshawar
58	Dr Islamud din	MO Lokki Health
59	Saadullah khan	District Sanitary/Food Inspector EDO (H) Office Mardan
60	Dr Qiaser Ali	PHC EDO(H) Office Mardan
61	Arbas Khan	District Drug Inspector EDO(H) Office Mardan
62	Mahboob Ur Rehman	District Planning Officer Hangu
63	Momin Khan Marwat	EDO (Finance and Planning) Laki Marwat
64	Waqar Khan	Monitoring Officer Khyber PakhtunkhwaK
65	Waqar Ahmad	Monitoring Officer RMU Deptt Khyber PakhtunkhwaK

66	Dr M Aman Khan	PICO HMC Peshawar
67	Dr Mokaish	M/S MMC Mardan
68	Dr Hafiz ullah	DMS Bannu
69	Kanwal Iqbal	SFC CESSD Peshawar
70	Dr Amin ul haq	DPC, LHW Program
71	Dr Syed Javed Husain	Shiffa International Hospital Islamabad (former MNA, Kurram Agency)
72	Dr Syed Arif Hussain	Health Systems Specialist
73	Dr Imtiaz Ali Shah	Coordinator HSRU
74	Ms. Shukria Syed	CESSD Peshawar
75	Dr Mohtasim Billa	
76	Aqeel Badshah Khattak	Deputy Secretary of Health
77	Dr M. Javed khan	Senior Advisor GTZ Peshawar
78	Dr Sardar Muhammad	D-DHO Abbottabad
79	Dr Ahmed Faisal	Health District Coordinator EPI Abbottabad
80	Dr Rafiullah Bangash	DRCS/GRC Health Program manager Peshawar
81	Sher Muhammad	Anesthesia teacher DHQ Swabi
82	Muhammad Irshad	District Operation Assistant Mansehra
83	Dr Ali Ahmed	Provisional Programme manager DHIS. DOH
84	Syed Muhammad Ilyias	CEO Paraplegic Center Hayatabad Peshawar
85	Dr Siddique ur Rahman	Project Manager(Save the Children) Batagram
86	Abdur Rashid	EDO Social Welfare Department Mansehra
87	Shahzad Naeem	Chief Executive Ayub Medical Institute Abbottabad
88	Dr Shahid Nisar Khalid	District Specialist Surgery Swabi
89	Ms Shakila Begum	Controller NEB, Peshawar
90	Dr Niaz Muhammad	M/S KAITH Mansehra
91	Dr Saeed Ijaz Ali shah	District Coordinator NP for FP & PHC Mansehra
92	Dr Mushtaq Ahmed Khan	TA, SHSR FATA/GTZ

93	Dr Khalid Mashood	Programme Officer GTZ Peshawar
94	Javed Ali	Press Reporter Peshawar
95	Dr Ayub Khan	EDO, Health Batagram
96	Dr Muhammad Azam Khan	Hepatitis Programme Peshawar
97	Pervez Akhtar	Health / Economist Peshawar
98	Khuram	National Programme Mansehra
99	Dr Raza Muhammad Khan	MTA Health System PRIDE
100	Akmal Minallah	PFM Advisor Provincial Reform Programme Project
101	Ivan G. Somlai	CESSD/CIDA
102	Dr Zia Ul hasnain	DOH Peshawar
103	Mobashar malik	UNFPA
104	Alexandra Pluschke	GTZ
105	Rahim Zada	CPO health Khyber PakhtunkhwaK
106	Saadiya Razzaq	HSSPU
107	Dr Muhammad Sohail K. Hashmi	PMDC
108	Dr Usman Raza	Peshawar Medical College
109	Dr Alamgir Khan Shinwari	Director Administration DGHS Health Department
110	Prof Shad Muhammad	Khyber Medical University
111	Dr Inam Ullah	UNICEF
112	Dr Muhammad Rahman	WHO
113	Dr Raza Zaidee	DFID
114	Dr Akhtar Said	Health Department
115	Dr Imran Khan	Deputy Director (IQHCS)
116	Dr Amber Ali	Chief Economist P&D Department Khyber Pakhtunkhwa

117	Aziz Khan Khattak	Additional Secretary of Health Department Khyber Pakhtunkhwa
118	Dr Muhammad Saleem Wazir	Ayub Medical College Abbottabad
119	Dr Shahid Pervaiz	DHO,HQ Punjab HD Rawalpindi
120	Dr Inam Ul Haq	World Bank
121	Naseem Firdous	Program Officer TRF
122	Imdad Ullah Khan	TRF

TRF is funded by UKaid from the Department for International Development and AusAID, and managed by HLSP