Third-Party Evaluation of the PPHI in Pakistan

Findings, Conclusions and Recommendations

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Sosec conducted the Health Facility and Household survey

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Disclaimer

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An evaluation of this size can only succeed through a team effort involving many people. It is impossible to include all of them here, so may we thank all those people inside and outside Pakistan who volunteered their time and their views to our evaluation, whether as key informants or interviewees.

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Being evaluated is not an easy task for those who have given so much time, effort and enthusiasm to build the PPHI organisation that is now under the lens. Throughout the assignment we could always count on Mr Jahangir Tareen, the person who launched the original PPHI concept and currently Chairman of the National Steering Committee of the PPHI. Mr Farooq Haroon, National Coordinator of the PPHI provided invaluable support and advice to the evaluation team beyond the call of duty. We are also extremely thankful to the PPHI team of Program Managers and District Support Managers and collaborators. They care about PPHI – wrong, they feel passionately about it, so we sincerely hope that this report meets their expectations.

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We had to overcome a few obstacles while undertaking the study: poor quality data, changes in the evaluation team, misunderstandings, but nothing compared to what millions of Pakistanis had to endure during the August 2010 floods which caught us in the middle of data collection. To them, to the millions of Pakistani people who deserve better access to basic health care we dedicate this report.

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Abbreviations and Acronyms

AN	Antenatal
ANC	Antenatal Care
ARV	Anti-Rabies Vaccine
ASV	Anti-Snake Venom
BHU	Basic Health Unit
CD	Cabinet Division
CMIPHC	Chief Minister´s Initiative for PHC
DG	District Government
DHA	District Health Administration
DHIS	District Health Information System
DDOH	District Department of Health
DOH	Department of Health
DSM	District Support Manager (PPHI)
DSU	District Support Unit (PPHI)
ENMOC	Emergency Neonatal & Maternal Obstetric Care
FLCF	First Level Care Facility
FLHC	First Level Health Care
FMO	Female Medical Officer (PPHI)
FP	Family Planning
FSU-PPHI	Federal Support Unit of PPHI
G-B	Gilgit Baltistan
GOB	Provincial Government of Balochistan
GOKP	Provincial Government of KP
GoP	Government of Pakistan
GoPunjab	Provincial Government of Punjab
GOS	Provincial Government of Sindh
HH	Household
HMIS	Health Management Information System
HSSPU	Health Systems Strengthening and Policy Unit
KP	Khyber Pakhtunkhwa
LHS	Lady health Supervisor
LHV	Lady Health Visitor
LHW	Lady health Worker
MIPSI	Ministry of Industry Production and Special Initiatives
MNCH	Maternal, Neonatal and Child Health
MO	Medical Officer
MOH	Federal Ministry of Health
MoO	Manual of Operations
MOPW	Federal Ministry of Population Welfare
MOU	Memorandum of Understanding
NN	Neonatal
NSC	National Steering Committee
OP	Out-patient
PDOH	Provincial Department of Health
PHC	Primary Health Care
PKR	Pakistan Rupee
PM	Program Manager (PPHI)
PN	Postnatal
PNC	Postnatal care
PPHI	People´s Primary Health Care Initiative
PRSP	Punjab Rural Support Programme
PSU	Program Support Unit (PPHI)
RHC	Rural Health Centre
RSP	Rural Support Programme
SRH	Sexual and Reproductive Health
SRSO	Sindh Rural Support Organisation
VfM	Value for Money
VP	Vertical Programme
WMO	Woman Medical Officer

Summary of key findings, conclusions and recommendations

This Volume of the Third Party Evaluation (TPE) of the People's Primary Health Care Initiative (PPHI) provides the main findings and recommendations from the study undertaken in the provinces of Sindh, Balochistan and Khyber Pakhtunkhwa (KP), and in 4 health facilities from Gilgit-Baltistan during 2010. Under the PPHI "model" District Governments contract the provincial Rural Support Programmes (RSP) to manage First Level Health Care Facilities (FLCF) in their district. PPHI has been implemented in over 60% of districts in Pakistan.

The main objectives of the Third Party Evaluation were to study and assess the changes caused by the PPHI as compared to the conventional management by the District Departments of Health (DDOH) with special reference to:

a. Utilization of first level care facilities, especially by the poor;
b. The range, volume and quality of services at FLCF;
c. "Community Participation" in delivery of services at and from FLCF;
d. Efficiency and effectiveness of management structures at all levels, from National to Provincial to District to Community level.

The TPE study measured results at three levels:

- in 76 Basic Health Units (BHU - the main and most common type of FLCF in Pakistan) and in 2,280 households located in the catchment areas of those BHUs (30 households per BHU);
- in 12 districts i.e. 4 districts in each province, combining PPHI and non-PPHI districts, using HMIS and PPHI data sources;
- in 32 PPHI districts, that is in all the PPHI districts that received the first transfer of funds from the District Government before 31st December 2007.

Impact Assessment

PPHI was launched to overcome the failure of many First Level Care Facilities in Pakistan to deliver PHC services through health facilities that were understaffed, poorly resourced and/or ineffectively managed. It is quite clear that in the districts where PPHI has been operating for the longest time (approximately 2 years since mid or end 2007 until January 2010) PPHI has achieved significant **improvements** in **staffing**, availability of **drugs and equipment** and **physical condition of facilities,** including rehabilitation and repossession of hitherto dysfunctional BHUs. Improvements have also been measured by this TPE in terms of **services delivered** from those facilities -summarised in Table form in Annex 2- such as:

- **Outpatient attendance** increased by 20% on average in PPHI districts and fell by about same in DDOH districts between 2007 and 2010 (with unexplained ups and downs in certain months). Significant increases in outpatient attendance were confirmed in the 32 oldest PPHI districts: in KP Outpatient attendance increased threefold, it doubled in Balochistan and increased by at least 25% in Sindh. The

number of outpatients seen by Female Medical Officers in PPHI BHUs increased five-fold in the same period.

- Attendance for **antenatal and postnatal care** services increased in PPHI districts when compared to the starting point, yet attendance figures for both PPHI and DDOH districts were found to be quite low when population estimates were used. For example, 80% PPHI and 86% DDOH BHUs reported fewer than 2 ANC users per day between January and March 2010. TT vaccinations to pregnant women were higher in DDOH BHUs, where 50% DDOH BHU reported 60+ vaccinations versus 10% in PPHI BHUs. On postnatal care 88% PPHI and 95% DDOH BHUs reported less than 1 postnatal case per day in the same period.
- In terms of safe delivery, the household surveys report a higher percentage of **deliveries performed by BHU staff** in PPHI districts (37%) than in DDOH districts (18%), although most of these deliveries took place at home rather than in BHUs. This was matched by an accompanying **reduction of births attended by unskilled birth attendants** in PPHI areas (59%) when compared to DDOH areas (71%). Quality of delivery care was given as main reason for using BHU staff in 60% of households from PPHI districts against 20% of households in DDOH districts.
- Availability of certain **diagnostics tests** (e.g. Malaria) and treatment for snake and dog bite was found higher in PPHI BHUs, which also conducted a larger number of **school and community health sessions** than DDOH managed ones.
- PPHI BHUs had slightly better **referral record keeping** practices, although much more can be done in both PPHI and DDOH districts to better follow up referred patients, particularly women in complicated delivery.
- Availability of **telephone** communications and **transport** arrangements was better in PPHI districts.
- Consumer satisfaction measured through **760 BHU exit polls** revealed that users had selected the BHU because it offered **better quality** of service than other providers at a rate of 47% in PPHI and 36% in DDOH BHUs. They also perceived better **drug availability** in PPHI BHUs (31%) than in DDOH ones (19%). In addition, 81% of users in PPHI BHUs stated that they had **received all the prescribed drugs**, versus 51% in DDOH BHUs. This was confirmed by household survey results.

All these improvements are very encouraging but are nowhere near enough, particularly when population denominators are used to assess service coverage, a practice that was seldom used by either PPHI or DDOH district managers. When catchment population estimates were used by the TPE it became apparent that utilisation of essential MNCH services remains low and that for reproductive health services is simply abysmal, in both DDOH and PPHI BHUs, so the room for improvement is huge if MDGs 4 and 5 are to be achieved.

The impact assessment exercise undertaken by this TPE revealed substantial limitations in the reliability of HMIS data, suggesting that a simple comparison between PPHI and DDOH BHUs was not always possible, particularly in the absence of baseline data[1] or simply

[1]Baseline data for some districts of KPK was indeed available but the TPE team could not use it as it learnt too late about its existence.

because 2 years of implementation[2] is probably not long enough to demonstrate unequivocal results at service delivery level. Therefore, information on impact should be interpreted carefully: data collected tells a story, but it may not always tell the full story. For example, our regression analysis suggests that the **PPHI BHUs are serving a higher proportion of poorer consumers** than DDOH BHUs, and while this reflects positively on the PPHI model it should be interpreted with caution given the modest sample size and quite a few confounding variables (location of BHU, distance to BHU, variations in poverty mappings within districts, etcetera).

PPHI funding and expenditure

The following issues have been highlighted in the section looking at the financing of the PPHI scheme:

- Funding for the PPHI programme comes from a number of sources – practice varies from province to province. Some provinces have demonstrated significant commitment to PPHI by devoting discretionary resources to the programme.
- PPHI funding only represents a share of total BHU spending. BHUs receive inputs from other sources including "in kind" flows. Individual BHUs do not keep separate accounts where all these inputs are included and therefore it was not possible for the TPE to get a comprehensive picture of funding at BHU level.
- There is a wide variation in resource allocations between districts irrespective of whether they are PPHI districts or not. In many cases funding appears way below what is required to deliver an essential health care package. Thus, much of the difference in performance between districts and facilities may reflect differences in per capita resource allocation rather than the impact of PPHI itself.
- PPHI districts have been accorded more flexibility in the use of district programmatic budgets, including the possibility to vire funds between salary and non-salary budgets. PPHI districts are also allowed to keep unspent yearly balances which DDOH districts are not authorised to do. As a result of the latter, some PPHI districts have been accumulating significant balances by carrying over unspent allocations from the previous year(s), in some cases over a year's allocation. It is not clear whether this represents a rational response to the additional flexibility provided to PPHI.
- Given the inability to get a comprehensive picture of inputs (staffing salaries, budget and national programme allocations and other allocations by external sources) and conclusive results in terms of improved outputs, a Value For Money assessment was not feasible as part of this TPE.
- Though private out of pocket spending is extremely high in Pakistan there is little evidence that financial cost - through official fees - is a significant barrier to access. Charges tend to be low – revenue raised is negligible. Only around 5% of patients cite financial cost as a major driver in their choice of facility.

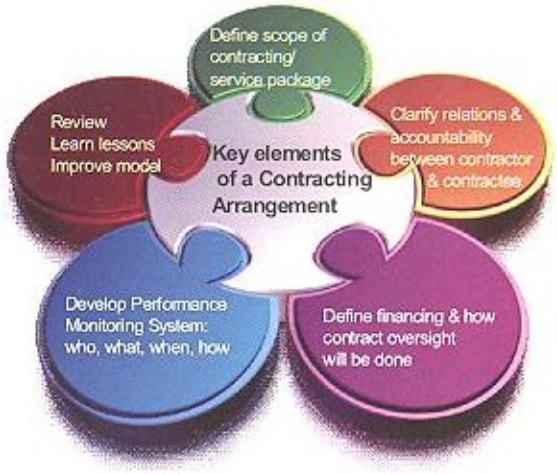
[2]Assuming an average of a year for PPHI to assess the needs, rehabilitate, staff and equip a BHU following the transfer of funds from the District Government, the first BHUs taken over by PPHI in 2007 only became fully operational in mid to late 2008. This means that impact on services measured even in the "oldest" PPHI BHUs and districts is often less than 2 years old by March 2010, the last measurement made for impact assessment.

The PPHI model and its implementation

The data collection methodology adopted by the TPE necessitated casting a wide net and applying a process of triangulation to arrive at best estimates. Even so, there are limits to what the empirical data can demonstrate, and much of this TPE has been concerned with evaluating the structure and process of the PPHI programme against what is being learned elsewhere about delivering primary care, institutional change and contracting. It is here, in fact, where action-oriented lessons are to be learned and hopefully applied to improve the delivery of services.

The most salient features relating to the PPHI model and the way it has been applied are the following:

- In its original design PPHI was conceived as a trigger for management reforms to improve PHC management by district and provincial departments of health. However, these reforms were neither defined nor implemented by either provincial or district governments and, as a result, the changes that were introduced by PPHI have not permeated into the relevant government structures.
- Key elements of a contracting arrangement (see figure) have not been operationally defined for PPHI in relation to, for example, the service package to be delivered, the institutional relations between contractor and contractee or the means to oversee contract implementation or performance monitoring of service providers. Deficiencies have been also observed in the technical competence of district and BHU managers affecting both PPHI and DDOH districts that would require a more robust approach to induction training and continued professional development of these cadres.



- The absence of performance monitoring arrangements (a framework) in the public sector is currently the main impediment for the GoP to assess the performance and the value obtained for the money spent through BOTH private and public service providers. The HMIS and DHIS should be the main instruments to monitor performance of service providers. Using the HMIS/DHSI would provide powerful incentives for improving the quality of its data.

Most shortcomings such of the ones above relate to the institutional context in which PPHI has been operating –one often characterised by suspicion and opposition by those who as per the MOUs and contracts should have been supporting it. The PPHI model has made important contributions to PHC delivery in Pakistan, demonstrating that it is possible to increase staffing levels and delivery of essential services within a relatively short period of 3 years. These improvements have also paved the way for introducing more accountability for service provision (subject to improved oversight and performance monitoring) and for bringing in additional service providers to the PHC network in Pakistan. At this point it is no longer a question of whether contracting can work for PHC, but about **how to make it**

work for improved PHC delivery using a well tested model covering more than 60% of districts in Pakistan.

Main recommendations

On the basis of our analysis we would like to make the following broad recommendations (more detailed, specific recommendations can be found within each section of Volume 1):

a. The institutional framework under which the PPHI and DDOH models operate should be reformed and strengthened along the lines suggested in Chapter 5. In essence, provincial and district health administrations should focus on overseeing the performance of service providers, whether these be public or private, and seek incremental improvements.

b. In PPHI districts the DDOH should be assisted to change its role to one of contractor (purchaser) focusing on performance monitoring of service providers. DDOH staff should acquire further competence in performance monitoring and provided with technical support to become informed purchasers (contractors). They should be rewarded for their success, first in completing their management training and subsequently for performance in public health indicators, thus encouraging them to get good results from service providers (the DSU in PPHI districts).

c. In PPHI districts, provincial governments and district administrations should consider the merits of allowing PPHI to take responsibility for the management of RHCs (on an incremental basis and linked to performance) so as to enhance the management of referrals and thus deliver a more integrated service package in the district.

d. Disease-specific programme staff integrated in the national programmes should plan and report monthly plans and activities at BHU level to achieve more effective integration of outreach and facility based services in BHU catchment areas. This would enable MOs in charge to become accountable for coverage with essential health care in entire catchment areas, not just at BHU level. There is no contradiction between being part of a national programme and reporting to the local BHU, as many preventive programme staff actually do in many countries.

e. The PPHI model relies on competent management and public health skills – skills different from those learned by the civil servants who have typically taken on the DSM roles and also different from the clinical skills of the doctors who are taking the MO or EDOH roles. Neither has received sufficient appropriate training to perform the functions expected of them and neither receives sufficient ongoing training and technical support. At national and provincial level, PPHI should now develop basic training and continued support packages for its district and facility level staff, and ensure that these are rolled out across the PPHI network. Delivering public health is a complex business and the medium term vision should be to develop a cadre of competent PHC managers in Pakistan (there are various examples and options for doing this from around the world). This will require investments in training and incentives for staff interested in becoming professional health care managers.

f. Experience from Batagram district, from other parts of Pakistan (the Aga Khan Health Services network) and from the rest of the world (Cambodia, Nepal, India and many more) suggests that as the contracting capabilities of the DDOH are improved the door should be opened to contracting other potential health care providers using similar arrangements to the PPHI scheme. The country is too

diverse and the delivery of PHC too complex to expect a single contractee to do it all. Under tight contracting arrangements, other NGOs could help reach those currently badly served.

g. Experimentation is needed in reward for performance and in DSUs networking with private sector providers (including TBAs) in their districts to improve their quality and the access to services by consumers. This might be achieved by employing a franchise-type model to supplement the work of its own staff – the RSPs do not have to employ all health care providers but might 'piggy back' on the investment that private skilled and unskilled workers have made and the credibility they have in their communities. Pakistan has the experience of working with PSI/Greenstar and Marie Stopes International in reproductive health services to build on.

h. The financing of PPHI is of great concern to the TPE (as are the very low levels of funding for PHC that were observed in many PPHI and DDOH districts during our study). Our concern related to the impact that resource shortages in PPHI districts would have on access to health care, particularly among poor women and children in rural Pakistan.

i. Funding from the federal government for PPHI was intended as a temporary measure and may now be directed to or shared by the provincial governments, following the 18th Constitutional Amendment, in which the funding of the entire PHC network is being revised. In order to avoid disruption to service delivery we recommend that the Federal Government should ensure that the management costs of PPHI are covered until such time as a definitive arrangement or formula can be put in place. More rather than less financial and technical support is needed now to embed the contracting arrangements and to develop management capacities.

j. The external development partners who support health care in Pakistan might prove key partners in these efforts to support and sustain PHC in the provinces. They are likely to be attracted by schemes such as PPHI where strengthened contracting could lead to various forms of performance based financing to deliver an essential health care package through the PHC network. In other words, the greater the performance orientation of the PHC network the more attractive it will be for donors, particularly large donors supporting the principles of Results-based Aid (RBA).

In its original conception PPHI was not only a contractual arrangement but a programme of public service change and reform that did not receive the support required for achieving that aim. PPHI must now be supported with change management and technical health skills, and become much more performance oriented to help Pakistan meet its health care needs including its MDGs 4 and 5.

This is a medium term and substantial programme of change that requires leadership but will be achieved and sustained if the right incentive structure is built for key participants. It is time for a change of gear, a restatement of the aims of the programme at the highest level, and a commitment to the basic model and its improvement.

1. Introduction

1.1 Report structure

This evaluation is submitted in three Volumes:

Volume 1 (this volume) is the main report containing all the main findings, conclusions and recommendations.

Volume 2 contains the programme and organisational research that supports Volume 1, specifically:

- The Approach and Methodology Section;
- The Provincial and District Assessments exploring programmatic issues linked to the implementation of the PPHI model;
- The Financial Management Assessments conducted at provincial and district levels to document resource flows for PPHI and discussing value for money and efficiency issues;
- The annexes containing the main data collection tools utilised by the evaluators.

Volume 3 contains the Survey results from 76 BHUs and 2,280 households from their catchment area (30 in each BHU) undertaken by SoSec Consulting Services.

1.2 Context

In the past two decades, Pakistan has made efforts in developing its Primary Health Care (PHC) in terms of access, coverage, and availability of services. However, this has not been matched by improvements in key health indicators which remain poor as compared to other South Asian countries.

Also the recently increasing national and international pressure on achievement of Millennium Development Goals (MDGs) has pushed governments to search for ways and means to address the existing inefficiencies and poor responsiveness of health care systems, especially of PHC service delivery and management, through the development and testing of innovative models.

The administrative set up of the health system in Pakistan comprises the federal, provincial and district levels. At the federal level the Ministry of Health (MOH) is responsible for policy, planning and coordination with bi-laterals, multi-laterals and international organizations. A number of vertical programmes such as: National Programme for Family Planning and Primary Health Care, Nutrition, TB Control and others are also under the overall management of MOH. Although the National Health Policy is formulated at the federal level, provinces and districts are responsible for its implementation. After devolution in 2001, provincial health department's roles and responsibilities include province specific policy formulation, standard setting and technical support in the areas of M&E, management and training of staff. The district level is responsible for management and provision of health care facilities through District Head Quarter Hospitals (DHQ), Tehsil Head Quarter Hospitals (THQ), Rural Health Centres (RHC) Basic Health Units (BHU); Mother and child Health Centres (MCH) and Dispensaries; the BHUs, MCH Centres and Dispensaries are commonly known as the First Level Care Facilities (FLCF). The districts are also responsible for prevention and control of infectious and contagious diseases, data collection, monitoring, supervision and planning.

1.3 Background to the evaluation

As part of the National Health Policy of 2001 and considering the inadequate functioning of the primary health care facilities, the policy suggested testing different models and building public private partnership for provision of health care services through the existing public health facilities. One such model was tried out in Punjab, under the Chief Minister's Initiative on Primary Healthcare starting in Rahim Yar Khan District in 2003. This model was evaluated in 2005 by the World Bank which showed positive results in terms of interalia, increasing the utilization rates of the facilities.

In 2005, the Federal Government launched a country-wide Programme, known as the People's Primary Health care Initiative **PPHI** (formerly known as President's Primary Healthcare Initiative) for improving the service delivery at first level care facilities (FLCFs). The purpose of this initiative was to strengthen the curative and preventive services provided in FLCFs, by handing over the management and finances of running the BHUs to the Rural Support Programmes (RSPs) in their respective provinces. The objective of the initiative was to re-organize and re-structure the management of all the BHUs in the district with a central role for community-based support groups.

Cabinet Division and the Ministry of Health, Government of Pakistan have commissioned this independent evaluation of the PPHI so as to assess its impact on the delivery of primary healthcare and to ascertain whether PPHI is a successful model for replication. The evaluation was expected to highlight successes and failures as the case may be, identify gaps and issues and formulate recommendations for consideration of various stakeholders.

1.4 Evaluation objectives

The main objectives of the Third Party Evaluation (TPE) are to study and assess the changes caused by the PPHI as compared to similar other innovations and the conventional management with special reference to the following broad areas.

k. Utilization of first level care facilities, especially by the poor and marginalized;
l. The range, volume and quality of services at FLCF;
m. "Community Participation" in delivery of services at and from FLCF;
n. Efficiency and effectiveness of management structures at all level from National to Provincial to District to Community level.

Recommendations will be formulated in light of the above, on improvements in the existing model and its future.

The **specific objectives** of the TPE are:

a. to assess the PPHI "model" in terms of its conceptualisation, design, organisation, governance, financing, implementation and monitoring arrangements at federal, provincial, district and facility levels;

b. to assess the impact of the PPHI at service delivery level by comparing results between PPHI and non-PPHI BHUs, with special reference to the following broad areas.

    a) Utilization of preventive and curative services;
    b) Increases in the range, volume and quality of services delivered, and in the numbers of staff available to manage the facilities from which those services are delivered;

c) Access to those services by the poor and marginalized;

d) Involvement of the community in the delivery of services;

e) Efficiency and effectiveness of management structures at all levels from National to Provincial to District to Community level.

A follow up to the evaluation to be undertaken by the Government of Pakistan on the basis of this Third Party Evaluation should be:

a. development of consensus on the clarity of roles of all the stakeholders;

b. development of the strategy for the future.

1.5 Management and reporting

The Third-Party Evaluation (TPE) was commissioned by the Government of Pakistan (GoP) through the Technical Resource Facility (TRF), an entity funded by UK Aid and AusAID that provides technical support to the Ministry of Health´s Maternal, Neonatal and Child Health (MNCH) programme. The TRF, in close coordination with the Health Systems Strengthening and Policy Unit (HSSPU) of the MOH, identified most of the national consultants. TRF/HLSP contracted national and international consultants, including the International Team Leader who directed and oversaw the entire evaluation study. TRF/HLSP also contracted SoSec, a survey firm based in Islamabad to undertake the BHU and Household (HH) surveys. UK Aid and AusAID provided the financial support to fund the evaluation.

The work of the evaluation team was overseen by an **Advisory Forum** acting as a steering committee and comprising the following members:

- Secretary Ministry of Health / nominee by the secretary
- Secretary Cabinet Division / nominee by the secretary
- National Program Director PPHI
- Chief HSSPU
- CEO RSPN
- Representatives from AusAID and DFID

The evaluation team were supervised on technical matters by a **Technical Review Panel** appointed by the TRF and comprising 3 members. The TRP helped review the study design, the first draft evaluation report and was kept informed of the implementation of the evaluation study.

1.6 Study Approach and Methodology

In order to keep this Volume 1 to the point we have included a complete methodology section in Volume 2. The following paragraphs are just an outline of the methodology used.

In terms of the scope of work, the TPE was primarily a Programme Evaluation, which combined a variety of research methods to assess the following two main areas:

a. An assessment of **the PPHI "model"** and its implementation in terms of its conceptualisation, design, organisation, governance, financing, implementation and monitoring arrangements at federal, provincial, district and facility levels; and

b. An assessment of **the impact of the PPHI at service delivery and staffing levels** by measuring and comparing service delivery and staffing results between PPHI and non-PPHI BHUs and districts.

The TPE has assessed different types of variables (some qualitative and some quantitative) at different levels of the system (federal, provincial, district, BHU and community), each of

them requiring different sample sizes and sampling frames. Tables 1 and 2 describe the main "components" of the TPE, the methods and sample sizes that were used, as well as the main deliverables from the evaluation. The components below are expanded further in the data collection tools (see Annexes 3-5 in Volume 2).

Table 1: Programme and financial management assessments at district, provincial and federal levels

Components	Issues to be covered	Sources, methods & sample
Programme assessment of PPHI from a **federal** perspective	The PPHI model: origins, launch and implementation country wide. Discussion of: policy objectives, governance, contractual arrangements, performance management, M&E, financial management, costs and financial flows, VfM, accountability and sustainability.	• Results from Provincial and District assessments • Internal PPHI documents & presentations • Complemented by selective Interviews • Situated in an international and national context through a literature review
Programme assessment of PPHI from **provincial** perspective	The PPHI model as implemented in each province. Discussion of: origins, launch and implementation, including discussion of policy objectives (MOU), governance, contractual arrangements, performance management, M&E, financial management, costs and financial flows, value for money (VfM), accountability and sustainability.	*Outputs:* • One study in each province using case study methodology, and one inter-provincial consolidated report. • One financial management assessment in each province, and one inter-provincial, cross-cutting consolidated financial management report. • Qualitative and quantitative factual information complemented by interviews • Guidelines for data collection in Annex 1C and 1E
Programme Assessments of PPHI in the **districts**	The PPHI model as implemented in each district: origins, launch and implementation, including discussion of governance, contractual arrangements, performance management, M&E, financial management, costs and financial flows, VfM, accountability and sustainability.	*Outputs:* • One study in each of 14 surveyed districts (2 PPHI and 2 NON-PPHI districts in each province + 2 in G.B) using case study methodology. • One inter-district consolidated report per province • Two district financial management assessments per province, one in a PPHI district and another in a non PPHI district. • One inter-district financial management report • *Note* sampling issue in Balochistan where all districts are PPHI managed. Hence we divided the sample into 2 new and 2 old PPHI districts, in an attempt to maximise differences before and after PPHI • Qualitative and quantitative factual information complemented by

Components	Issues to be covered	Sources, methods & sample
		interviews • Guidelines for data collection in Annex 1D and 1E.

Table 2: Impact Assessment measured at BHU, household, district and provincial levels

Components	Issues to be covered	Sources, methods & sample
Impact of PPHI at Service Delivery & staffing levels measured at **district** level in 14 districts	• Changes in staffing and in a group of selected services measured in the 14 surveyed districts (50% PPHI and 50% no PPHI) since August 2007. • Cut-point measurements to be made in: August 07; January & August 2008; January & August 2009; January 2010.	• Sample: the 14 surveyed districts (50% PPHI and 50% no PPHI) • Source of data will be the district HMIS/DHIS • In PPHI districts data will be cross-checked with data kept by PPHI in their monthly consolidated reports. • Types of services to be covered included in Annex 1G
Impact of PPHI measured in 78 **Basic Health Units**	• Physical condition of facility • Staffing, equipment and stock of drugs • Volumes of selected services in last 3 months • Indirect measurement of quality of services (service protocols in use? Citizen charter? Etc). • Perceptions of quality of services through exit interviews	• Systematic survey using **health facility questionnaires** that combine direct observation, checking facility data and interviewing key personnel. • Average stay of survey team in facility: 3 days • **Exit interviews** of 10 patients (purpose sampling to women and children) to be interviewed in each facility over 3 days • BHUs in each district to be selected randomly but those located at less 3 km from a tehsil or district hospital will be excluded and an alternative BHU will be chosen.[3] • Sample size is 78 BHUs: 12 districts x 6 BHUs per district = 72 + 6 districts in G-B = 78 BHUs • Calculation of sample size in Annex 1F • Questionnaires for BHU survey and exit interviews in Annex 1H
Impact assessment of user perceptions measured in **30 household**s in the BHU catchment area	• Perceptions of quality of care offered at BHUs and of improvement in quality • Health seeking behaviour • Health and hygiene practices • Impact of community work undertaken from BHUs	• Systematic household survey using standard questionnaire • Sample: 30 HH per BHU – stratified in 2 groups as per distance of HH from BHU:15 closer & 15 far. • All 2,520 households to be covered (14 districts x 30 HH =2520. • HH Questionnaire included as Annex 1I

[3] The intention is to focus on those BHUs that the population are more likely to use rather than by-pass in favour of higher level hospitals. Since this is done for all BHUs (PPHI/non PPHI) no bias is introduced for comparison purposes.

2. Introduction to the PPHI model

This section introduces the PPHI model. It draws upon the assessments that were undertaken by evaluators at federal, provincial and district levels and contained in Volume 2 of this report. For reasons of brevity, the description of the PPHI initiative, its organisation and management is kept to a bare minimum. The objective is to introduce the PPHI to those less familiar with it. A critical analysis of the PPHI will be undertaken later in this report, in section 5.

2.1 Coverage by the PPHI model

In 2005, the Federal Government launched a country-wide Programme, known as the People's Primary Health Care Initiative **PPHI** (formerly known as President's Primary Healthcare Initiative) for improving the service delivery at first level care facilities (FLCFs). The purpose of this initiative was to strengthen the curative and preventive services provided in FLCFs, by handing over the management and finances of the Basic Health Units (BHU – the main type of FLCF in Pakistan) to the Rural Support programmes (RSPs – see below) in their respective provinces. The objective of the initiative was to re-organize and re-structure the management of all the BHUs in the district with a central role for community-based support groups.

Currently (by March 2010) the PPHI model covers 2,392 BHUs out of a total of 5,310 BHUs (Economic Survey 2008-09) in the country.

Table 3: Coverage of PPHI at the Provincial & District Level at March 2010

Province/Area	Districts (BHUs)	Districts with PPHI	BHUs in PPHI Districts	Other HFs with PPHI
Sindh	23 (788)	19	553	1 RHC, 381
NWFP/FATA	31 (956)	14	424	-
Balochistan	30 (559)	30	554	4
Gilgit Baltistan	7 (17)	7	17	123 Civil Hospitals = 2
Punjab – CMI	36 (2455)	12	844	200
AJK	8 (203)	Not yet started	-	-
Total	**135 (4978)**	**82**	**2392**	**710**

Source: FSU of PPHI – Cabinet Division in March 2010

Rapid expansion: PPHI underwent a very rapid expansion between 2007-2010 to the extent that, today, PPHI manages FLCFs in 60% (82 out of 135) of districts in Pakistan, which is equivalent to PPHI managing 48% (2,392 out of 4,978) of all first level PHC facilities in Pakistan.

Rural Support Programmes – RSP: The PPHI model is being implemented by the Rural Support Programmes (RSPs) in respective provinces and districts. Rural Support Programmes are provincial organisations to deliver development services in several sectors. In terms of legal status an RSP is a Guarantee Limited company. All RSPs were created by Provincial Governments from whom they received initial (seed) funding through endowment grants. Typically an RSP is managed by a Board of Directors comprising about 10-12 board members, of whom only 2-3 are government servants while the rest are private professionals. The overwhelming majority of funding for RSPs comes from

government, with a small proportion coming from donors or from other development organisations for specific purposes.

Contractual agreements outlining the terms of conditions and services to be provided by the BHUs (preventive and curative) have been signed between the respective RSPs and District Governments in Sindh, Khyber Pakhtunkhwa (KP) and Balochistan. A similar agreement was executed in Gilgit Baltistan. Before district contracts were launched a Memorandum of Understanding was signed between the Provincial Government and the RSP, as a general framework for the PPHI in that province. A discussion of these contractual instruments will be provided later in this report (section 5).

For RSPs the PPHI is one among several programmes and initiatives that they implement with government funding. In order to make the PPHI operational RSPs have established Program Support Units (PSU) and District Support Units (DSU) at provincial and district levels respectively for oversight and management of PPHI inputs and processes. Until 2010 the running costs of the PSUs and DSUs has been borne by the Federal Government.

2.2 How was the PPHI Model Launched?

PPHI was formally launched on 6th October 2005, by a decision taken by the then President and Prime Minister of Pakistan. This initiative intended to replicate, in all provinces, two successful "experiments" or pilots that had been launched in the Lodhran and Rahim Yar Khan districts of Punjab in 1999 and 2003 respectively, and which had then been rolled out to 12 additional districts in Punjab (covering 1,049 FLCFs) under the auspices of the Chief Minister's (of Punjab) Initiative for Primary Health Care (CMIPHC).

Three main decisions were taken by the Government of Pakistan (GoP) about PPHI in order to launch and scale up this initiative:

a. **A phased roll out was planned:** PPHI was to be extended to all other provinces, and to all districts, of the country in a phased manner;

b. **Responsibility for managing costs**: The cost of the provincial and district support units required to manage the PPHI were to be borne by the Federal Government which would also provide funds for a one-time upgrading /rehabilitation of BHUs in PPHI areas;

c. **District Health Management Reform & Long Term Vision**: District health management structures were to be re-engineered in the light of the experience of the initiative under implementation, with a view to BHUs run via the PPHI being eventually returned to a reformed district health management structure.

The initiative was launched in the provinces of Balochistan, North West Frontier Province *(now* known as Khyber Pakhtunkwa - KP) & Sindh during 2006, while contracts between PPHI and District Governments were only signed and transfers of funds only made from mid 2007.

With regard to PPHI's fit within the structure of the federal level of the GoP, the initiative was initially housed in what was then known as the Ministry of Industries, Production and Special Initiatives, to be later transferred to Cabinet Division, where the PPHI is officially housed to this date. The modus operandi for the PPHI implementation followed a similar pattern in the three provinces under study. In essence:

- **Memorandum of Understanding (MoU) Signed**: An MoU was signed between the respective Provincial Departments of Health (DoH) and the Rural Support Programmes (RSP) operating in each province.

- **District Department of Health Decide about First Level Care Facilities:** Following the signing of the MOU, District Governments could also chose whether to continue with the traditional management of their First Level Care Facilities (FLCF) by the District Department of Health (DDOH), or opt for these to be also included and covered by the PPHI model.[4] Irrespective of the decision taken by District Governments at that time, they retained this choice going forward.

2.3 Organisation & Management of PPHI

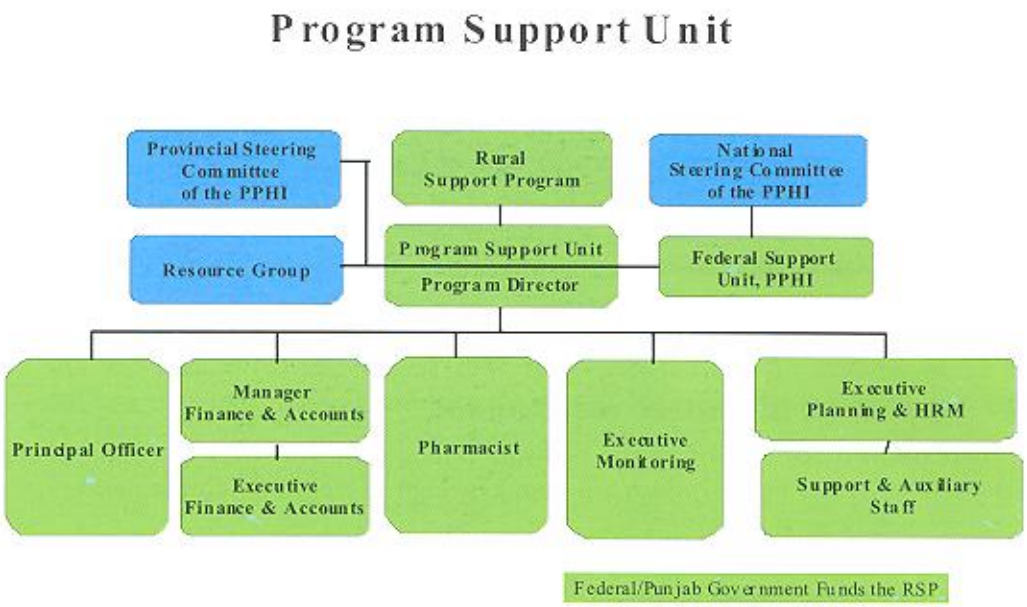
PPHI is guided by its Manual of Operations (MoO), a document that is regularly updated and defines the main tasks and functions to be performed by the organisation, its staff, as well as its main governance, support committees and structures. The January 2010 version of the MoO provides what the evaluation team considers sufficient and clear information and detail on the following:

- Vision, mission and objectives of the PPHI;
- A definition of Primary Health Care with an outline of the curative, preventive and promotion services usually included (3 fields and 8 components are mentioned) under such a definition;
- The role of principal governance structures, including: the National and the Provincial Steering Committees; The Federal, Program (Provincial), Regional (sub-provincial) and District Support Units;
- Roles and responsibilities of key PPHI cadres, including: The National Program Director; the (provincial) Program Director; the Regional Program Director and the District Support manager;
- Roles of the Resource Group, a group of "distinguished health professionals" to be appointed at both national and provincial levels to "provide guidance to the PPHI operations appropriate to their specialties" MoO 2010 p.16).

Figures 1 - 2 show the management and organisational structure of PPHI at the provincial and district levels.

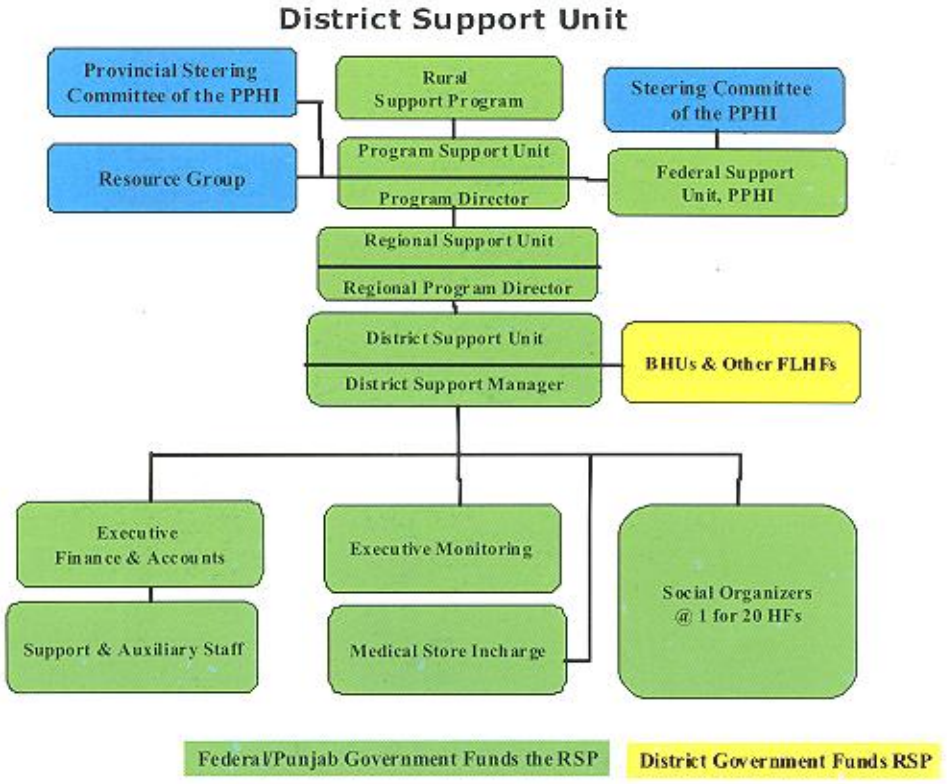
[4] It is not clear to the evaluators the extent to which District Governments were always given a choice. During our district and provincial interviews in Balochistan and Sindh, some interviewees referred to pressure on the district governments from sections of the provincial government to adopt the PPHI.

Figure 1: PPHI Organisation at the Provincial level



Source FSU of PPHI, March 2010

Figure 2: PPHI Organisation at the District Level



Source FSU of PPHI, March 2010

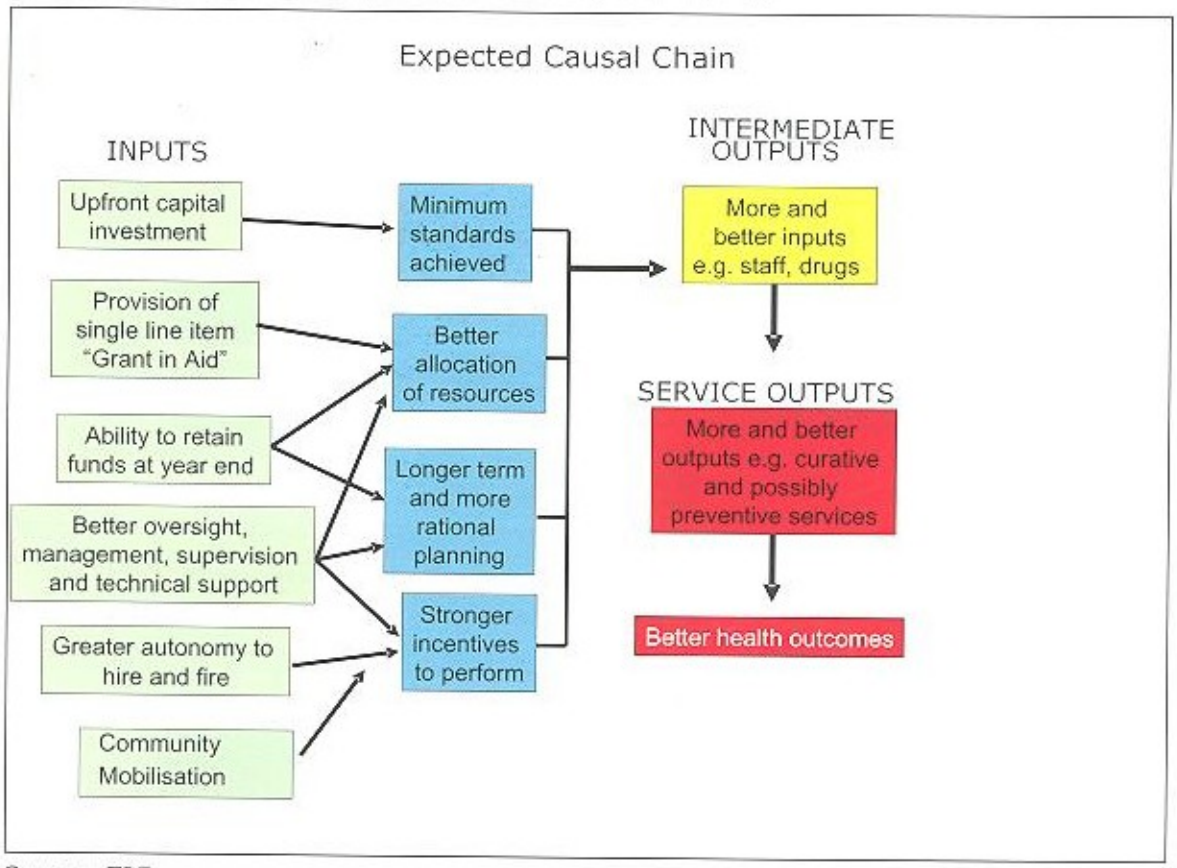
3. Impact of PPHI: staffing, services and client satisfaction

The Third Party Evaluation (TPE) team begins the evaluation by presenting, in this section, the impact of the PPHI model. Following a brief description of our approach to impact assessment and of the limitations of this part of the evaluation we begin by looking at changes brought about by PPHI, first at the level of inputs (staffing, drugs, equipment, physical condition of BHUs, etcetera) and then at output level (Out-patient, preventive and other types of health services offered in the BHUs. This section concludes with a look at perceived quality standards and other issues brought by the exit interviews conducted in BHUs and by the household survey.

3.1 Approach to impact assessment

The chart below maps out the causal pathway through which PPHI is expected to improve the availability of key inputs, which are then expected to contribute to the delivery of more and better quality services.

Figure 3: Expected causal chain in PPHI implementation



Source: TPE

The TPE team attempted to measure the impact of the PPHI by combining three approaches to impact assessment:

a. **BHU Survey**. Firstly, we attempted a comparison of PPHI facilities with non PPHI facilities in 78 BHUs from 14 districts.[5] For this we measured service data available at the BHU for the months of January, February and March 2010. We also measured the same service data from the BHU records for the 3 days during which the survey teams were in each BHU.

b. **District level HMIS data**. Secondly, we measured the same services as in (a) and the staffing information that were available in the HMIS or DHIS records from each of the 12 target districts in Sindh, KP and Balochistan. This measurement was made at 6 cut-points: August 2007, January and August of 2008 and 2009, and January 2010.

c. **PPHI provincial and district data**. Finally, we measured the same services as in (a) and (b) above in the PPHI monthly consolidated reports for the same months and years as in (b) i.e. August 2007 to January 2010. We covered all 32 PPHI districts that had received the first transfer of funds from the district level before 31 December 2007. This way of selecting the districts aimed to maximise the time under PPHI management for impact -positive or the lack of it- to be more prominent. This measurement was not included in our original study design: we decided to do it rather late during the analysis of data in order to get a better complementary picture of services delivered in the oldest districts in each of the provinces, hoping that a larger sample size of PPHI districts would offer a better picture of outputs that our modest sample size in the BHU survey permitted.

Table 4: Summary approach to PPHI impact Assessment

Components	Methods (who responsible)	Sample size	Type of Information
BHU Organisational Assessment	• Interviews & Documentation • (SoSec)	78 BHUs* (24 per province + 6 G-B)	How BHU work is organised
BHU Service Delivery Assessment	HMIS/DHIS in Jan, Feb, Mar 2010 & in 3 days of visit by survey teams (SoSec)	78 BHUs*	• Services & staffing data • User perceptions of quality
	10 Exit Interviews per BHU (SoSec)	760 Exit Int.	
Community Level Assessment	Household survey 30 HH per BHU – 15 closer & 15 far (SoSec)	2,280 households were surveyed	Perceptions of service – pattern of use
District Level Assessment	HMIS/DSU records on services in selected months: (SoSec)	12 Districts: 8 PPHI -4 DDOH	Services & staffing data

* 76 were covered, 4 instead of 6 in G-B, because of floods

[5] In the end, because of the August rains and floods we could only cover 4 out of 6 targeted BHUs in the only 2 districts of Gilgit-Baltistan where PPHI is operating. Therefore, the total number of surveyed BHUs was 76 instead of the 78 originally targeted BHUs.

The impact assessment has to be carefully interpreted, for none of the three approaches above taken in isolation offers a full picture, and also because each of them has its own limitations linked to the quality and scope of the data. Therefore, we have presented the main findings by theme, and included under each theme the combined result of the three impact assessments undertaken. For clarity of readers each impact assessment will be coded differently, as follows.

3.2 Limitations of the Impact Assessment

The following is a summary of limitations of the Third Party Evaluation study that pertain specifically to the impact assessment:

Absence of baseline data to compare PPHI and DDOH models. To assess differences between the PPHI and DDOH models baseline data should have been collected at origin for both models. In the absence of baseline data we used cross sectional measures for services and staffing at selected "cut point" months, but this approach has limitations as it cannot show improvements but simply increases or reductions in frequencies measured.

Reliability of data, particularly HMIS data. We observed different HMIS data compilation and storage practices in provinces & districts, and a general absence of data quality assessments affecting both PPHI and HMIS data. We think that these factors are responsible for a number of unexplained fluctuations in recorded services.

Difficulty to establish population denominators. We observed that catchment populations to calculate service coverage were neither used nor known in either DDOH or PPHI BHUs. Without population denominators it is hard to assess if services delivered were high or low in relation to each BHU, since their catchment populations are known to vary considerably. In some cases we tried to mitigate this fact by estimating average population sizes, but such information should be taken only as indicative.

Implementation time in some districts. While we tried to use the older PPHI districts for the BHU survey (to maximize the chance of impact) this was not always possible as other sampling characteristics were to be met as well. Less implementation time by PPHI would reduce the chance of measuring changes, particularly among BHUs taken over by PPHI less than 2 years ago.

No "non-PPHI" (control) districts in Balochistan. In difference with Sindh and KP there are no "Non-PPHI" districts (also called DDOH in this study) in the case of Balochistan, because all districts in that province have been transferred to PPHI. In the absence of DDOH districts the evaluation team selected 2 "new", recently taken over PPHI districts in Balochistan (Lasbela and Qilla-Saifullah) as a pseudo-control group. The intention was to assess if significant differences in terms of impact could be noticed between the old and the new PPHI districts.[6] This point should be born in mind when interpreting the BHU survey and district data.

Self-exclusion of Punjab PRSP from the study. The Punjab PRSP decided to exclude itself from the TPE and communicated this decision to the TPE in May. Efforts were made by the Advisory Forum during the month of June to bring the PRSP back into the study, but these did not change the PRSP decision. At this point it was too late for the TPE team to adapt the design to the new circumstances. Exclusion of the PRSP implies that the results

[6] Therefore "PPHI OLD" or simply "PPHI" in the tables refers to all the PPHI districts in Sindh and KPK, and to the 2 "old" districts in Balochistan.

of the TPE may not be generalized to the entire country or to the Punjab. The TPE regrets the auto-exclusion of the Punjab PRSP as Punjab has the longest data series (beginning in 2005) which would have enabled the team to look at changes over 4-5 years, instead of 2-3 years as in the remaining provinces.

3.3 Impact on staffing levels

Approach to attraction and retention of BHU staff by PPHI

One of the reasons why the PPHI was launched was the difficulty experienced in government BHUs[7] to attract and retain the right type of human resources, particularly Medical Officers (MO) and Lady Health Visitors (LHV). In Pakistan there is usually one MO and one LHV position sanctioned for each BHU. When in post and available, the MO is the person in-charge of the BHU. S/He supervises the rest of the staff based at or operating from the BHU (e.g vaccinators) and runs the Out-Patient (OP) duty. If the MO happens to be a woman (WMO in the government denomination and FMO if contracted by PPHI) she will also deliver most mother and child health services together with the LHV. In the absence of a female doctor in the BHU the LHV deals with all the maternal and female health matters. In the absence of a MO in the BHU it is the LHV who may run the OP services, even though her primary responsibility is to deliver MNCH services and to oversee their delivery by village-based staff such as Lady Health Workers (LHW) and their supervisors (LHS).

PPHI can hire any staff on contract including medical officers, LHVs, paramedics (technicians) and ancillary staff. PPHI´s approach to increasing staffing levels has focused primarily on MOs and LHVs. In the case of **Medical Officers,** PPHI is allowed to contract Medical Officers, while it also manages government MOs based in PPHI BHUs that chose to stay when the BHU becomes managed by PPHI. MOs operating in PPHI facilities get salaries similar to those of their counterparts in non PPHI districts (see section 4 later in this report) but they also receive attractive salary complements if they manage more than one BHU i.e. a "cluster" of BHUs. Thus, MOs working across a cluster of two or three health facilities would earn around twice as much as a government doctor managing just one facility. The cluster model is exclusive to PPHI BHUs. In the case of Medical Officers (MO) the principle of higher pay when covering a cluster of BHUs applies regardless of whether MOs are contracted by PPHI or are existing government doctors operating in a PPHI facility.

PPHI has also been able to appoint Female Medical Officers (FMO) for a cluster of up to five facilities with a salary range of Rs. 35,000 to 50,000 (which is much higher than the standard salary of a female MO in the government system).

Additionally, all staff –whether employed by PPHI or by the government are entitled to Hard Area Allowance in a PPHI district. Hard areas in each province have been categorized as Category-I and Category-II. Medical officers posted in Category-I BHU get Rs.10,000/month and paramedics get Rs. 5,000/month. In Category-II BHUs a medical officer gets Rs. 5,000/month and paramedic Rs. 2,000/month. In non-PPHI districts such allowance or its replacement is not available.

[7] Among the various types of first level PHC facilities in Pakistan only Basic Health Units (BHU) and Rural Health Centres (RHC – a primary level referral facility) are expected to be staffed by medical officers. It must be noted that as a general approach PPHI has only been handed over the management of BHUs, and not RHCs. The impact of this decision is further discussed in section 5 of this report when reviewing referral practices.

Availability of Medical officers in PPHI BHUs

Our key findings suggest that PPHI has had considerable success in attracting additional Medical Officers to BHUs. For example:

a. MOs are found in many BHUs that were not operational when PPHI took over that district (see tables in section 3.5 showing numbers of BHUs that were not operational when PPHI took over).

b. The number of MOs in PPHI BHUs increased by more than half between August 2007 and January 2010 in the sample districts whilst the number in non PPHI districts declined by around 10% (Source: HMIS/DHIS data in 12 sample districts).

c. The proportion of sanctioned MO posts filled in PPHI BHU increased from just over 60% to around 80% over the period 2007-2010; in DDOH districts it fell from 80% to around 70% (Source: HMIS/DHIS data in 12 sample districts).

Figure 4: Proportion of Sanctioned MO posts filled

(including WMOs)

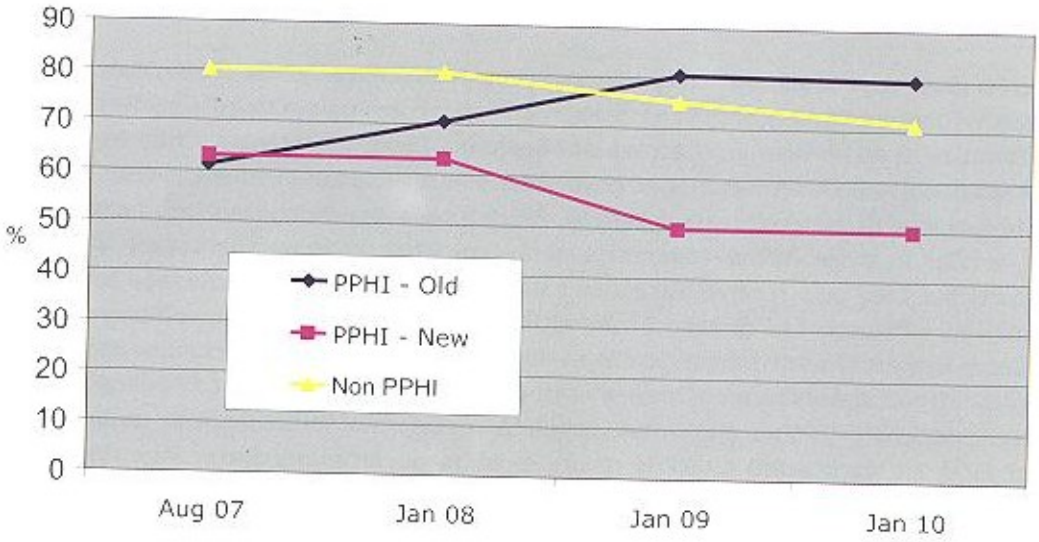
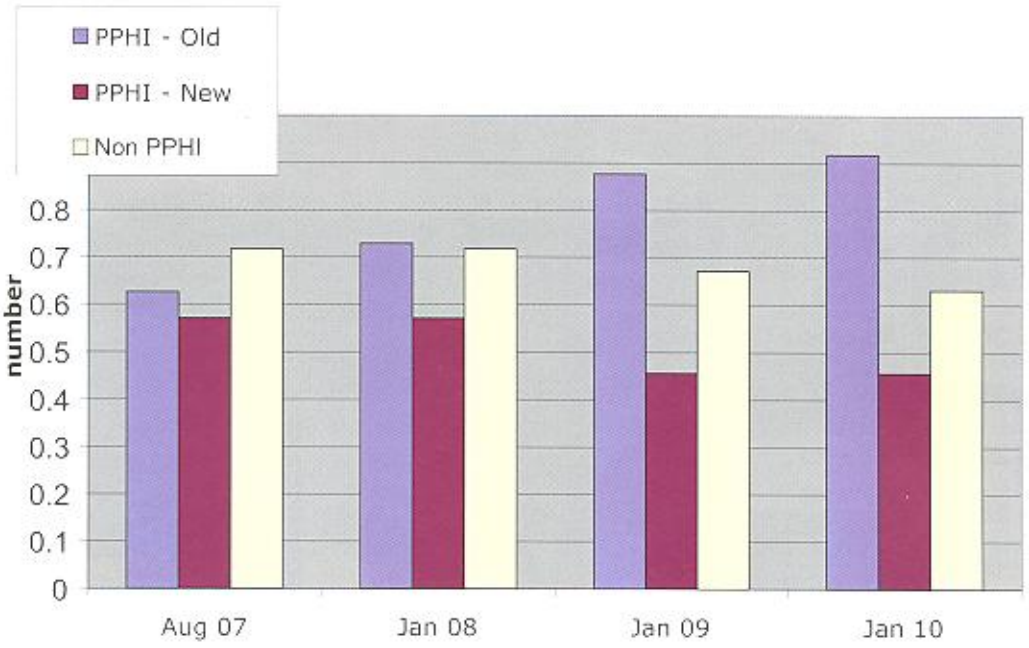
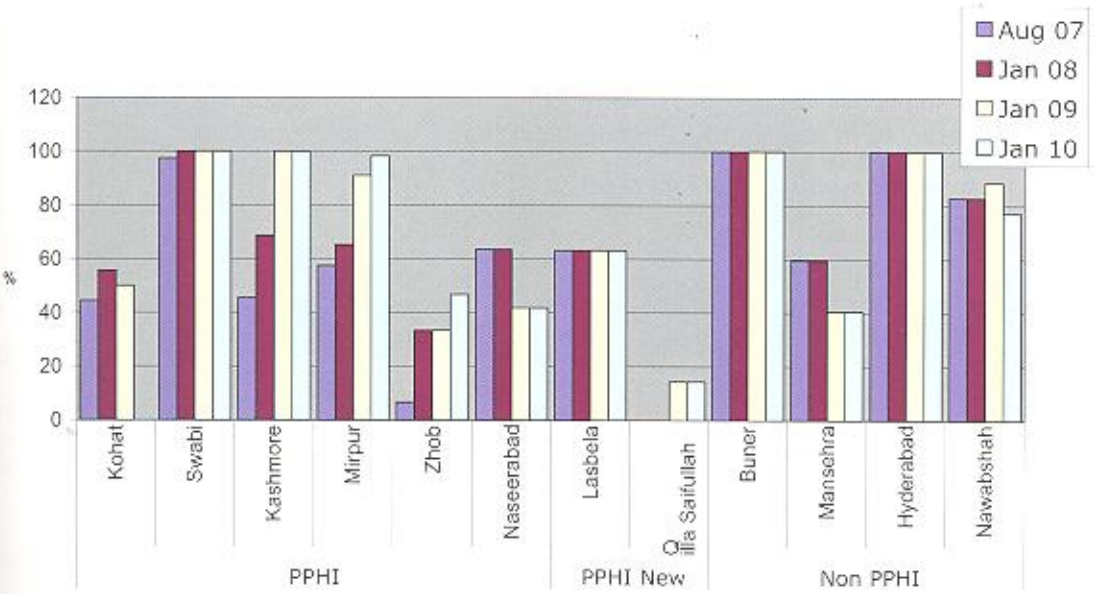


Figure 5: Medical Officer per BHU



According to the data from sample districts, in August 2007 there were around 12% less MOs per BHU in PPHI districts – by January 2010 there were around 45% more. The picture is, however, quite mixed with wide variations within PPHI districts and within DDOH districts, and between them.[8]

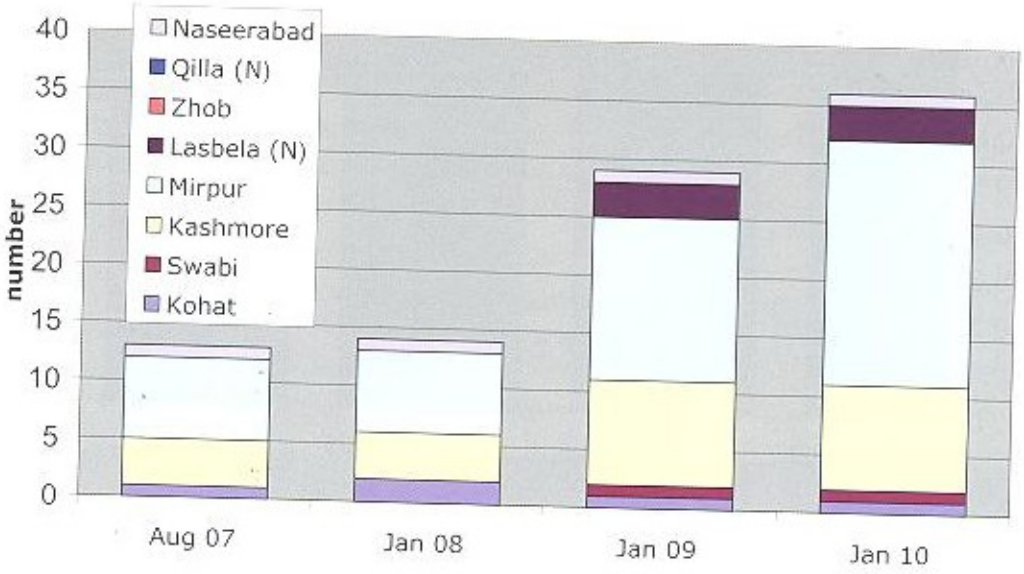
Figure 6: Proportion of Sanctioned MO Posts Filled



[8] For terminology "old" and "new" PPHI districts please refer to 3.2 – limitations in relation to Balochistan.

d. PPHI has led to considerable increases in the number of FMOs (we cannot compare to non PPHI because FMO is a PPHI specific cadre).

Figure 7: Number of FMOs in PPHI Districts



Overall, there is little detectable difference in staffing levels between PPHI and DDOH managed BHUs when comparing numbers of allocated posts with numbers actually filled (Table 5 below). However, this finding should be interpreted with care given the point made earlier (see point a) that when PPHI took over the districts a significant number of BHUs were not operational. Therefore, the fact that staffing numbers became similar by 2010 would reflect positively on PPHI efforts to staff previously dysfunctional BHUs with an MO.

e. Staffing levels are still inadequate across the board. In Sindh province the differences in staffing ratios are less noticeable and still quite low.

Table 5: Average numbers of key staff per BHU

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
numbers of staff									
MO/ WMO	10	12	12	17	7	4	4	33	33
FMO	3	0	12	0	1	0	2	18	-
LHV	12	11	7	9	12	9	4	35	29
Paramedic/ Tech	29	19	16	10	23	23	11	79	52
Midwife/ Dai	12	11	13	9	9	10	6	40	30
average staff per BHU									
MO/ WMO	0.8	1.0	1.0	1.4	0.6	0.3	1.0	0.8	0.9
FMO	0.3	-	1.0	-	0.1	-	0.5	0.5	-
LHV	1.0	0.9	0.6	0.8	1.0	0.8	1.0	0.9	0.8
Paramedic/ Tech	2.4	1.6	1.3	0.8	1.9	1.9	2.8	2.0	1.4
Midwife/ Dai	1.0	0.9	1.1	0.8	0.8	0.8	1.5	1.0	0.8

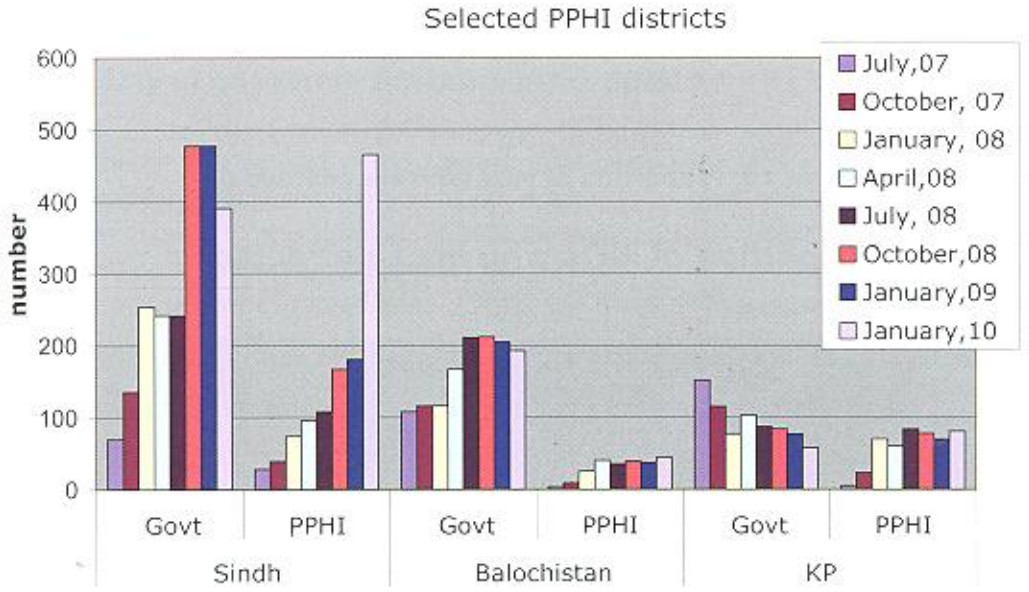
Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: BHU Survey, measurement as in January 2010

f. The chart below shows the composition of Medical Officers in PPHI districts by employer. It illustrates once again the diversity of patterns that can be observed within the PPHI model in each of the three provinces. For example:

- In KP the number of government doctors working in PPHI BHUs has decreased since 2007 while the numbers of PPHI contracted doctors increased;
- In Sindh there has been a marked increase in the numbers of both government paid and PPHI contracted doctors. This can be explained by the large number of Female Medical Officers who have been contracted out by the PPHI in Sindh.
- In Balochistan numbers of both government doctors and PPHI contracted doctors have increased, but much more slowly than in Sindh, suggesting – perhaps- more difficulty to recruit from the medical profession in that province.
- We should interpret all these figures with care as they correspond to absolute numbers of MOs without adjusting by the numbers of BHUs managed by PPHI at each cut-point in our cross sectional analysis. In sum, PPHI is attracting more contracted doctors, and while the numbers of government paid doctors is decreasing they still represent a substantial part of the workforce in all provinces.

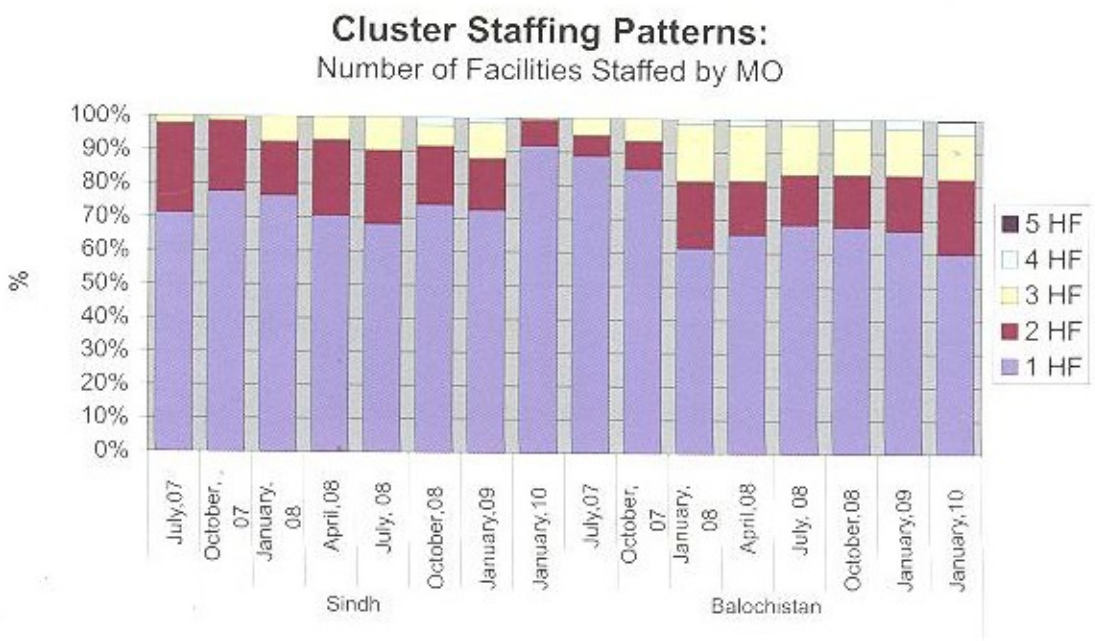
Figure 8: Medical Officers by type of contract by Province



g. How widely is **clustering** used by PPHI? In terms of how staff are used, the chart below shows the number of facilities covered by a medical officer. It shows that, whilst in most cases a medical officer covers a single facility in some cases they cover a cluster of facilities – sometimes up to 5. (5 HF = a medical officer covering 5 BHUs). The chart shows that Balochistan has generally made more use of a cluster approach (one MO covering more than one BHU) with MOs covering 3 BHUs

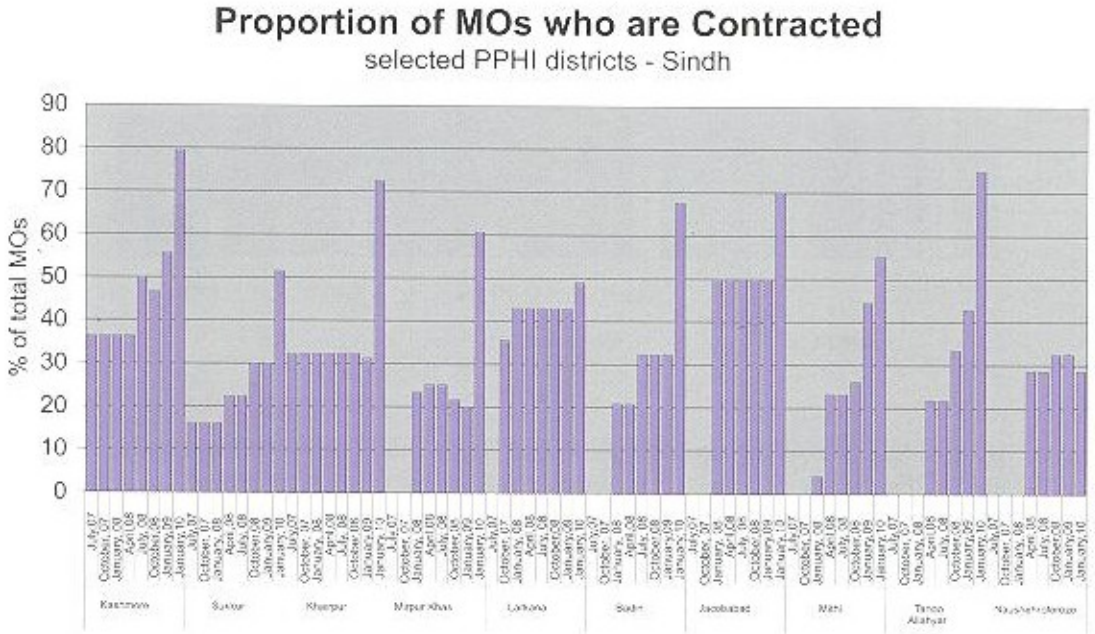
in around 15-20% of cases. In Sindh, in over 90% of cases one MO covered a single BHU by January 2010

Figure 9: Cluster Staffing Patterns



h. Use of contracting also varies considerably by district but has generally been increasing – especially in 2009. The chart shows the proportion of medical officers who have been contracted through PPHI (rather than being Government employees) over time in a range of facilities in Sindh province.

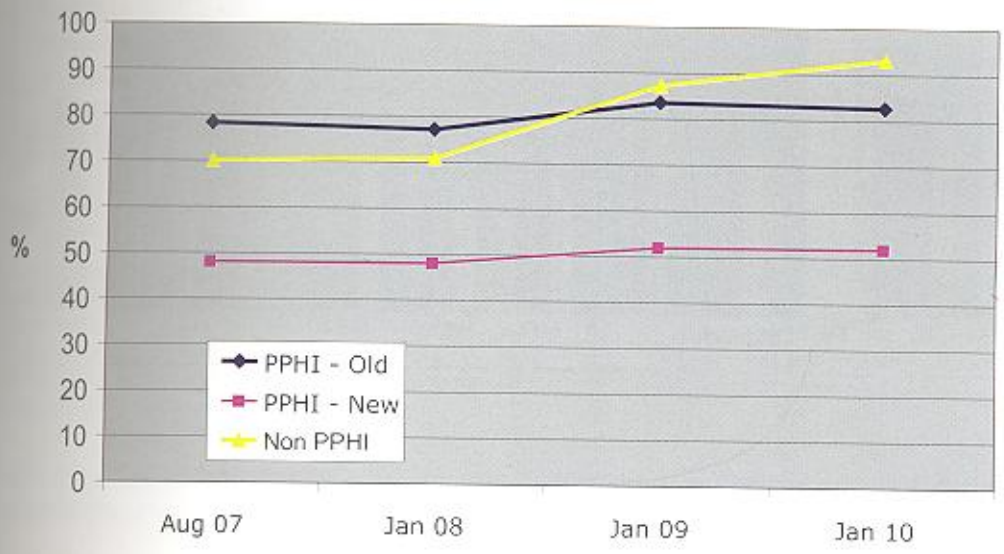
Figure 10: Proportion of MOs who are contacted



Availability of LHVs

For LHVs the picture is rather different than for MOs since non PPHI districts seem to have had more success in filling sanctioned LHV posts. There may be several explanations for this fact, one of them being that LHVs may be more attracted by a government position than by the (temporary) contract offered by PPHI, but we are unsure of the precise reason for this difference. (Source: 12 sample districts)

Figure 11: Proportion of Sanctioned LHV Posts Filled



Availability of all staff in the older PPHI BHUs

As shown in the chart below there appears to have been some improvement for some cadres (though not others) in the proportion of posts filled in the 32 older PPHI districts, though there is significant variation between types of staff and between provinces. In Sindh, for example, the number of MOs in post has consistently been above 80% of sanctioned posts and had increased to above 100% by January 2009. In Balochistan less than half MO posts have been filled. In KP the number of government funded doctors in BHUs has decreased

Figure 12: Proportion of Sanctioned Posts Filled

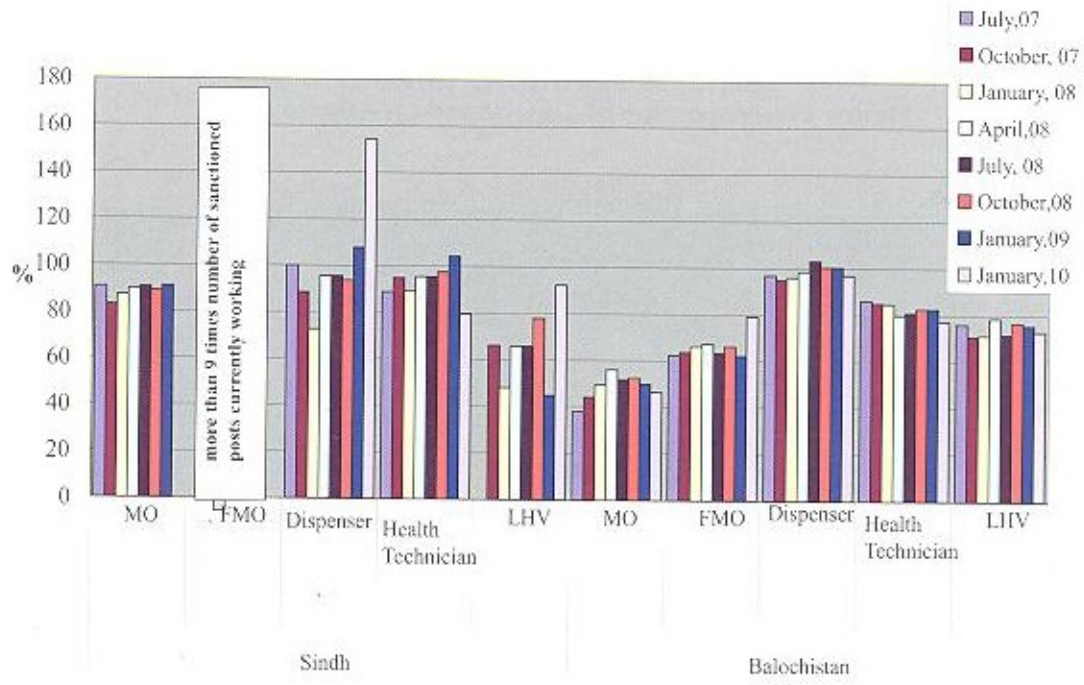
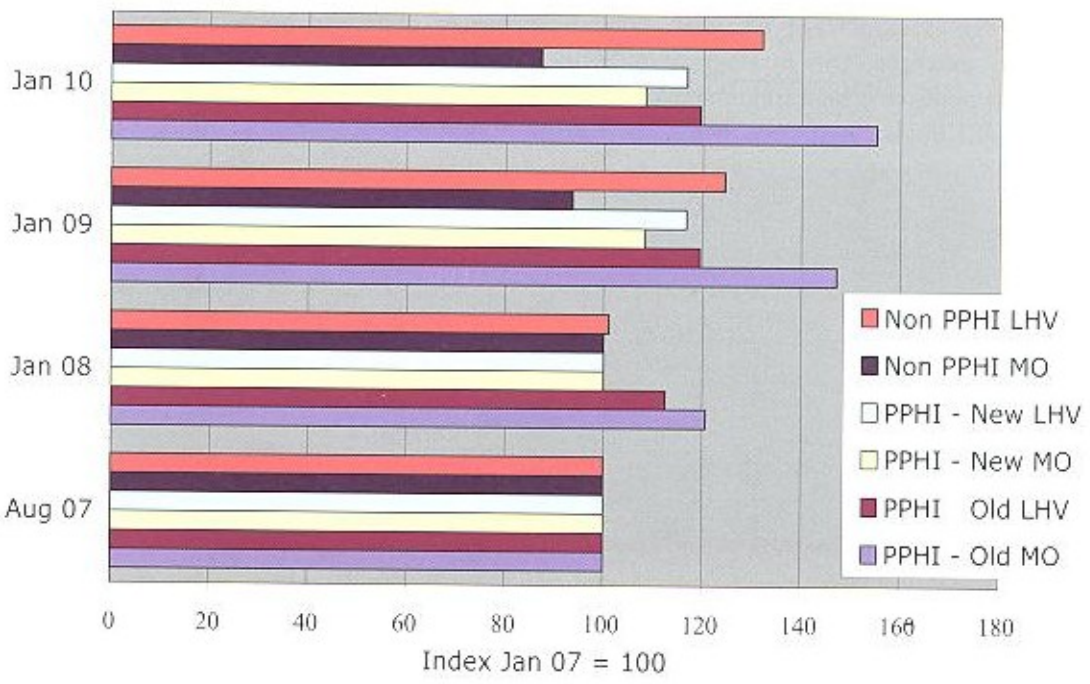


Figure 13: Increase/Decrease in Staffing Levels



3.4 Availability of essential drugs and vaccines

Data from the period January-March 2010 collected at BHUs suggests that availability of essential drugs was better in the PPHI BHUs, with 42.5% assessed as "highly satisfactory or satisfactory" against 13.9% in DDOH BHUs. No significant differences were reported in vaccines stocks, with PPHI BHUs recording 60% "highly satisfactory or satisfactory" against 66.7% in DDOH BHUs.

Table 6: Availability of essential drugs and vaccines – percentage composite score January-March 2010

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
10 essential drugs									
Highly Satisfactory	8.3	0.0	58.3	25.0	0.0	0.0	25.0	22.5	8.3
Satisfactory	50.0	16.7	16.7	0.0	0.0	0.0	0.0	20.0	5.6
Unsatisfactory	25.0	75.0	25.0	25.0	8.3	16.7	50.0	22.5	38.9
Highly Unsatisfactory	16.7	8.3	0.0	50.0	91.7	83.3	25.0	35.0	47.2
5 Vaccines									
Highly Satisfactory	50.0	33.3	66.7	50.0	33.3	41.7	50.0	50.0	41.7
Satisfactory	0.0	25.0	0.0	33.3	25.0	16.7	25.0	10.0	25.0
Unsatisfactory	0.0	0.0	0.0	0.0	25.0	8.3	0.0	7.5	2.8
Highly Unsatisfactory	50.0	41.7	33.3	16.7	16.7	33.3	25.0	32.5	30.6

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: BHU Survey

Data from the survey day of visit confirm better drug availability in PPHI BHUs in all selected drugs except Ampicillin.

Table 7: Number of sample BHUs with essential drugs available on day of visit

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
Amoxicillin capsule / syrup	12	12	12	8	10	5	4	38	25
Contrimaxazole Tab/syrup	12	11	12	12	7	6	3	34	29
Metronidazole Tab / syrup	12	12	11	12	12	10	3	38	34
Inj. Ampicillin	1	8	9	11	1	1	3	14	20
Tablet Diclofenic	11	11	12	10	10	7	3	36	28
Chloroquin tablet / syrup	12	11	12	11	11	8	3	38	30
Oral pills	10	7	9	6	5	1	4	28	14
Intravenous infusions	12	12	12	12	10	10	4	38	34
Inj. Dexametazone	3	12	12	11	12	6	3	30	29
Tablet Iron-folic acid	12	12	11	9	9	9	3	35	30
% of sample BHUs with essential drugs available on day of visit									
Amoxicillin capsule / syrup	100.0	100.0	100.0	66.7	83.3	41.7	100.0	95.0	69.4
Contrimaxazole Tab/syrup	100.0	91.7	100.0	100.0	58.3	50.0	75.0	85.0	80.6
Metronidazole Tab / syrup	100.0	100.0	91.7	100.0	100.0	83.3	75.0	95.0	94.4
Inj. Ampicillin	8.3	66.7	75.0	91.7	8.3	8.3	75.0	35.0	55.6
Tablet Diclofenic	91.7	91.7	100.0	83.3	83.3	58.3	75.0	90.0	77.8
Chloroquin tablet / syrup	100.0	91.7	100.0	91.7	91.7	66.7	75.0	95.0	83.3
Oral pills	83.3	58.3	75.0	50.0	41.7	8.3	100.0	70.0	38.9
Intravenous infusions	100.0	100.0	100.0	100.0	83.3	83.3	100.0	95.0	94.4
Inj. Dexametazone	25.0	100.0	100.0	91.7	100.0	50.0	75.0	75.0	80.6
Tablet Iron-folic acid	100.0	100.0	91.7	75.0	75.0	75.0	75.0	87.5	83.3

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: BHU Survey

3.5 Physical condition of BHU facilities

When PPHI took over the management of districts a certain number of BHUs were not functional, i.e. being used as health facilities because of either poor physical condition or because they had been occupied without authorisation for purposes other than health care delivery (Table 8). Many Health facilities did not have water or electricity. PPHI used the Federal subsidy of Rs 100,000 to deal with these matters. Table 9 shows several examples of physical rehabilitation that PPHI undertook as part of their taking over a new district. Therefore, the comparison of the physical condition between PPHI-DDOH managed BHUs should take account of the fact that in many places facilities had to be repossessed, rehabilitated and staffed before they could become operational.

Table 8: BHUs that were not delivering services when PPHI took over their management

Province (Total No. of BHUs managed by PPHI)	BHUs in Unauthorized Possession Before PPHI	BHUs retrieved from unauthorized possession and made functional by PPHI*	BHUs dysfunctional because of extreme dis-repair before PPHI	BHUs Repaired by PPHI and made functional
Sindh (610)	40	40	24	24
KP (467)	20	15	21	21
Balochistan (553)	24	24	79	79
Gilgit-Baltistan (17)	1	1	Nil	Nil
Total (1647)	85	80	124	124

* BHUs partially or wholly occupied without authorisation. In the case of Balochistan these include BHUs abandoned owing to poor security situation. In case of KP, five BHUs are still in the possession of the army due to army action in the area.

Source: PPHI PSU/FSU

Table 9: Improvements to FLCF physical condition, water and electricity by PPHI

Province	Health Facilities	Number of FLCF in need of Repair & Repaired		Availability of Electricity when PPHI took over		Availability of Water when PPHI took over	
		Before PPHI	PPHI Renovated	HFs with no Electricity	HFs Electrified by PPHI	HFs with no Water	HFs supplied with Water by PPHI
KP	418	370	338	106	98	143	139
Balochistan	555	551	409	357	136	460	240
Sindh	1,029	892	532	333	208	473	315
Totals	2,002	1813	1,279	796	442	1,076	694

Source: PPHI PSU/FSU

Notwithstanding the issues raised above the physical condition of PPHI BHUs was found to be generally better than DDOH ones in the BHU survey, particularly in having telephone communications, water supply within the premises, functional toilets, patient examination room, labour room, and storeroom, and in roof repairs. DDOH BHUs tend to have more staff accommodation, but in fact little of this appears to be used in either model, with less

that 5% of MO accommodation being used by the MOs and less than 20% of LHV accommodation being used by the LHVs, in both PPHI and DDOH models.

Table 10: Condition of BHU facilities by numbers of facilities

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
Electricity connection	9	10	12	12	10	10	4	35	32
Functioning electric fans in rooms	9	10	12	12	10	9	3	34	31
Functional telephone	8	6	12	-	10	-	2	32	6
Water supply within premises	11	12	12	10	10	7	4	37	29
Drinking water for patients	12	12	9	10	8	7	4	33	29
Functional toilet for patients	7	-	6	4	1	-	1	15	4
Furnished wait area for patients	12	12	12	12	12	10	4	40	34
Patient examination room / place	12	12	12	10	12	11	4	40	33
Functioning labour room	5	5	10	5	1	3	4	20	13
Separate store room	11	12	12	12	11	7	4	38	31
Leakage from building roof	-	1	2	6	2	2	-	4	9
Doctor residence within premises	8	9	6	10	11	11	2	27	30
MO resides in BHU	-	-	1	-	1	1	-	2	1
LHV residence within premises	5	10	5	10	11	11	2	23	31
LHV resides in BHU	2	4	-	1	3	2	2	7	7

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Table 11: Condition of BHU facilities (percentages)

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
Electricity connection	75	83	100	100	83	83	100	87	89
Functioning electric fans in rooms	75	83	100	100	83	75	75	85	86
Functional telephone	67	50	100	-	83	-	50	80	17
Water supply within premises	92	100	100	83	83	58	100	93	80
Drinking water for patients	100	100	75	83	67	58	100	83	80
Functional toilet for patients	58	-	50	33	8	-	25	37	11
Furnished wait area for patients	100	100	100	100	100	83	100	100	94
Patient examination room / place	100	100	100	83	100	92	100	100	92
Functioning labour room	42	42	83	42	8	25	100	50	36
Separate store room	92	100	100	100	92	58	100	95	86
Leakage from building roof	-	8	17	50	17	17	-	10	25
Doctor residence within premises	67	75	50	83	92	92	50	68	83
MO resides in BHU	-	-	8	-	8	8	-	5	3
LHV residence within premises	42	83	42	83	92	92	50	58	86
LHV resides in BHU	17	33	-	8	25	17	50	18	19

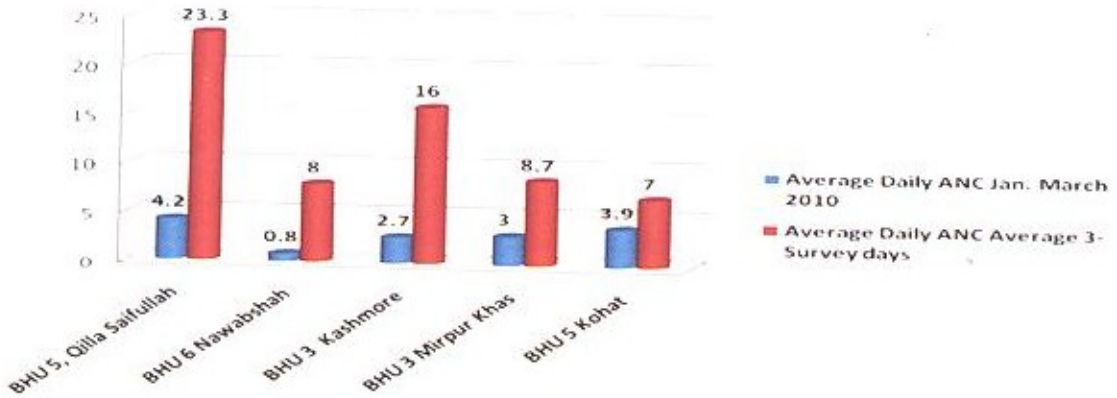
Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

3.6 *Impact on MNCH services and consumer satisfaction*

Reliability of HMIS data

The TPE measured the impact of PPHI management and inputs on service utilisation at FLCFs by collecting and analyzing three main sources of data: the BHU survey results; the district level HMIS/DSU data; and the PPHI provincial and district data. The summaries presented below are based on the best triangulation we have been able to achieve. However, there are yet unexplained features that made the TPE query the validity of HMIS/DHIS data. For example, if we look at the BHU data in relation to ANC services contrasts are stark between data reported by BHUs in the quarter January-March 2010 and that recorded during the three days of the TPE survey.

Figure 14: Average ANC attendance reported in BHU survey using the Jan-March 2010 period or the 3 days of survey



Source: BHU Survey

Interestingly, these discrepancies suggest that BHUs are not exaggerating their utilisation and workload, but are underestimating it. We are unsure as to why would this happen, but the implication is that data on service utilisation should be interpreted with care, and that the combination of sources is likely to provide a more accurate picture than when any source is taken in isolation from the rest. In any case, this problem simply points to poor data management practices that seriously hinder the potential of the HMIS to be used for performance monitoring purposes.

Also, the absence of convincing BHU catchment population data prevents estimation of service needs and real coverage against which to assess the adequacy of services actually provided, or indeed to compare BHU performance. The TPE has been surprised and concerned by the lack of use of population denominators across the PHC network, in both PPHI and non-PPHI BHUs and districts. How can targets be set and monitored if denominators are never used? In fact, it is only when the TPE used some notional denominators that the very limited impact of the PHC network on key areas like SRH, MNCH or disease control became painfully apparent. Thus, when numbers of patients seen were divided by either the number of days in a month or the notional catchment population per BHU the service utilisation patterns were often abysmal. This is a key area for improvement by both BHU and district managers to assess the impact of the services they deliver to the population.

Provision of MNCH & reproductive health services

Neither PPHI nor DDOH BHUs are attracting large numbers of antenatal, deliveries or postnatal consumers, although these services are offered.

Antenatal visits:80.8% of PPHI BHUs and 86.9% of DDOH BHUs receive fewer than 2 consumers per day. 25% of PPHI BHUs and 26% of DDOH BHUs record providing no antenatal services during the period January-March 2010, although some BHU recorded some ANC services during the three days of the survey.

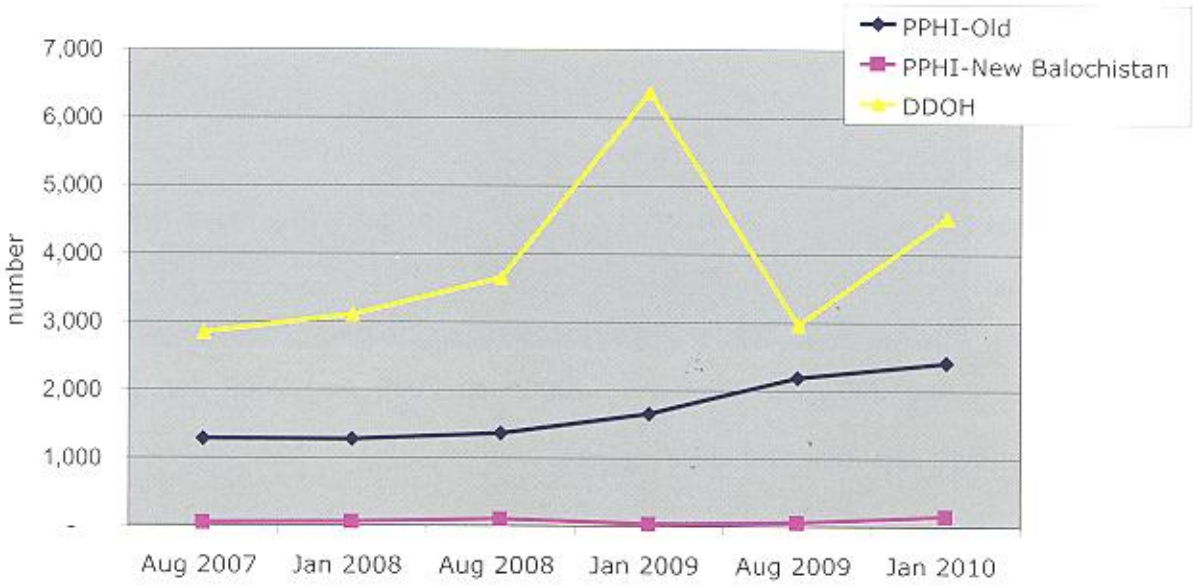
Table 12: Average daily antenatal attendance at BHUs during Jan-March 2010

	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
none	13	25.0	6	26.1
<1/day	17	32.7	7	30.4
1-<2 /day	12	23.1	7	30.4
2-<3/day	4	7.7	1	4.3
3-<4/day	2	3.8	1	4.4
>4/day	4	7.7	1	4.4
Total BHUs	52	100	23	100

Source: BHU Survey

Information on ANC collected from the HMIS in the 12 sample districts shows an upward trend in delivery of ANC services, yet confirming the point made earlier about very low attendance across both models. Unexplained ups (January 2009) and downs in recorded numbers continue to emphasise unreliability of data.

Figure 15: Ante Natal Care at BHU or by BHU staff



Source: HMIS data in 12 sample districts

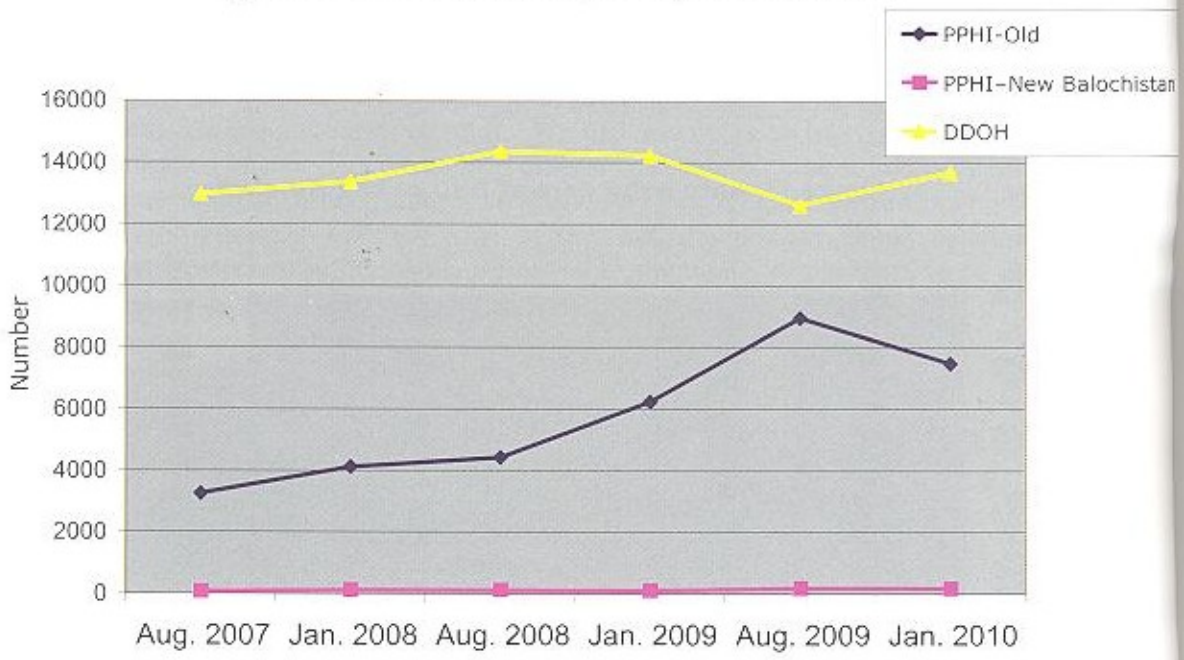
TT Vaccinations: TT vaccinations are higher in DDOH BHUs with 50% reporting providing more than 60 TT vaccinations a month (January-March 2010) against 10% for PPHI BHUs (Table 13 below). Higher numbers of TT vaccinations was confirmed by HMIS data from the 12 sample districts which also show a marked upward trend in PPHI districts (see Figure 16 below).

Table 13: Average monthly TT vaccinations at BHUs during Jan-March 2010

	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
none	15	28.8	4	16.7
<15	13	25	2	8.3
>15-30	10	19.2	2	8.3
>30-45	7	13.5	2	8.3
>45-60	2	3.8	2	8.3
>60	5	9.6	12	50
Total BHUs	52	100	24	100

Source: BHU Survey

Figure 16: TT Vaccinations by PPHI/DDOH districts



Source: HMIS data from 12 Sample districts

Postnatal: 88.5% of PPHI BHUs and 95.7% of DDOH BHUs are attracting less than one consumer per day.

Table 14: Average daily postnatal attendance at BHUs during Jan-March 2010

	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
none	20	38.5	12	52.2
<1/day	26	50	10	43.5
1-<2 /day	4	7.7	0	0
2-<3/day	2	3.8	1	4.3
Total BHUs	52	100	23	100

Source: BHU Survey

Deliveries: Almost half of all BHUs (PPHI and DDOH) receive no deliveries, and 61.6% of PPHI and 62.5% of DDOH BHUs receive fewer than 3 deliveries per month. On the other

hand, the household survey suggests that PPHI BHUs may be achieving a reduction in the use of unskilled birth attendants (for example a TBA, with 59% in PPHI areas against 71% in DDOH using TBA).

In PPHI areas, 37.4% of women who delivered in the last 24 months said they were attended by BHU staff[9], compared with 18% in DDOH areas. Of those in PPHI areas who did not use BHU services only 20% gave quality as their reason but 53% gave "timing not good" as their reason (meaning the time in the day or night when delivery took place did not allow them to use the BHU). In DDOH areas, 60% gave quality and 17% timing as their reasons. These figures suggest that perceptions of quality of delivery services are higher among women in PPHI districts.

Table 15: Average monthly deliveries supervised at BHUs during Jan-March 2010

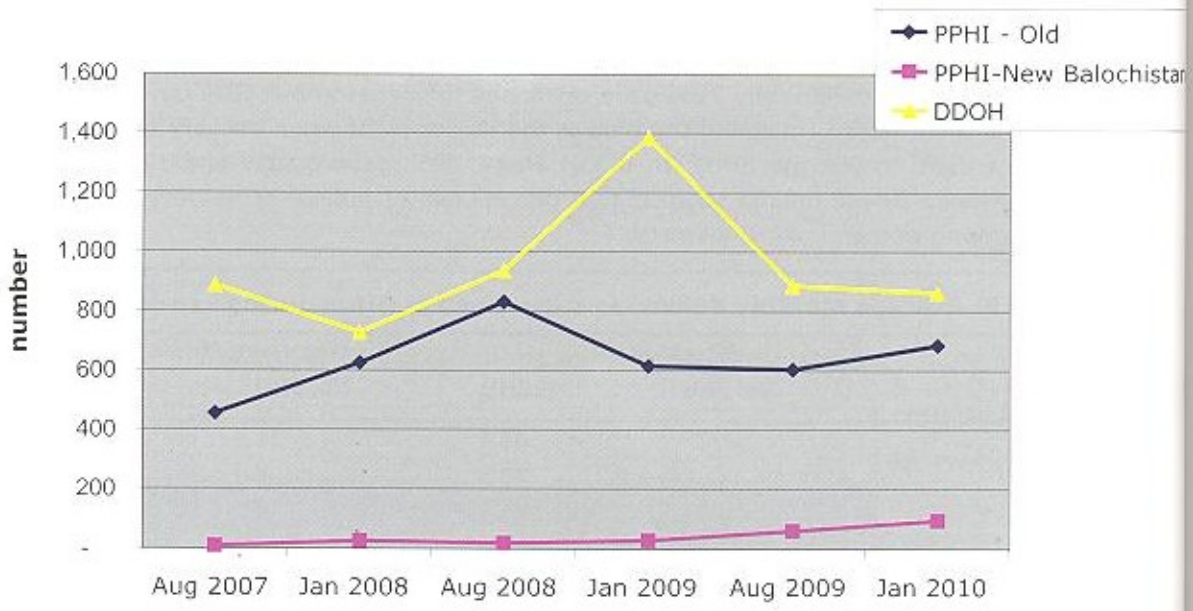
	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
none	25	48.1	11	45.8
<3	7	13.5	4	16.7
>3-6	7	13.5	4	16.7
>6-9	4	7.7	2	8.3
>9	9	17.2	3	12.5
Total BHUs	52	100	24	100

Source: BHU Survey

The TPE team tried to triangulate the BHU survey information with HMIS/DHSI data collected in the 12 sample districts. This is shown in the table below. As can be seen the number of deliveries recorded in BHU facilities increases for both DDOH and PPHI models over time, but there remain unexplained (implausible) peaks in January 2009 affecting, this time, data for DDOH facilities.

[9] Community people covered in the household survey could not be specific about what type of worker attended their delivery because communities are not generally aware of distinctions between a LHV or a LHW, or about whether the "BHU" staff operate from the facility (as in the case of LHV and FMO/WMO) or from the community (as in the case of LHW, who many people associate with the BHU even if she is community based).

Figure 17: Deliveries conducted at BHUs



Source: HMIS data from 12 sample districts

Neonatal services: 34.6% of PPHI BHUs and 45.8% of DDOH BHUs reported no demand for neonatal care.

Table 16: Average monthly neonates served at BHUs during Jan-March 2010

	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
none	24	46.2	12	50
<3	6	11.5	2	8.3
>3-6	9	17.3	3	12.5
>6-9	4	7.7	1	4.2
>9-12	3	5.8	0	0
>12-15	1	1.9	1	4.2
>15-18	0	0	0	0
>18-24	1	1.9	1	4.2
>24	4	7.7	4	16.7
Total BHUs	52	100	24	100

Source: BHU Survey.

Family planning: 34.6% of PPHI BHUs and 45.8% of DDOH BHUs attract no consumers for FP; 84.5% of PPHI and 79.2% of DDOH serve fewer than 24 consumers per month. The household survey indicates that contraceptive prevalence rates are a bit higher in DDOH areas (47%) mainly provided by LHWs, than PPHI areas (40%) where BHUs provide 19% of services compared with 10% in DDOH areas.[10] These extremely low figures

[10] Contraceptive prevalence rates should be interpreted with caution because of relatively small sample size of the HH survey and sampling method used. Attention is also drawn to likelihood of under-reporting of FP services delivered by LHWs in both PPHI and DDOH BHUs. For example, we

probably reflect the traditional separation in supply of FP services between MOH and MOPW, with the latter focusing FP services through Family Welfare Centres, which results of course in huge missed opportunities to capture clients for FP through the PHC network.

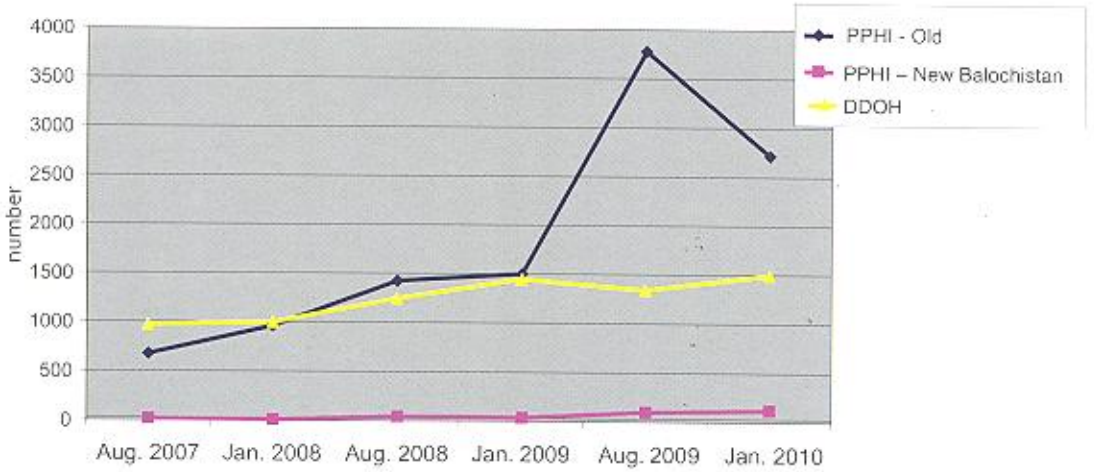
Table 17: Average monthly FP clients served at BHUs, Jan-March 2010

	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
None	18	34.6	11	45.8
<6	10	19.2	2	8.3
>6-12	10	19.2	4	16.7
>12-18	4	7.7	1	4.2
>18-24	2	3.8	1	4.2
>24	8	15.4	5	20.8
Total BHUs	52	100	24	100

Source: BHU Survey

HMIS data from the 12 sample districts appears to show a slightly better picture than the BHU survey in terms of numbers of family planning visits for the whole district in a given month. However, if these figures were adjusted by district population the emerging picture would continue to emphasise very low utilisation figures. Yet again unexplained highs (January 2009) cast doubts on reliability of HMIS data.

Figure 18: Family Planning Visits or clients



Source: HMIS data from 12 sample districts

Children immunisation: On the whole, DDOH BHUs are delivering more vaccinations than PPHI BHUs (see table 18). It should be noted though that immunisations delivered from the BHUs appear to be quite low across the board. About 40% of PPHI BHUs provided no DPT or measles immunisations in the period January-March 2010 compared with about 21% of DDOH BHUs, but there is much variation across provinces and districts.

On the other hand HMIS data from the 12 sample districts confirm that BHUs under DDOH management deliver more DPT vaccinations and also more measles immunisations,

observed different routing of LHW reports across districts, some passing through the BHU LHV while some went straight to the district DDOH, so there are risks of both under-reporting and double counting.

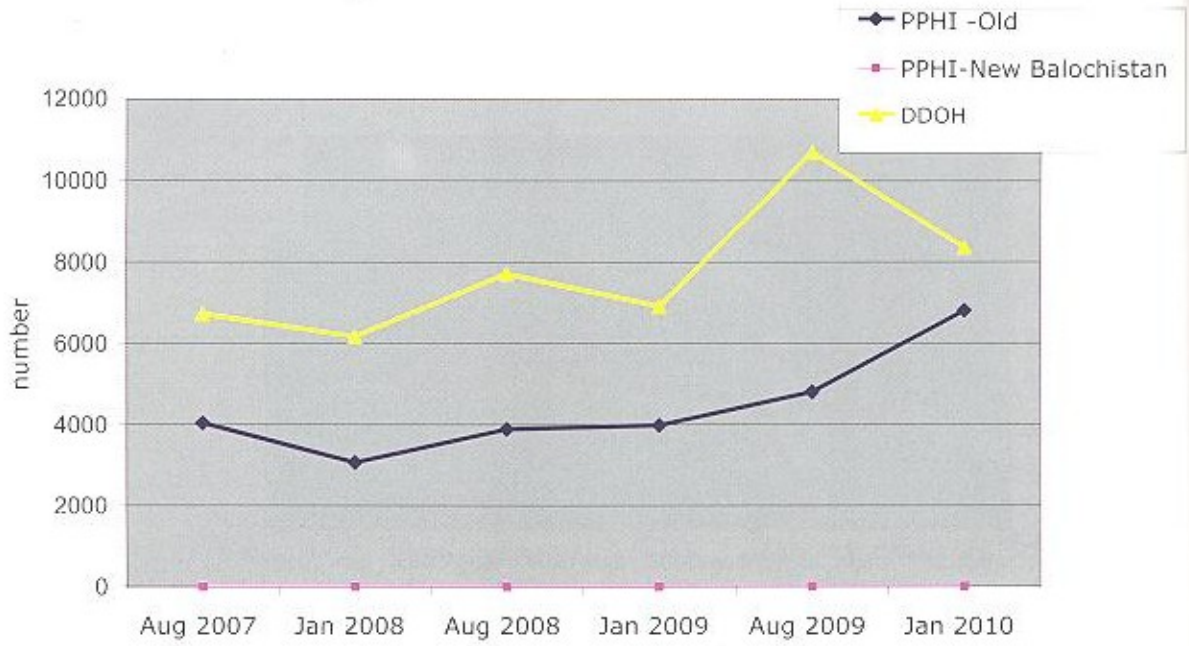
although in the case of measles vaccination PPHI BHUs show a marked upward trend and are quickly closing the gap (see figures 19 and 20 below).

Table 18: Average monthly DPT & measles vaccinations at BHUs, Jan-March 2010

	PPHI Model DPT		Dist. Govt. Model DPT		PPHI Model Measles		Dist. Govt. Model Measles	
	No. BHU	% BHU	No. BHU	% BHU	No. BHU	% BHU	No. BHU	% BHU
none	21	40.4	5	20.8	22	42.3	5	20.8
<15	10	19.2	0	0	15	28.8	3	12.5
>15-30	4	7.7	1	4.2	9	17.3	6	25
>30-45	3	5.7	0	0	4	7.7	4	16.7
>45-60	4	7.7	3	12.5	0	0	1	4.2
>60	10	19.2	15	62.5	2	3.8	5	20.8
Total BHUs	52	100	24	100	52	100	24	100

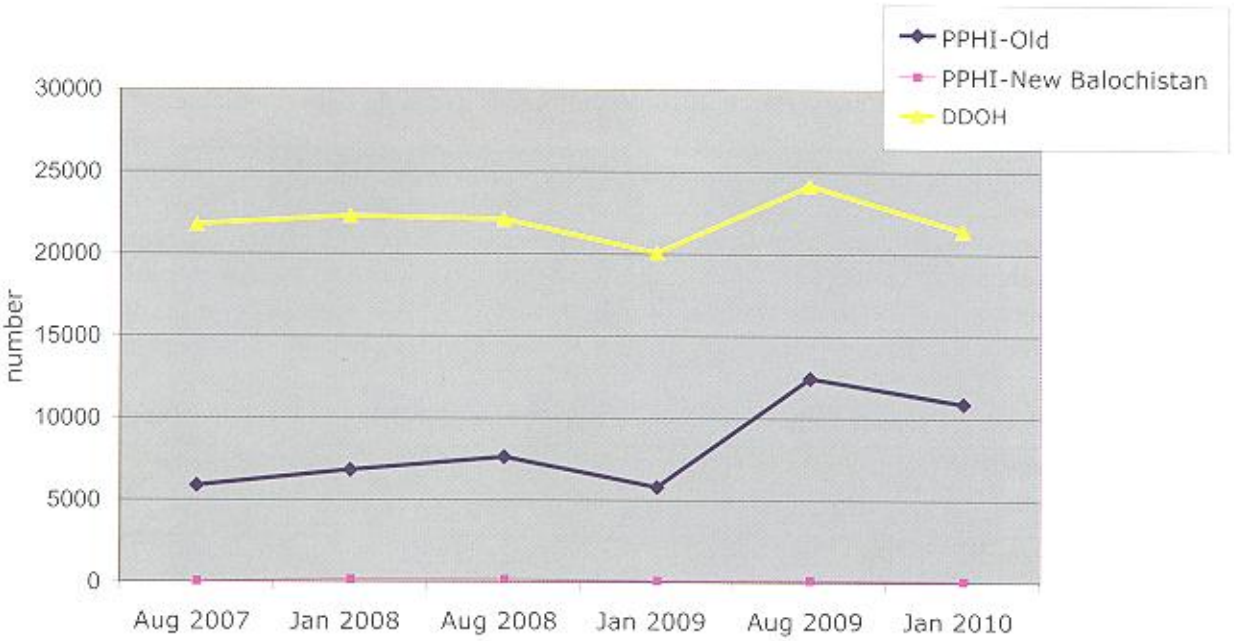
Source: BHU Survey

Figure 19: Measles Vaccinations in sample districts



Source: HMIS data from 12 sample districts

Figure 20: DPT Vaccination in 12 sample districts



Source: HMIS data from 12 sample districts

School and community health sessions: PPHI BHUs appear to deliver considerably more school and community health sessions than DDOH BHUs, with 88% having provided 1-3 school sessions, and 92% having provided 1-3 community sessions. These findings were confirmed by the household survey, where 40% of women in PPHI areas reported undertaking health education by BHU staff, compared with 5.4% in DDOH areas.

Table 19 - Average monthly school and community health sessions by BHUs during Jan-Mar 2010

	PPHI Model school health		Dist. Govt. Model school health		PPHI Model community		Dist. Govt. Model community	
	No. BHU	% BHU	No. BHU	% BHU	No. BHU	% BHU	No. BHU	% BHU
No Service	4	7.7	0	0	2	3.8	0	0
Up to one session	27	51.9	0	0	26	50	0	0
>1– 3 sessions	19	36.5	0	0	22	42.3	0	0
>3 sessions	2	3.8	0	0	2	3.8	0	0
Total BHUs	52	100	24	0	52	100	24	0

Source: BHU Survey

3.7 *Impact on out-patient attendance*

The first issue to note in this section is the meaning of out-patient attendance, which in this case reflects patients registered in the BHU records. Unfortunately such records do not permit to know whether registered patients came seeking preventive or curative services. Therefore, out-patient attendance in this study should not be equated with curative care. Since the same issues affect PPHI and DDOH BHUs we can at least say that the comparison need not introduce additional bias for comparison purposes.

Outpatient attendance as per BHU survey

The BHU survey serves more to highlight the unreliability of data reporting than it does to reveal any improvements or otherwise of services utilisation following PPHI management of BHUs. A combination of infeasible reported attendance rates and large differences between the daily attendances recorded during the three days of the survey and those reported for the January-March 2010 period render available data unreliable.

For what it is worth, it indicates little difference between the BHU management models, with average daily attendances of 29 for DDOH and 27 for PPHI BHUs. During the observed three days of the survey, attendance rates were significantly higher at PPHI BHUs than at DDOH BHUs. Given these limitations it is worth to look at this information in conjunction with the household survey data that identifies some differences in consumer preferences across provinces (see section on Household Survey later in this chapter).

Table 20: Average daily outpatient attendance at BHUs during Jan-March 2010

Average Daily Patients	PPHI Model		Dist. Govt. Model	
	No. BHU	% BHU	No. BHU	% BHU
<20 Patients	24.0	46.2	8.0	34.8
20-49 Patients	23.0	44.1	11.0	47.8
>50	5.0	9.6	4.0	17.3
Total BHUs	52	100.0	23	100.0

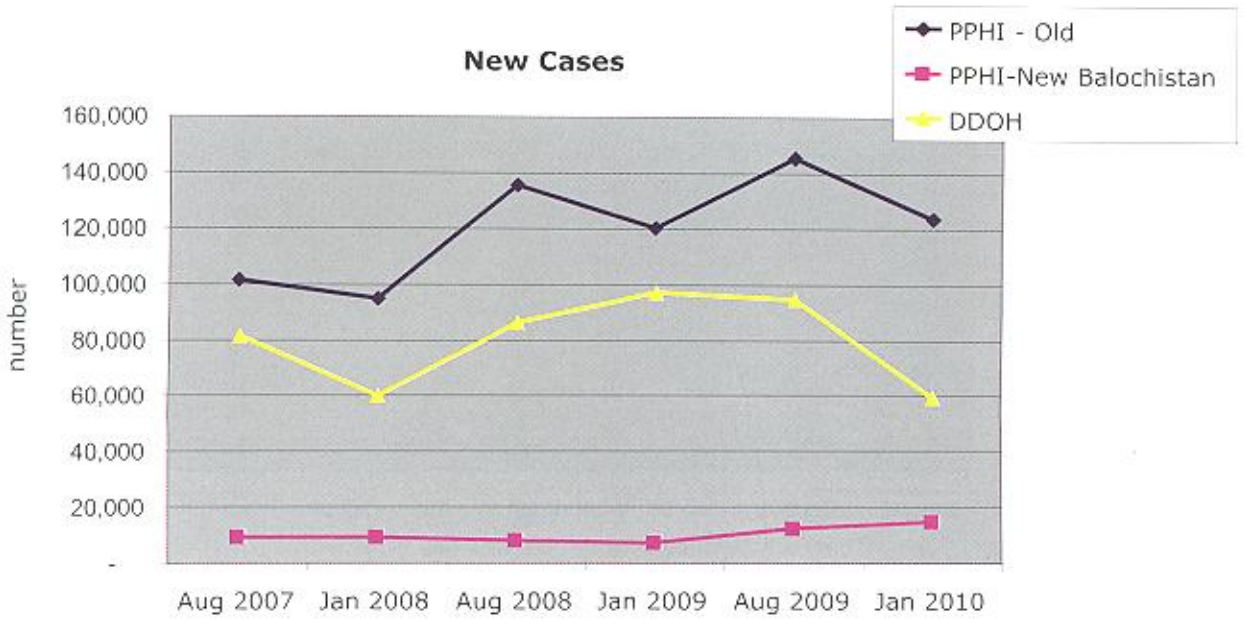
Source: BHU Survey

Reported **TB-DOTS services** are higher at DDOH BHUs with 42% providing this service during January-March 2010 against 14% at PPHI BHUs (Table not provided here – please refer to Volume 3 containing the complete BHU survey results).

Outpatient attendance in 12 sample districts

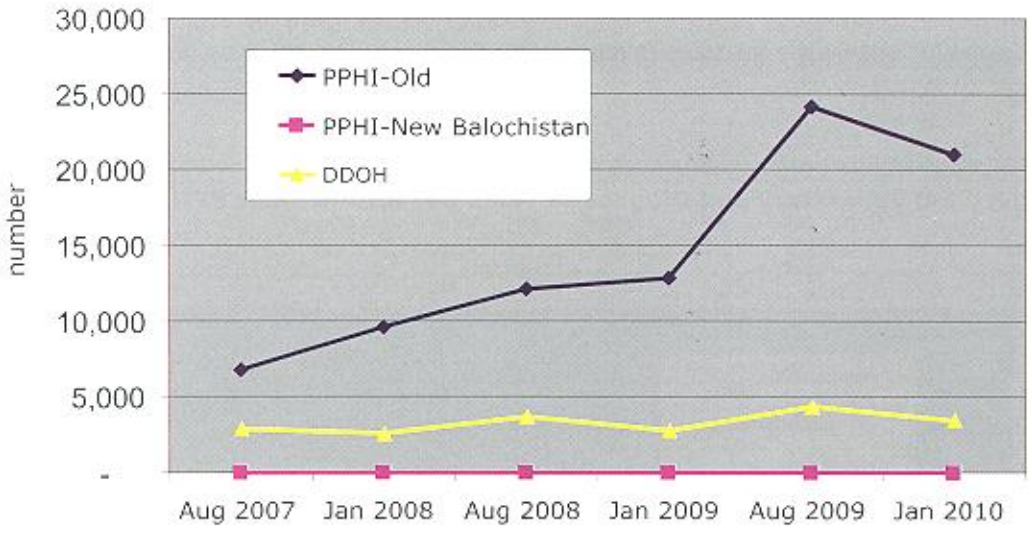
The data collected from the District HMIS/DHIS records suggests that outpatient attendees rose by around 20% in PPHI districts but fell by slightly more in DDOH districts (Figure 21). There was a significant increase in outpatient services provided by FMOs in PPHI districts (Figure 22). The picture for preventive services is more mixed. What is notable is the extremely low coverage rates the figures imply if catchment population figures were included.

Figure 21: General Outpatient Attendance in sample districts



Source: HMIS data from 12 sample districts

Figure 22: Outpatient Attendances by FMO - new cases

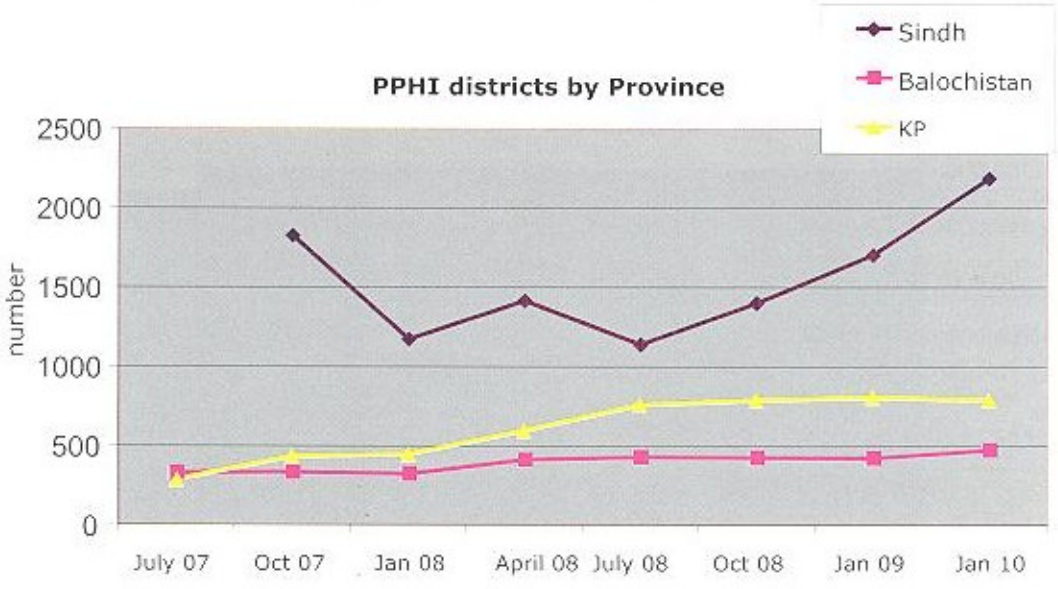


Source: HMIS data from 12 sample districts

Outpatient attendance & services from 32 older PPHI districts

Using data from the 32 districts for the three provinces where PPHI has operated since 2007 the number of curative services delivered by PPHI facilities has increased rapidly (Figure 23). However, the number of BHUs has also expanded over time (except KP where it has remained broadly the same). The figures on OP contacts per BHU set out below suggest, at best, modest progress.

Figure 23: OP Services per BHU

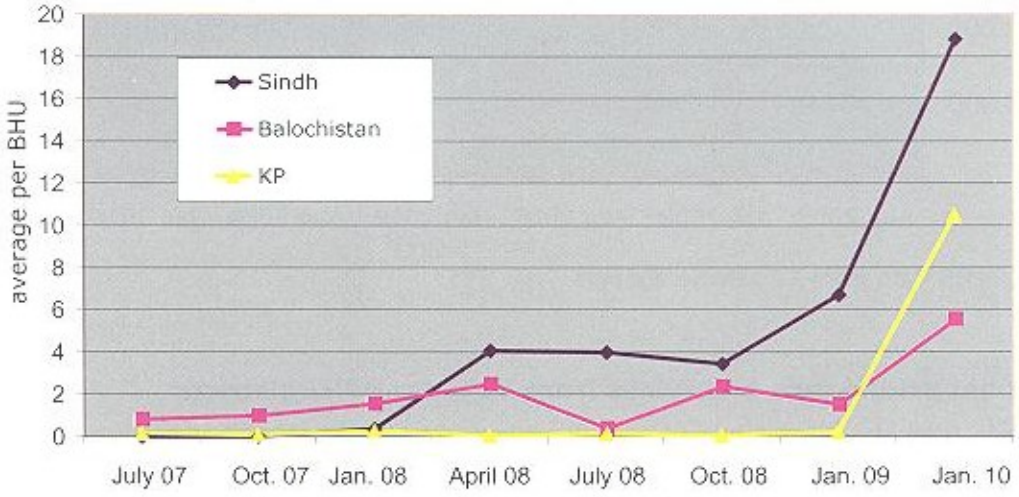


Source: PPHI data from 32 "older" PPHI districts in 3 provinces

There is also wide variation between districts. For example, assuming a constant 30 day month in a range of districts in Balochistan, there is a general upward trend and wide variation between those districts where BHUs see, on average 5 to 10 patients a day – a mid range of facilities seeing around 20 patients a pay and an outlier – Quetta – which has been seeing over 30 patients a day

Figure 24 below shows the increase in laboratory and diagnostic services provided by PPHI BHUs.

Figure 24: Laboratory and Diagnostic Tests per BHU in older PPHI districts



Source: PPHI data from 32 "older" PPHI districts in 3 provinces

New services introduced by PPHI. In terms of new services introduced, PPHI BHUs appear to be offering more laboratory tests than DDOH BHUs including malaria diagnosis (microscopic and rapid test), hepatitis-B tests, and treatment for dog and snakebite. Few PPHI or DDOH managed BHUs are offering TB testing. PPHI BHUs appear to be offering more antenatal tests than DDOH BHUs, but this has to be assessed against the apparent very low numbers of antenatal visits provided – see above.

Table 21: Percentage of BHUs where new services were added in PHC package

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
new service introduced									
Rabies vaccine / anti-snake venom	100	8.3	91.7	33.3	16.7	0	75.0	70.0	13.9
Sputum smear microscopy for TB	0	0	8.3	0	8.3	0	0	5.0	0.0
Blood smear microscopy for malaria	58.3	33.3	16.7	33.3	8.3	0	0	25.0	22.2
Rapid diagnostic test for malaria	100	41.7	33.3	16.7	8.3	0.0	0	42.5	19.4
Hepatitis-B testing	16.7	16.7	0.0	8.3	83.3	0.0	0	30.0	8.3
tests provided in ANC service									
Pregnancy test	66.7	66.7	100	16.7	91.7	0	100	87.5	27.8
Haemoglobin test for anaemia	16.7	0	83.3	8.3	41.7	0	100	52.5	2.8
Urine for sugar	25.0	25.0	58.3	8.3	16.7	0	50	35	11.1
Blood grouping	0	16.7	16.7	16.7	8.3	0	50	12.5	11.1
Urine for proteinuria	0	8.3	0	0	8.3	0	50	7.5	2.8

Footnote 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: BHU Survey

3.8 Planning, management and referral practices

Referral system: Whilst high percentages of BHUs claim to have established a referral system (95% of PPHI and 86% of DDOH BHUs), the standard referral form was observed in 80% and 53% respectively, and actual referral records seen in only 43% and 22% respectively. 88% of PPHI BHUs claim that local transport of some sort can be made available for emergency referral, against 67% of DDOH BHUs. This includes taxi, private vehicle/ambulance and public transport.

Table 22: Percent BHUs with referral system performing the following functions

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
Referral system established	100	100	100	67	83	92	100	95	86
Use standard referral form	100	75	100	58	50	50	100	85	61
Standard referral form seen	92	67	100	58	42	33	100	80	53
Referral record seen	83	42	17	-	25	25	50	43	22
Returned filled referral form seen	-	17	-	-	8	8	-	2	8
Telephone working	67	42	100	-	33	-	75	68	14
Local transport system available	100	75	92	58	67	67	100	88	67

Footnote 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: BHU Survey

28% of PPHI BHUs have records showing referral of complicated deliveries (January-March 2010) against 22% for DDOH BHUs, but 58% of PPHI BHUs claim to have referred but have not maintained a record.[11]

[11] Referral practices have not been assessed in the TPE evaluation with the depth that would be required to draw conclusions. Why so many BHU managers claimed to have referred women in complicated pregnancy yet no records were kept? How many women were actually referred? Where did those women go, and did they reach a facility with a fully functioning ENMOC unit? What was the outcome of that referral? Etcetera.

Planning and management at BHUs: PPHI BHUs appear to be performing better than DDOH BHUs in terms of some simple planning and management indicators, but more investigation would be required to assess whether this is actually the case in practice rather than just intention.

Table 23: Percentage of BHUs with planning and management systems in place for target setting for preventive programmes

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
MO sets monthly targets	83.3	83.3	75.0	25.0	0.0	8.3	100.0	57.5	38.9
basis for target setting[1]									
Using HMIS/DHIS guidelines	75.0	75.0	50.0	0.0	0.0	0.0	50.0	42.5	25.0
Using PPHI Manual of Operations	8.3	8.3	25.0	0.0	0.0	0.0	0.0	10.0	2.8
Using EDOH office guidelines	0.0	0.0	0.0	8.3	0.0	8.3	0.0	0.0	5.6
Using team approach at BHU level	0.0	0.0	0.0	16.7	0.0	0.0	25.0	2.5	5.6
Others	0.0	0.0	0.0	0.0	0.0	0.0	25.0	2.5	0.0
MOs approves duty roster of staff									
For BHU staff only	66.7	83.3	58.3	8.3	16.7	16.7	50.0	47.5	36.1
For BHU and outreach staff	16.7	0.0	41.7	66.7	25.0	0.0	50.0	30.0	22.2

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

[1] for those setting targets

Source: BHU Survey

PPHI BHUs also appear to be providing more monitoring and supervision of their attached MCH Centres and Dispensaries than DDOH BHUs – or at least to be more aware of the need for it (Table 24 below). Whereas the DDOH does not authorize medical officers of BHUs to supervise dispensaries and MCH centres, the PPHI Manual of Operations actively encourages this. Again, more investigation would be required to assess whether supervision and monitoring by BHUs is actually practised.

Table 24: Percent of BHUs with planning and management systems for monitoring and supervision

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	12	12	12	12	12	12	4	40	36
attached MCH Centre/Dispensary									
MO monitoring/supervising	41.7	8.3	33.3	0.0	0.0	0.0	50.0	27.5	2.8
Routine supervision	33.3	8.3	25.0	0.0	0.0	0.0	0.0	17.5	2.8
Attend patients listed for advice	41.7	0.0	8.3	0.0	0.0	0.0	25.0	17.5	0.0
Organize continuing education	41.7	8.3	25.0	0.0	0.0	0.0	0.0	20.0	2.8
Essential drugs stocks	41.7	8.3	16.7	0.0	0.0	0.0	25.0	20.0	2.8
Resolving challenges faced	41.7	0.0	8.3	0.0	0.0	0.0	25.0	17.5	0.0
LHWs									
BHU staff monitors LHWs	16.7	41.7	16.7	66.7	50.0	16.7	50.0	30.0	41.7
Periodically supervise LHWs	16.7	41.7	0.0	58.3	33.3	8.3	25.0	17.5	36.1
Feedback on referrals from LHWs	16.7	41.7	8.3	58.3	50.0	16.7	50.0	27.5	38.9
Give technical support/guidance	16.7	41.7	8.3	66.7	41.7	0.0	50.0	25.0	36.1
immunization programme									
BHU staff monitors EPI	75.0	66.7	83.3	66.7	41.7	25.0	50.0	65.0	52.8
Supervise EPI vaccinators	75.0	58.3	58.3	50.0	16.7	16.7	25.0	47.5	41.7
Investigate EPI coverage[1]	41.7	50.0	66.7	50.0	16.7	8.3	25.0	40.0	36.1
Monthly performance review	58.3	50.0	41.7	66.7	25.0	0.0	25.0	40.0	38.9
Monitor vaccine store temperature	66.7	66.7	75.0	58.3	33.3	25.0	50.0	57.5	50.0
Monitor vaccines stock	66.7	66.7	75.0	58.3	25.0	16.7	0.0	50.0	47.2
Monitor syringe stocks	66.7	66.7	66.7	58.3	25.0	25.0	0.0	47.5	50.0

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

[1] where a case of whooping cough, measles or tetanus is received/ reported

Source: BHU Survey

Use of service protocols: We measured availability and use of service protocols as a proxy for quality of care. There are 12 protocols available to BHUs to guide services provision. Only 17 of the 52 PPHI BHUs and only 1 of the 24 DDOH BHUs had all of these available. Moreover, there is little evidence that service protocols are used, that training has been conducted in their use or that there is any systematic monitoring of use of service protocols in either DDOH or PPHI districts. Those in most use appear to be for immunisation scheduling, TB-DOTS, and malaria management. Complete data on these aspects is available in the BHU Survey Report, in Volume 3.

3.9 Consumer satisfaction in BHU exit interviews

The exit poll of consumers suggests the following.

At PPHI BHUs, 47.1% of consumers choosing BHUs for services rather than other service options identified "good quality service" as one of their reasons for doing so, against 36.3% at DDOH BHUs. Consumers also expect better drugs availability (31.6% against 19.3% for availability of all or most drugs). Good quality service expectations are considerably improved in Sindh and KP, but less so in Balochistan.

Table 25: Reasons consumers choose the BHU over other options: percent of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Own choice	95.0	84.0	87.0	88.0	85.0	83.0	95.0	89.6	85.0
Easy Access	70.0	89.0	64.0	85.0	91.0	100.0	43.0	71.8	91.3
Good Quality Service	57.0	74.0	63.0	29.0	22.0	6.0	45.0	47.1	36.3
Kind/ Helpful Staff	34.0	42.0	21.0	6.0	18.0	22.0	2.0	22.1	23.3
All medicine given	29.0	18.0	8.0	3.0	4.0	1.0	0.0	12.3	7.3
Most medicine given	18.0	14.0	3.0	8.0	40.0	14.0	10.0	19.3	12.0
Recommended by friend	4.0	10.0	16.0	8.0	12.0	11.0	5.0	10.1	9.7
Suggested by LHW	0.0	1.0	0.0	3.0	1.0	5.0	0.0	0.3	3.0
Suggested by community organizer	0.0	5.0	0.0	n/a	2.0	n/a	0.0	0.6	n/a

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI

Source: Exit Interviews at surveyed BHUs surveyed

The great majority of patients have to queue for less than 30 minutes to be seen at BHUs: 82.5% of PPHI BHU patients and 88.3% of DDOH patients are seen within this time, and almost all patients queue for less than one hour. This may be a reflection of the small workloads of many BHUs, and is discussed later.

Table 26: Waiting time in queue by percentage of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
<30 minutes	98	90	91	97	65	78	63	82.5	88.3
30-60 minutes	2	8	7	3	30	22	35	15.2	11.0
>60 minutes	0	2	2	0	5	0	2	2.3	0.7

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI

Source: Exit Interviews at surveyed BHUs

Most visits to BHUs are for curative care (85.6 - 88.7%) PPHI and DDOH managed BHUs respectively. More patients are seen by doctors in PPHI BHUs (72.0%) than by doctors in DDOH BHUs (61.3%).

Table 27: Purpose of visit to BHU by percentage of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Sickness	80.0	91.0	86.0	93.0	92.0	82.0	82.0	85.6	88.7
Immunization	6.0	6.0	3.0	1.0	2.0	13.0	5.0	3.8	6.7
Family planning	3.0	1.0	2.0	3.0	2.0	3.0	8.0	2.9	2.3
Antenatal care	11.0	2.0	8.0	3.0	2.0	2.0	5.0	6.8	2.3
Postnatal care	0.0	0.0	1.0	0.0	2.0	0.0	0.0	0.9	0.0

Source: Exit Interviews at surveyed BHUs surveyed

Table 28: Staff providing service at BHU by percentage of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Doctor	74.0	67.0	94.0	78.0	43.0	39.0	87.0	72.0	61.3
Paramedic	26.0	33.0	6.0	22.0	57.0	61.0	13.0	28.0	38.7

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: Exit Interviews at surveyed BHUs surveyed

81.1% of exit poll respondents at PPHI BHUs reported receiving all the drugs prescribed compared with 51.7% at DDOH BHUs, a differential that was supported by the household survey in which 88.5% of patients reported that they received all their drugs at PPHI BHUs compared with 63.8% at DDOH BHUs.

Table 29: Drugs prescription by percentage of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Received all medicines	90.0	70.0	95.0	48.0	63.0	37.0	67.0	81.1	51.7
Received some medicines	10.0	30.0	5.0	52.0	33.0	60.0	31.0	17.5	47.3
Received no medicine	-	-	-	-	4.0	3.0	2.0	1.4	1.0
Instructed how to take medicine	100.0	99.0	99.0	98.0	91.0	98.0	100.0	97.0	98.3
Understood instructions	100.0	98.0	99.0	97.0	90.0	98.0	100.0	96.7	97.7
Instructed for repeat visit	91.0	87.0	95.0	91.0	56.0	43.0	72.0	79.8	73.7

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: Exit Interviews at surveyed BHUs surveyed

Table 30: Consumer rating of overall services in percent

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Highly satisfied/ satisfied	99.0	99.0	94.0	67.0	77.0	75.0	95.0	90.5	80.3
Partially satisfied/ not satisfied	1.0	1.0	6.0	33.0	23.0	25.0	5.0	9.5	19.7

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: Exit Interviews at surveyed BHUs surveyed

In terms of subjective satisfaction with the services received:

- the majority of patients had used the BHU previously (over 85%);
- 90.5% of patients at PPHI BHUs rated services as "highly satisfactory or satisfactory" against 80.3% of DDOH BHU patients;
- 86.5% of PPHI BHU patients said they would "always" revisit, against 64.3% of DDOH BHU patients;
- 76.5% of PPHI BHU patients cited an improvement in quality since their last visit, against 61% of DDOH BHU patients. Views on improvement are particularly striking for Sindh Province.

Table 31: Client views on quality of services for those who have visited before by percentage of respondents

	Balochistan		Sindh		KP		GB	Total	
	Old	New	PPHI	DDOH	PPHI	DDOH	PPHI	PPHI	DDOH
	120	120	120	120	120	120	40	400	360
Quality of care has improved	81.0	98.0	90.0	33.0	55.0	52.0	87.0	76.5	61
Quality of care remained the same	19.0	2.0	10.0	64.0	40.0	48.0	13.0	22.0	38.0
Quality of care has deteriorated	0.0	0.0	0.0	3.0	5.0	0.0	0.0	1.5	1.0

Footnote: 'old' Balochistan counted as PPHI and 'new' counted as DDOH equivalents as they have had less time to change to PPHI management practice

Source: Exit Interviews at surveyed BHUs surveyed

There were little or no differences in time travel or travel costs between consumers at PPHI or DDOH managed BHUs.

3.10 Results from the Household survey

The household survey covered 2,280 households where an estimated 16,097 people lived (estimate based on 7.1 persons per household). Distributing by main location and age group is shown below.

Table 32: Distribution of sample population of Household Survey by age and sex

		PPHI			DDOH			Total		
		BHU Villages	Far Villages	Total	BHU Villages	Far Villages	Total	BHU Villages	Far Villages	Total
Total Population		5,541	5,604	11,145	2,563	2,389	4,952	8,104	7,993	16,097
Total Households		780	780	1,560	360	360	720	1,140	1,140	2,280
Average Family Size		7.1	7.2	7.1	7.1	6.6	6.9	7.1	7.0	7.1
0-5 Months		183	184	367	91	94	185	274	278	552
	%	3.3	3.3	3.3	3.6	3.9	3.7	3.4	3.5	3.4
6-23 Months		639	645	1,284	311	279	590	950	924	1,874
	%	11.5	11.5	11.5	12.1	11.7	11.9	11.7	11.6	11.6
2-5 Years		871	892	1,763	406	391	797	1,277	1,283	2,560
	%	15.7	15.9	15.8	15.8	16.4	16.1	15.8	16.1	15.9
6-10 Years		960	1,008	1,968	351	369	720	1,311	1,377	2,688
	%	17.3	18.0	17.7	13.7	15.4	14.5	16.2	17.2	16.7
>10 Years		2,888	2,875	5,763	1,404	1,256	2,660	4,292	4,131	8,423
	%	52.1	51.3	51.7	54.8	52.6	53.7	53.0	51.7	52.3
Male		2,836	2,857	5,693	1,273	1,172	2,445	4,109	4,029	8,138
	%	51.2	51.0	51.1	49.7	49.1	49.4	50.7	50.4	50.6
Female		2,705	2,747	5,452	1,290	1,217	2,507	3,995	3,964	7,959
	%	48.8	49.0	48.9	50.3	50.9	50.6	49.3	49.6	49.4

Source: Household survey

24.2% of this population reported an illness within the previous 30 days. Around two thirds of the total illness burden occurs in children < 10 years, and one third in adolescents and adults above that age. Age specific illness rates decrease with age group from 57.2% in the 0-5 month age group (i.e. more than half of infants under six months reported an illness in the previous 30 days), to 16.5% in the >10 years age group.

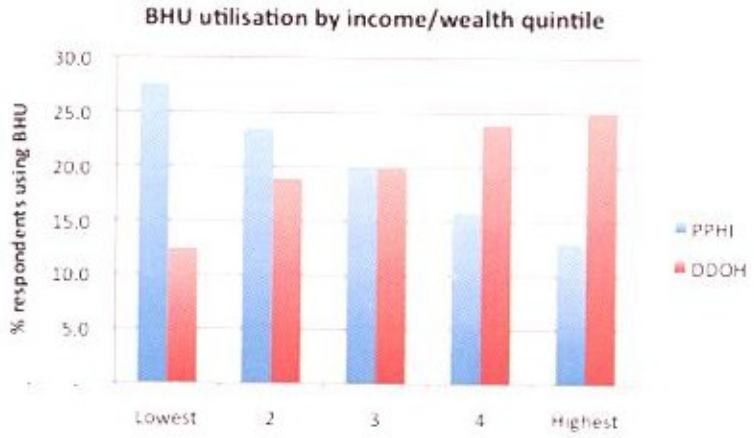
Table 33: Distribution of sample population who suffered from Illness in last 30 days

	PPHI			DDOH			Total		
	BHU Villages	Far Villages	Total	BHU Villages	Far Villages	Total	BHU Villages	Far Villages	Total
Total sick persons	1,248	1,135	2,383	796	715	1,511	2,044	1,850	3,894
% of population surveyed	22.5	20.3	21.4	31.1	29.9	30.5	25.2	23.1	24.2
0-5 Months	98	106	204	55	57	112	153	163	316
% of total sick persons	7.9	9.3	8.6	6.9	8.0	7.4	7.5	8.8	8.1
% of persons in age group	53.6	57.6	55.6	60.4	60.6	60.5	55.8	58.6	57.2
6-23 Months	344	309	653	208	178	386	552	487	1,039
% of total sick persons	27.6	27.2	27.4	26.1	24.9	25.5	27.0	26.3	26.7
% of persons in age group	53.8	47.9	50.9	66.9	63.8	65.4	58.1	52.7	55.4
2-5 Years	231	197	428	142	129	271	373	326	699
% of total sick persons	18.5	17.4	18.0	17.8	18.0	17.9	18.2	17.6	18.0
% of persons in age group	26.5	22.1	24.3	35.0	33.0	34.0	29.2	25.4	27.3
6-10 Years	155	139	294	81	72	153	236	211	447
% of total sick persons	12.4	12.2	12.3	10.2	10.1	10.1	11.5	11.4	11.5
% of persons in age group	16.1	13.8	14.9	23.1	19.5	21.3	18.0	15.3	16.6
> 10 Years	420	384	804	310	279	589	730	663	1,393
% of total sick persons	33.7	33.8	33.7	38.9	39.0	39.0	35.7	35.8	35.8
% of persons in age group	14.5	13.4	14.0	22.1	22.2	22.1	17.0	16.0	16.5

Source: Household survey

Use of BHUs by level of income: The use of PPHI BHUs by income level appears to be distinctly different from that using the DDOH BHUs. Use of PPHI BHUs is higher among the lower income groups, whilst in DDOH BHUs the pattern seems to be the opposite.

Figure 25: Utilisation of BHUs by income/wealth quintile



Source: Household survey

The absence of catchment population data and insufficient controls within the household survey prevent further analysis of whether this utilisation pattern has been affected by the distribution of income groups in the populations served, the location of the BHUs within the catchments areas, or other factors. In sum, while the finding is interesting it should be interpreted with caution.

Table 34: BHU consumers by income/wealth quintile

Quintile	PPHI BHU consumers		DDOH BHU consumers	
	No.	%	No.	%
Lowest	518	27.6	114	12.4
2	441	23.5	174	18.9
3	376	20.0	183	19.9
4	298	15.9	220	23.9
Highest	246	13.1	230	25.0
Total	1,879	100	921	100

Source: Household survey

Different patterns of BHU utilization by province

The data identify some differences in consumer preferences across provinces. In Sindh, 99.1% of households in PPHI districts reported to use the BHU almost always and made negligible use of private providers (0.7%). This contrasts with households in DDOH districts where only 63.6% used the BHU whilst 30.3% used private providers.

In KP Province, however, only 40.3% of those using a facility accessed the BHU in PPHI districts compared to 63.9% where BHUs are managed by DDOH, whilst 54.1% and 22.1% respectively used private providers.

Overall, across the data available, BHUs in Balochistan and Sindh are more likely to be used in districts where they are PPHI managed, while in KP the opposite is the case. It should be noted that these preferences will depend greatly on the availability of alternatives and the relative costs and affordability by consumers, so these results should not be generalised in terms of people preference for one or another model.

Table 35: Care seeking by service type and by respondent location in percentages

		Location of respondent		
		PPHI district	DDOH district	Overall
Sindh	BHU	99.1	63.6	83.2
	Other govt	0.2	6.1	2.9
	Private practitioner	0.7	30.3	13.9
Balochistan	BHU	90.8		90.8
	Other govt	1.1		1.1
	Private practitioner	8.2		8.2
KP	BHU	40.3	63.9	55.1
	Other govt	5.6	14	10.9
	Private practitioner	54.1	22.1	34
Gilgit - Baltistan	BHU	88.8		88.8
	Other govt	6.4		6.4
	Private practitioner	4.8		4.8

Source: Household survey

Table 36 below shows the results from an exploratory regression analysis. It should be seen as a somewhat simplistic attempt to overcome the small sample size by assuming a basic linear model in which facility utilisation is determined by the management model (PHPHI or non-PPHI) conditioned by factors relating to differences between provinces and the distance of communities from the relevant BHU facility. The dependent variable is

allocated the value 1 for facility users who access a BHU and 0 for those who access an alternative facility (other government facility or private practitioner).

The analysis indicates that there are minor differences in terms of choice of facility between the provinces of Sindh, Balochistan and GB. However, the odds-ratio for KP is 0.22, implying that a sick individual in KP is around one-fifth as likely to use a BHU as a similar individual in GB. This conforms to the findings in table 5. Similarly, the further away a household from the BHU, the less likely it is to be accessed. The odds-ratio is 0.78, implying that the likelihood of using a BHU decreases by around 22% for each mile of distance.

At least in this simplistic model, there is a clear implication that individuals are more likely to use a BHU if it is under PPHI management, even allowing for the effect of provincial and distance factors. The odds-ration is 1.75, which implies that the probability of using a BHU is some 75% higher in PPHI districts. This seems a potentially interesting finding, but it must be treated with considerable caution.

Table 36: Logistic regression to explore choice of facility (BHU versus other)

Explanatory Variable	B	S.E.	df	Sig.	Odds ratio
PPHI	0.562	0.092	1	0.000	1.75
Province (GB reference)			3	0.000	
Sindh	-0.193	0.247	1	0.435	0.83
Balochistan	0.223	0.264	1	0.397	1.25
Khyber Pakhtoonkhwa	-1.502	0.246	1	0.000	0.22
Distance to BHU	-0.247	0.083	1	0.003	0.78
Constant	1.874	0.278	1	0.000	6.51

Source: Household survey

Reasons for using BHUs

Reasons for using BHUs given by respondents who had used them show two clear differences between those using PPHI BHUs and those using DDOH BHUs.

- 44.5% of PPHI BHU users gave "good quality service" as a reason compared with 7.8% in DDOH BHUs.
- 86.0% of users in DDOH BHU districts gave "easy access" as a reason compared with 48.2% in PPHI BHU districts, and there is little difference between respondents from BHU villages or from more distance villages.

Table 37: Reasons for using BHU given by those who received services by numbers and percentages

	PPHI BHU consumers		DDOH BHU consumers	
Quintile	No.	%	No.	%
Easy access	906	48.2	792	86.0
Quality service	836	44.5	72	7.8
Reasonable price	96	5.1	51	5.5
Concerned staff	31	1.7	3	0.3
Suitable hours	10	0.5	3	0.3
Total	1,879	100	921	100

Source: Household survey

Access to reproductive health services

In PPHI districts, 71.4% of pregnant women sought and received some antenatal care during their last pregnancy compared to 62.5% of those in DDOH districts. In PPHI districts, 53.6% of pregnant women received some ANC at a BHU, compared to 22.6% of those in DDOH districts. Of those women seeking and receiving some ANC, 75.0% received it from a BHU in PPHI districts, compared with 36.2% in DDOH districts, the latter making much more use of private doctors.

Table 38: Women receiving antenatal services

	PPHI BHU consumers			DDOH BHU consumers		
	BHU village	Distant village	Total	BHU village	Distant village	Total
Eligible women	789	796	1,585	384	360	744
ANC in last pregnancy	579	553	1,132	245	220	465
%	73.4	69.5	71.4	63.8	61.1	62.5
location of ANC in % [1]						
BHU staff	56	51.3	53.6	28.4	16.4	22.6
Private doctor	10.1	10.3	10.2	24.2	33.1	28.5
Unskilled BA	7.2	7.9	7.6	11.2	11.6	11.4
% of ANC at BHU [2]	76.3	73.8	75.0	44.5	26.8	36.2

[1] % of eligible woment receiving care by location of service
[2] % of women receiving ANC receiving it at BHU

Source: Household survey

Of women delivering in the previous 24 months, 58.8% were attended by unskilled birth attendants in PPHI BHU districts, compared with 70.7% in DDOH BHU districts. PPHI BHU staff attended 37.4% of deliveries compared with 18.0% for DDOH BHU staff.

Reasons for not using BHU staff were different. 53.15 of those not using PPHI BHUs gave "timing didn't suit" as a reason against 14.9% for not using DDOH BHUs. Only 20.3% gave "quality as a reason in PPHI BHU districts compared with 65.2% in DDOH BHU districts.

Table 39: Attendance during delivery

	PPHI BHU consumers			DDOH BHU consumers		
	BHU village	Distant village	Total	BHU village	Distant village	Total
Eligible women	789	796	1,585	384	360	744
assisted by						
LHV of BHU	16.9	13.3	15.1	9.4	5.8	7.7
FMO/WMO of BHU	3.9	3.3	3.6	1.8	0.8	1.3
SBA of BHU	20.8	16.6	18.7	11.2	6.6	9.0
Private hospital	24.0	21.1	22.5	20.3	30.6	25.3
Unskilled BA	55.3	62.3	58.8	68.5	72.8	70.6
not using BHU						
Number not using	625	664	1,289	341	336	677
reason						
Timing didn't suit	55.0	51.4	53.1	19.9	14.9	17.4
Quality not good	23.4	17.5	20.3	54.8	65.2	60.0
Too far away	1.4	8.0	4.8	0.6	3.9	2.2
Staff attitudes	1.6	3.5	2.6	10.3	6.8	8.4
Others	18.6	19.6	19.1	14.4	9.2	12.0

Source: Household survey

Community Involvement in health activities

PPHI has established **community support groups**, which are affiliated with each BHU under its management in all provinces. The support groups have representations from both male and female members of the society as two separate groups.

In addition the male and female medical officers in PPHI facilities have been assigned the responsibility to deliver **community health education and promotion sessions** in the schools and communities from their catchment areas. The following is a sample of community activities measured in our BHU survey:

- In Balochistan 661 support groups have been organized with 537 male and 124 female support groups. Till June 2010, over the last three years, 12,503 support group meetings have been held, 12,989 community health sessions have been held.
- In Khyber Pakhtunkhwa province 418 support groups have been organized with 414 male and 4 female support groups. Such a gender disparity was attributed to a conservative societal setup. From July 2009 to June 2010, 1316 support group meetings have been held, along with 1435 community health sessions. Among the 1453 school health session, 45,258 children were examined and 27,335 children were treated.
- In Sindh 938 community support groups have been constituted at the level of each BHU. Over 15,000 health education sessions have been held in communities and schools covering 124 health topics.

The household survey conducted in the third party evaluation appreciates the immediate effect of health education sessions. In PPHI households 73-77% of ANC clients reported to have been educated by BHU staff about the complications of pregnancy while in the DDOH model 46-54% ANC clients reported the same. The TPE however, cannot ascertain that this was due to a direct effect of community based health education or to facility based interaction. Neither could the TPE assess the effect of community activities or community support groups on utilization of health facilities: this would have required a different methodology and additional resources that were not available to the TPE team.

3.11 Summary: the impact assessment in brief

It is quite easy to get "lost in the data" so the TPE has attempted to summarise the results from the three approaches used to measure impact of the PPHI model. In addition to the short summary a table has been included as Annex 2 comprising results from the various approaches to impact assessment.

Background findings

Regardless of the precise accuracy of reports, however, one unavoidable finding from the TPE survey is that most BHUs are serving very few consumers, and this is the case for both PPHI and DDOH managed BHUs. Crudely, on a national basis, 4,872 BHUs serve a rural population of 110.46 million giving a national average BHU catchment population of 22,672. We would expect this catchment population to generate between 75-150 outpatient visits per day (at 1-2 visits per person per year and with BHUs offering services 6 days a week). In practice, BHUs are reporting less than 50 outpatients a day, with 46.2% of PPHI and 34.8% DDOH serving less than 20 outpatients a day. Whilst it is possible patients are attending other providers rather than BHUs, the TPE household survey suggests that 72% of those seeking care did so at their local BHU.

In antenatal services, again on a crude national basis, Pakistan generates 5,337,000 deliveries per annum (30.9 deliveries per 1000 population). At three antenatal visits per pregnancy this should give rise to 6.7 antenatal attendances per day in the average BHU catchment population. In practice, 80.8% PPHI BHUs and 86.9% DDOH BHUs reported fewer than 2 attendances per day. This low ANC attendance rate is confirmed by the

household survey which suggests that PPHI BHUs are providing 1.2 attendances per day and DDOH BHUs 0.5 attendances per day.

Table 40: Antenatal care services needed and received

National population	172,800,000		
National births / annum	5,337,000		UNICEF
Births pa/1000 pop	30.9		
Rural population	110,460,000		
Number of BHUs	4,872		
Average BHU catchment pop	22,672		
Births pa/average BHU catch pop	700		
ANC visits needed pa	2,101		@ 3 visits per pregancy
	PPHI	DDOH	
% pregnancies receiving ANC at BHU	53.6	22.6	from household survey
visits pa to BHUs	375	158	
ANC visits per day			
visits needed	6.7	6.7	if services available 6 days/week
visits to BHUs stated in household survey	1.2	0.5	
visits recorded at BHUs	2.0	2.0	maximum

Source: TPE estimates combining household survey with estimated populations

For deliveries, the average BHU catchment population should generate some 58 births a month (using the national birth rate) whereas over 60% of BHUs are recording fewer than 3 deliveries a month, and half are recording none at all. It is not clear whether these records include deliveries attended by BHU staff in homes but it must be assumed that they do not because the household survey found that 37.4% of women who delivered in the last 24 months in PPHI BHU areas said they were attended by BHU staff (LHV, FMO, or SBA) compared to 18% in DDOH areas. Moreover, the 2006 Demographic and Health Survey found that 39% of all deliveries are attended by a health professional and 59% by TBAs or relatives (but with deliveries for lowest income quintile women falling to 16% attended by a health professional and 81.5% by a TBA or relative).

Table 41: Attended deliveries needed and received

National population	172,800,000		
National births / annum	5,337,000		UNICEF
Births pa/1000 pop	30.9		
Rural population	110,460,000		
Number of BHUs	4,872		
Average BHU catchment pop	22,672		
Births pa/average BHU catch pop	700		
	PPHI	DDOH	
Births pa/average BHU catch pop	700	700	
% delivered by BHU staff	37.4	18.0	from household survey
Deliveries per month			
deliveries needed	58	58	population and birth rate
BHU staff deliveries	22	11	from household survey
deliveries recorded at BHUs	3	3	maximum

Source: TPE estimates combining household survey with estimated populations

In summary, utilisation of general and RH services remains low. Whilst PPHI BHUs do seem to be improving utilisation figures, they have not made a dramatic impact on an

already dismal situation in RH, an area of major concern.

Relative performance in utilisation and consumer satisfaction

Within the limits of the reliability of the data available, PPHI BHUs do appear to have brought some improvements in increasing services utilisation and consumer satisfaction. These include:

- More births attended by BHU staff (although most of these deliveries are taking place in the home rather than in BHUs) and an accompanying lower number of births attended by unskilled birth attendants, with 59% using TBAs in PPHI areas against 71% in DDOH areas reported by women in the household survey;
- More antenatal attendances, albeit still well below needed levels;
- More school and community health preventive work (despite the fact that there appears to be little effective communication between PPHI and the relevant district authorities);
- More availability of some diagnostic tests (malaria);
- Better referral record keeping, telephone communications and transport arrangements;
- More consumer satisfaction with services provided, with PPHI BHUs achieving higher scores in perceived quality;
- Higher number of patients seen by a doctor and better availability of prescribed drugs.

Against this, PPHI BHUs seemed to feature worse than DDOH BHUs in a few areas such as immunisation coverage -including recorded TT vaccinations in pregnancy, or in TB-DOTS, in both of which DDOH BHUs provide more services. MOs in DDOH areas also seemed to more productive than PPHI doctors, but in the absence of information on quality of services this finding should be interpreted with care.

What the impact assessments reveal on health planning & management

One key finding across the BHU survey is the little if any use of local planning and local health service management practices, in the BHUs as in the district health offices in both PPHI and non-PPHI models. Where is the drive to look at BHU performance and to set improvement targets? Why is available data used so little?[12] Why are population denominators never used to verify coverage and to target efforts to under-served areas? Even though the PPHI model seems to have a tighter oversight of facilities and has made measurable improvements there is a long way to go to make BHUs truly, fully functional PHC facilities.

The TPE attributes these facts to a combination of factors: lack of competence of BHU and district managers to oversee service delivery, closely linked to insufficient public health management skills; insufficient focus on performance monitoring and accountability (district to BHU, within the BHU and between the BHU and staff in the catchment area); and little pressure and clarity from the top of the organisation and from the Provincial Departments of health to build up a performance and accountability culture more strongly rooted in effective management of public health facilities. In sum, efforts should help build a district health management team with a much stronger sense of drive and purpose.

[12] We would argue that if available data is used the justification for and chances of improving reliability of data would increase.

4. Expenditure and Cost effectiveness

4.1 Introduction

The ToR requested the study to

- analyse the cost of PPHI package and compare it with cost of other routine health outlet services including (i) BHU cost, (ii) RHC cost, (iii) per patient cost, (iv) management cost,(v) per capita cost of service package and
- analyse the out of pocket expenditure and impact of PPHI on OOP expenditures (expenditure on medicines, fee, transportation etc.)
- assess financial discipline and transparency in application of resources
- carry out the efficiency analysis and/or cost effectiveness analysis, and make a general assessment of Value for Money of the PPHI scheme.

Given the inability to fully assess costs at the BHU level it was not possible to carry out an efficiency or cost effectiveness analysis, or a Value for Money (VfM) analysis. The reasons are explained in greater detail later in this section.

4.2 Flow of Funds for PPHI

Background

PPHI was established as a time-specific initiative that would introduce reforms to the district PHC management model following which PHC facilities would be devolved to the DDOH two and half years later (see chapters 2 and 5). The implications for the financing of the initiative are that no specific policy arrangements or program design have been formulated for the development of PPHI[13] and for its future funding. This has led to a range of approaches being adopted in different settings without a longer term vision being yet in place suggesting what the future of the PPHI model will be.

PPHI is now completing fourth year of its implementation but no progress has been made towards agreeing the 'New District Health Management Model' or a PPHI exit strategy.

Funding of PPHI

PPHI is a fully government-funded initiative. **The management at federal and provincial level is funded by the federal level**. In districts it has been funded from three public sources i.e. federal, provincial and district.

The Federal Government funds:

- the management structure i.e., the District Support Units.
- one time capital expenditure (Vehicles, computers, furniture etc) of PPHI and a one time grant for BHUs repair and renovation (Rs. 100,000 per BHU).

[13] Although significant decisions with reference to tenure, coverage, management and financing of PPHI were contained in the order from Prime Minister's Secretariat (Public), Public Affairs Wing; Islamabad U. O. No. 2-2/Health /DSG/PAW/2005 Dated 06 October 2005.

Districts are expected to take on the programme costs with funds transferred to PPHI as a single line grant in aid. Ongoing development needs were expected to be met by the provinces.

Programme costs cover:

- Salaries and allowances (MOs, LHVs, Paramedic and support staff of BHUs, but it does not include National Programs' staff cost as they are not paid from district health budget. National Programs have their own budget provided by the federal government. BHU in charge is not authorized to use National Program fund).
- Medicines.
- Other operating expenses (utilities, stationery/printing, small repair and maintenance etc).

Such costs are mainly covered by the district government through transfer of BHUs Budget to PPHI as set out above. However, on occasion support for medicines etc is provided by the provincial government. The same principle applies for "One time Allocations by the Federal Government for Repair/Renovation and Provision of Equipments to BHUs under the PPHI scheme

Total cost of the initiative for Federal financing was Rs. 2.0 billion which is not to exceed even if the initiative slips from its proposed time line. **Rs. 1,781 million have been made up to the year 2009-10.** PPHI has requested for additional funds but revised allocation has not yet been approved.

At the provincial level only the Government of Sindh has provided evidence to the TPE of demonstrated significant support to the initiative by providing:

- Rs. 500,000 for major repairs and renovation of BHUs that were in dilapidated condition and funds provided by federal government were insufficient to bring them back to working condition;
- approved SNE (Schedule of New Expenditure) for the facilities that had completed their developmental phase and were waiting for transfer to recurrent budget for becoming operational;
- funds for salary and other related expenditure of Female Medical Officers (FMOs) out of MNCH funds and
- an amount of Rs. 500 million to establish an endowment fund to promote financial sustainability.

In other provinces, funding by provincial government has been restricted to operational cost such as emergency medicines and vacant posts salary. In Sindh province a PC-1 costing Rs. 35 million was prepared for allocation of funds under the Annual Development Programme of the Provincial Government.

When PPHI enters a district, it takes over all First Level Care Facilities (FLCFs) in the district so PPHI and non-PPHI BHUs are not working simultaneously in the same district. Accounting is done for all BHUs in the district as one unit. **Separate accounts of each BHU are not maintained** so it is not possible to disaggregate costs by facility

Salary of staff appointed by the district government prior to take over by the PPHI is an additional resource available to the district and is not accounted for in PPHI books of accounts. If services of such staff are terminated or they are transferred, the post becomes vacant and PPHI is authorized to claim salary of the post

Medicine procurement is mainly done by District Support Units. The cost of medicines procured is expensed out on payment of suppliers invoice. Medicine supplied to DSUs and individual BHU is recorded in terms of quantity only. Individual BHU does not have cost information in its stock registers.

Medicine and equipment are also received free of cost from certain international NGOs are recorded only in terms of quantity in the District Support Unit record. When these items are issued to a BHU, entries are made in stock registers in terms of quantity.

4.3 Overall Funding Flows for BHUs

Overall funding flows are shown in the schematic figure below. This highlights the various funding flows from the various levels to BHUs and the EDOH. Key points to note include:

- The majority of funding – even at district level ultimately comes from federal sources through National and Provincial Commission awards.
- In PPHI districts BHUs receive some of their income as single line item "grant in aid" in lieu of operational costs including sanctioned posts. BHUs are free to spend this money as they see fit.
- PPHI BHUs are not required to surrender any end of year unspent balances to the Provincial Treasury. Any balances can be retained and helping a "Reserve for Improvement" which can be used to generate income. The balances are held in commercial bank accounts and earn interest for long term investment. At the same time this may create incentives not to spend.
- BHUs receive support from other sources including financial and in kind support for salary costs and drugs and equipment – most notably to cover national programme staff and activities but also others. Essentially the PPHI "grant in aid" only forms part of the resources available to BHUs.
- BHUs receive additional resources to the degree that non PPHI districts do not receive support for maintenance and repair. Operational allocations between BHUs in the same district are supposed to be equal. Funding for DSUs is additional but does not directly benefit BHU.
- Decisions on allocation of resources to districts involves the District Health Department, District Planning & Finance Department and also the District Coordination Officer who is the Principal Accounting Officer for the district. The final approval of the District Budget is granted by the District Council in its duly convened meeting.
- There are wide variations in the amounts BHUs receive. For example a BHU in a non PPHI district might receive a much higher allocation than a BHU in a PPHI district in the same province. Average allocations – whether PPHI or not – also vary widely by province – with allocations in Balochistan being particularly low (see table 42 two pages below).
- PPHI BHUs can retain and use internally any revenues raised internally through user fees for any additional services the deliver. For some services and all services in non PPHI districts any such revenue has to be returned to the Treasury.

- Materials relating to National Programmes are transferred in kind, and salary of national programme staff is transferred from Federal to Provincial Coordination Offices and from there to district through their own channels. They do not use the district government fund transfer mechanism.

It should be noted that the data presented here reflects reported expenditure and does not allow for the possibility of assessing potential leakage of funds.

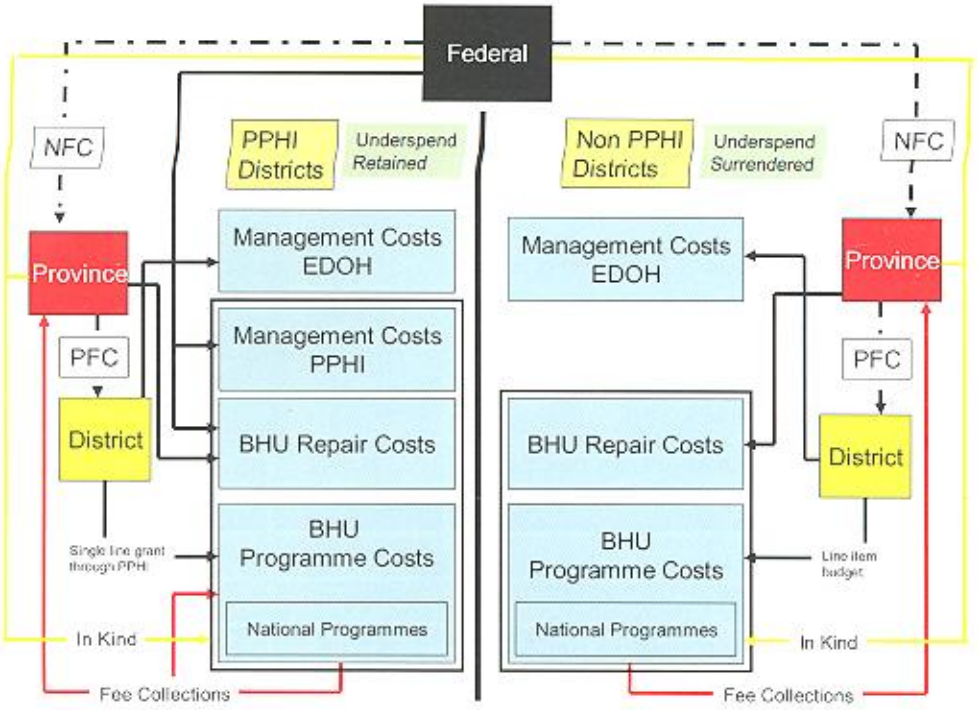
Resource Allocation Processes – Variation by Province

In Sindh, district governments inform PPHI about the overall allocation figure for the BHUs in the approaching financial year. The figure is based upon policy of the district government adopted for financing of Health Sector. It may please be noted that district Health Department proposes the budget based on policy of the district government and rationale provided by the district Finance Department. The PPHI is informed about the proposed overall budget figure for BHUs and asked to prepare detailed budget according to their foresight, however, PPHI has to respect overall policy directions of the District Government.

In the districts located in KP province, the BHUs budget is prepared as a part of district Health Budget and after approval BHUs portion of the budget is allocated to PPHI. The PPHI remains involved in budget preparation process with the district government.

In Balochistan two districts were visited i.e. Killa Saifullah and Zhob. In Killa Saifullah, a system similar to the one used in Sindh was being followed while in Zhob, PPHI management, at the time of taking over district's BHUs agreed on some percentages of different line items of non-salary budget of the district Health Department. Now every year District Health Department prepares its own budget and transfers agreed percentages of different line items in non-salary budget to the PPHI.

Figure 26: Schematic of Funding Flows



User Fees

All FLCFs working in the KP districts are required to charge an amount of Rs. 2/ from every patient visiting the facility for consultation or treatment. This is a government levy, its accounts are separately kept and collected amount is promptly deposited in the Government Treasury both in PPHI and non-PPHI districts. Some funds are generated by the PPHI managed health facilities from the services introduced by PPHI. Details of the services and their charges are given below:

Ultrasound	Rs. 50
HBC	25
Pregnancy Test	10
Sugar Test	25

An enquiry into disposal of these funds revealed that 40% of the fee earned is given to the medical technicians and 60% is retained by the BHU. The amount earned is still lying with the BHUs but a system for recording, use and investment of the funds is under preparation, which will suggest the ultimate disposal of the income.

User Fees in Swabi Two types of revenues are being collected in Swabi. One is the Parchi Fee, collected from all new patients attending the health facility. This fee is collected on behalf of the Government and deposited in the treasury. The other revenue generates from additional services introduced by PPHI in BHUs under its management. These charges relate to Ultrasound service, HBC, Pregnancy test and Sugar Test. The amount is not significant.

Resource Allocations

The chart below attempts to make comparison of funds released for FLCFs' operational cost by the district government and concerned provincial governments. The information is provided for both types of facilities working under the PPHI management and under the

District Health Departments. In order to provide a rational base for comparison, allocations per BHU have been calculated (as shown in the table below)

Table 42: Programmatic Allocations in Reviewed Districts (Rs. In million)

		FY 07-08	FY 08-09	FY 09-10
SINDH PROVINCE				
PPHI	Sindh-Mirpurkhas	43.692	80.253	80.253
	No. of BHUs (Equivalent)	68	68	68
	Average Allocation per BHU	**0.643**	**1.180**	**1.180**
DDOH	Sindh-Benazirabad (Non-PPHI)	N.A.	29.912	49.391
	No. of BHUs	N.A.	35	35
	Average Allocation per BHU	**N.A**	**0.855**	**1.411**
BALOCHISTAN PROVINCE				
PPHI	Baloch-Zhob	4.673	4.194	6.84
	No. of BHUs	15	15	15
	Average Allocation per BHU	**0.312**	**0.280**	**0.456**
PPHI New[14] (control)	Baloch-Killa Saifullah		3.718	4.2
	No. of BHUs		15	15
	Average Allocation per BHU		**0.248**	**0.280**
KHYBER PAKHTUNKHWA PROVINCE				
PPHI	KP-Swabi	18.763	20.281	19.127
	No. of BHUs	40	40	40
	Average Allocation per BHU	**0.469**	**0.507**	**0.478**
DDOH	KP-Mansehra	49.918	59.99	65.509
	No. of BHUs	58	58	58
	Average Allocation per BHU	**0.861**	**1.034**	**1.129**

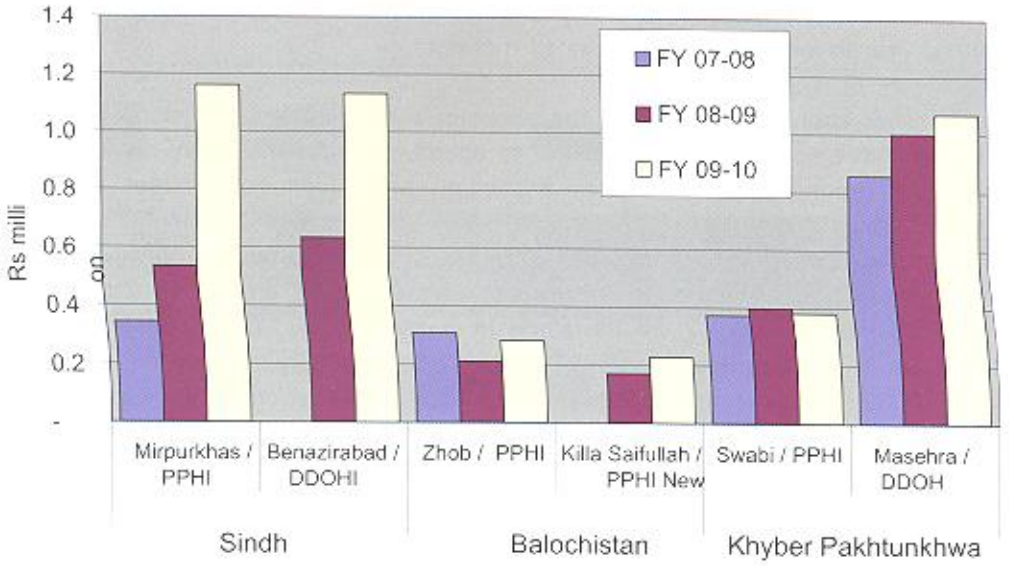
Source: PPHI TPE – Financial Management Assessments

The information indicates that in KP throughout the period under review, non-PPHI BHUs were allocated higher resources per BHU than those under PPHI management. In Sindh non-PPHI financial data was available only for the financial years 2008-09 and 2009-10. A comparison of these years revealed that in the financial year 2008-09 allocation was higher in PPHI managed facilities by about 38% but in the financial year 2009-10, non-PPHI facilities obtained 20% more funding than the PPHI managed facilities.

If a comparison is made between the provinces, districts in the Province of Sindh stand out in allocating higher resources per BHU, whereas lowest resources were allocated in the districts of Balochistan. This indicates poor resource position in the districts of Balochistan, insufficient to deliver a standard health package. It seems fairly clear from the above that **there are significant differences in the allocation of resources to lower level health facilities and that this may have a far greater effect on performance than whether BHUs belong to PPHI or DDOH models.**

[14] Reference is made to the fact that there are no non-PPHI districts in Balochistan and therefore a "new PPHI" district is used as control, as explained in 3.2.

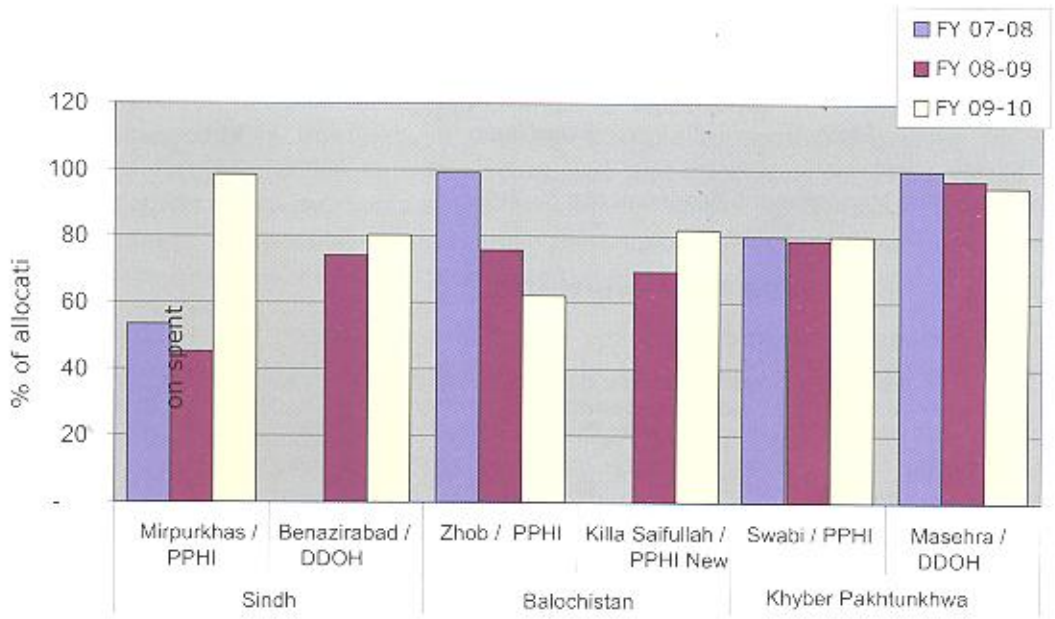
Figure 27: Average Expenditure per BHU by district PPHI/DDOH



Source: Financial Management Assessments by TPE

Figure 28 below shows the extent to which districts are actually spending their allocation. In KP it is not surprising to note that the DDOH district has fully spent its allocation (as the funds are lost otherwise) whilst the PPHI district has not. The picture is less clear in Sindh where the non PPHI spent a larger share of its allocation in 2008/09 but a lower share in 2009/10. It would be useful to investigate the reasons

Figure 28: Expenditure as % of Allocation by district PPHI/DDOH

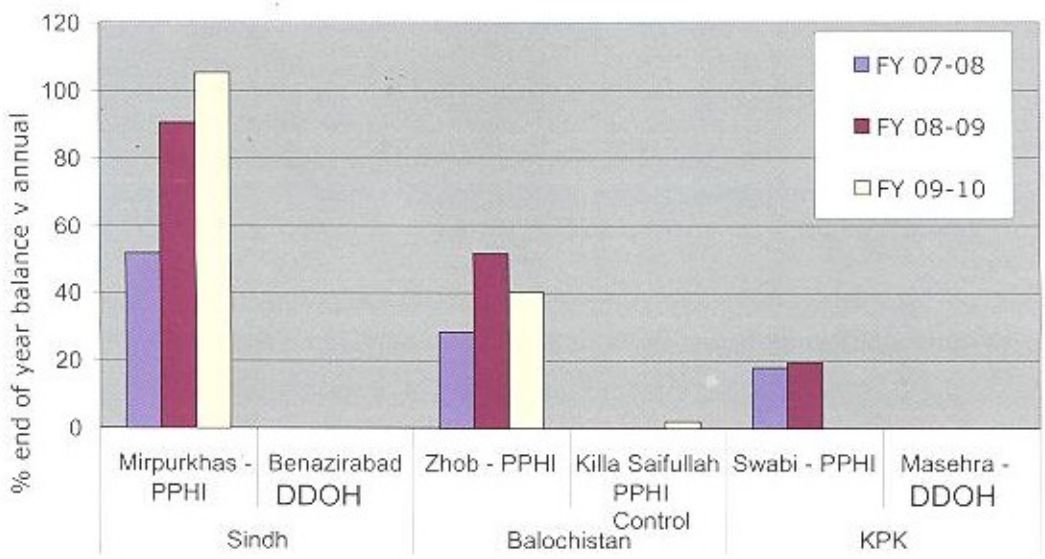


Source: Financial Management Assessments by TPE

The importance of the freedom to carry over under spends is shown in the chart below. In principle, this freedom allows a district to plan more rationally – it does not have to spend money within a financial year or try and spend "paper transfers" received in the last month of the financial year in a rushed and unplanned manner.

Experience in other countries has raised the opposite concern that institutions given this type of freedom have powerful incentives not to spend. Firstly, they may not be totally comfortable with the new freedoms they are given and given fears about perceived mismanagement may be reluctant to spend. This is compounded by the fact that any carry overs can be invested to earn income. Progress will have to be monitored closely to ensure that a sensible balance between spending and saving is achieved. There is no reason to assume this balance will be the same in every setting. The current picture is that PPHI districts have been accumulating financial balances varying between less than 10% and over 100% of their annual allocation. The further implication of this – in terms of the value for money assessment – is that any benefits achieved in terms of additional services provided – result from a less than full utilisation of the budget.

Figure 29: Balances as % of Allocation by district PPHI/DDOH



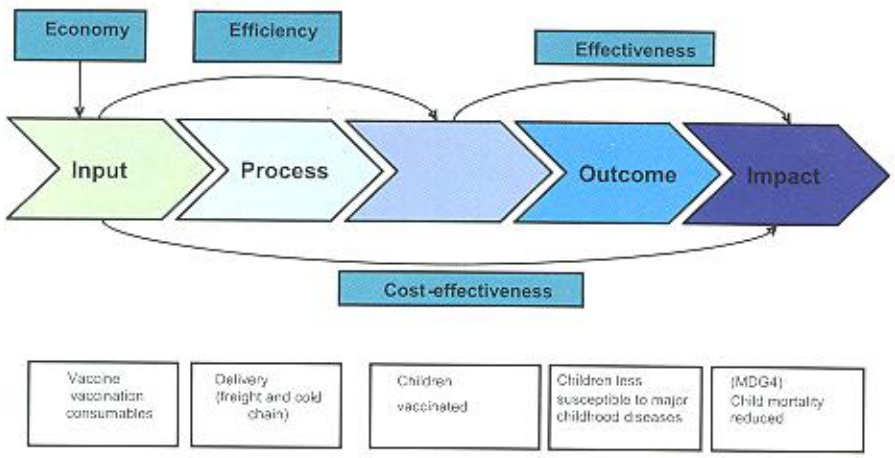
Source: Financial Management Assessments by TPE

4.5 Assessing Value for Money

A value for money assessment requires a comparison between the additional inputs involved in any intervention and any additional outputs and a judgment as to whether the extra outputs justify the extra expenditure. Rather than necessarily compare the intervention to the status quo the intervention should really be compared against the next best investment. For the purposes of this analysis we assume the counterfactual is that services would otherwise have continued to be managed by Government.

Figure 30: Elements of a value for money assessment

Example applied to childhood immunization



Source: V Walford, 2010

In the case of PPHI many of the "inputs" are actually reforms and are, therefore, cost free. These include giving BHUs the ability to retain end year under spends, to allocate resources more freely and to exercise greater authority in terms of resource management e.g. for example by being able to contract staff, pay them market wages and fire them if they under perform. The only true additional costs – at the district level - associated with the PPHI model are the upfront investment costs and the costs of running the District Support Unit. In theory the "Grant in Aid" does not involve additional resources – rather it transfers what a BHU would have had – a line item budget – into a single line item of the same value.

In terms of a value for money analysis the problem is that BHUs receive funds from other sources – both in financial terms and through in kind flows. As it was not possible to quantify such costs in this study it was not possible to carry out a value for money analysis. A further problem as noted above was that allocations for BHUs varied widely between districts within provinces as well as within provinces. With relatively small sample sizes this makes it impossible to disentangle the impact of PPHI which attempts to achieve better results with similar levels of funding to the impact resulting from the larger amounts of funding received by some districts.

4.6 Out of Pocket Expenditure and Access to Services

The Pakistan National Health Accounts 2005/6 study shows that private expenditure accounted for just under two thirds of health spending (with out of pocket spending accounting for more than 99.5% of this). There were significant variations between provinces with private spending accounting for more than three quarters of total health spend in Punjab and KP, around two thirds in Sindh but less than 40% in Balochistan (which received significant donor contributions at the time).

Data from the household survey and from exit interviews conducted for this evaluation (see Tables 43 and 44 below) suggests that patients paid very little to use BHU services beyond the registration fee at either PPHI or DDOH BHUs.

Table 43: If visited BHU for Treatment, How Much was Paid to BHU Staff

Model	< PKR 20		PKR 20 – 50		PKR 51 – 100		> PKR 100		Nothing		Total Person
	%	No.	%	No.	%	No.	%	No.	%	No.	
PPHI Model											
Balochistan earlier district	0.3	1	0.7	2	0.0	0	0.0	0	99.0	287	290
Balochistan later district	0.0	0	0.3	1	1.0	4	11.3	45	87.5	349	399
Sindh province	0.1	1	0.0	0	0.0	0	0.0	0	99.9	842	843
KP province	5.5	10	1.1	2	0.6	1	0.0	0	92.8	168	181
GB region	0.0	0	0.0	0	0.0	0	0.6	1	99.4	165	166
Overall	0.6	12	0.3	5	0.3	5	2.4	46	94.4	1,811	1,879
District Health Department model											
Sindh province	0.0	0	0.0	0	0.0	0	0.0	0	100	437	437
KP province	0.0	0	0.6	3	0.0	0	0.0	0	99.4	481	484
Overall sample	0.0	0	0.3	3	0.0	0	0.0	0	99.7	918	921

Source: Household survey TPE

Table 44: If visited BHU for Treatment, How Much was Spent on Medicines

Model	< PKR 20		PKR 20 – 50		PKR 51 – 100		> PKR 100		Nothing		Total Person
	%	No.	%	No.	%	No.	%	No.	%	No.	
PPHI Model											
Balochistan earlier district	0.3	1	0.3	1	0.0	0	0.3	1	99.0	287	290
Balochistan later district	0.0	0	0.5	2	1.8	7	14.8	59	83.0	331	399
Sindh province	0.4	3	0.0	0	0.0	0	0.0	0	99.6	840	843
KP province	31.5	57	6.1	11	6.1	11	18.2	33	38.1	69	181
GB region	1.2	2	0.6	1	3.6	6	12.0	20	82.5	137	166
Overall	3.4	63	0.8	15	1.3	24	6.0	113	88.5	1,664	1,879
District Health Department model											
Sindh province	0.0	0	0.5	2	0.0	0	0.0	0	99.5	435	437
KP province	7.0	34	8.5	41	10.1	49	42.8	207	31.6	153	484
Overall sample	3.7	34	4.7	43	5.3	49	22.5	207	63.8	588	921

Source: Household survey TPE

Not surprisingly, in the light of this, the data tends to suggest that cost of services is not a major factor in determining where people seek health care. In the surveyed BHUs only 3-8% of people cited this as the reason behind their choice.

Table 45: Reason for Selecting BHUs From Those Who Received Treatment from BHUs

Reasons for Selecting BHU for Treatment	Patient Origin	PPHI Model		District Govt. Model		Overall	
		No. of Patient	Percent	No. of Patient	Percent	No. of Patient	Percent
Easy Access	Total	906	48.2	792	86.0	1,698	60.6
	BHU Villages	482	48.1	455	88.7	937	61.8
	Far Villages	424	48.3	337	82.6	761	59.2
Good quality service	Total	836	44.5	72	7.8	908	32.4
	BHU Villages	445	44.4	39	7.6	484	31.9
	Far Villages	391	44.6	33	8.1	424	33.0
Reasonable price	Total	96	5.1	51	5.5	147	5.3
	BHU Villages	51	5.1	16	3.1	67	4.4
	Far Villages	45	5.1	35	8.6	80	6.2
Passionate staff	Total	31	1.7	3	0.3	34	1.2
	BHU Villages	20	2.0	1	0.2	21	1.4
	Far Villages	11	1.3	2	0.5	13	1.0
Working hours suit	Total	10	0.5	3	0.3	13	0.5
	BHU Villages	4	0.4	2	0.4	6	0.4
	Far Villages	6	0.7	1	0.2	7	0.5
Total Patient		1,879	100.0	921	100.0	2,800	100.0

Source: Household survey TPE

4.7 Key Messages

- Funding for the PPHI comes from a number of sources – practices in different provinces vary. Some provinces have demonstrated significant commitment to PPHI by devoting discretionary resources to the initiative.
- PPHI funding only represents a share of total BHU spending. BHUs and district receive inputs form other sources including "in kind" flows and individual BHUs do not have separate accounts. As such it is not possible to get a comprehensive picture of funding at BHU level.
- There is a wide variation in allocation between districts irrespective of whether they are PPHI districts or not. Thus, much of the difference in performance between districts and facilities may reflect the decentralisation process rather than the impact of PPHI itself.
- Some PPHI districts have been accumulating significant balances by carry-over unspent allocations from the previous year(s), in some cases over a year's allocation. It is not clear whether this represents a rational response to the additional flexibility provided by PPHI.
- Given the inability to get a comprehensive picture of inputs and conclusive results in terms of improved outputs a value for money assessment is not feasible.
- Though private out of pocket spending is extremely high in Pakistan there is little evidence financial cost - through official fees - is a significant barrier to access. Charges tend to be low – revenue raised is negligible. Only around 5% of patients cite financial cost as a major driver in their choice of facility.

5. The PPHI Model and its Implementation

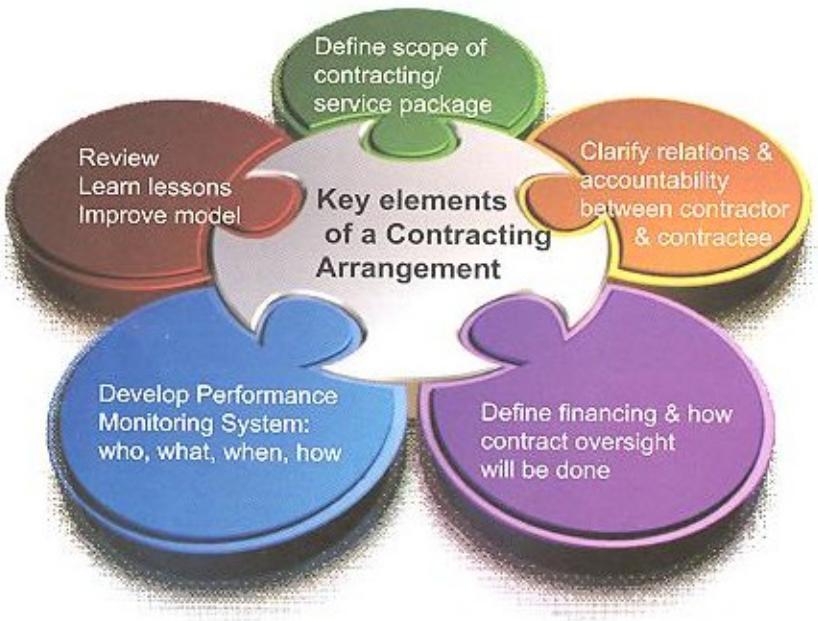
The purpose of this chapter is to describe the principles and characteristics underpinning the PPHI model in Pakistan, and *how* it has been implemented. It responds to the requirement in the evaluation objectives "to assess the PPHI model in terms of its conceptualisation, design, organisation, governance, financing, implementation & monitoring arrangements". To this end, the TPE has reviewed the PPHI contracting model taking into account good practice for contracting in the health sector, and experiences from other countries where such approaches have been employed.

A brief discussion of the principles of good contracting will cover issues of:

- The design, objectives and dynamics that originated the PPHI model in Pakistan;
- The extent to which contractor (DG) and contractee (RSP) are discrete legal entities, and the degree of contractor autonomy;
- The nature and type of incentives built into the contract for both parties, and the extent of competition or contestability established by the contractual framework;
- Whether the scope of the contracting arrangement and of the service package have been clearly defined;
- If relations and accountability lines between contractor and contractee have been established and implemented;
- How the financial flows and contracting oversight will be performed;
- Whether a performance monitoring system has been defined and is in place;
- Whether current arrangements foster a regular review of lessons to improve the model.

These aspects are summarized in the figure below:

Figure 31: Key elements of a contracting arrangement



5.1 Design of the PPHI Model

A review of the available documents from the time the PPHI was launched[15] clearly suggest that the original PPHI model envisaged a temporary outsourcing (contracting in) of the management of health facilities to a private entity (the RSP), in order to introduce management reforms, that were to be adopted by and within District Governments, and, more specifically, within a reformed District Department of Health.[16] The assumption being that once these reforms were in place, the management of FLCFs would be returned to the district health administrations. The following observations are made by the TPE:

a. **Was there a reform agenda?** The TPE team did not find any evidence of a reform agenda for the District or Provincial DOH that would underpin or sustain the changes that the PPHI model would bring about.[17] In any case, such reforms were neither defined nor introduced, in any of the districts or provinces visited. From what we have seen and recorded in our interviews, the Provincial and District DOH post-PPHI continued to go about their business, in much the same way, as they did before the PPHI took over the management of the FLCFs, except for the fact that PPHI managers began supplying information to the DDOH (for the HMIS), and were involved in (monthly) coordination meetings with the DDOH authorities.

b. **What was the long term vision and plan?** None of our interviews with either PPHI representatives or government health managers, in the districts, provinces, or at federal level, suggested that the management of FLCFs contracted through PPHI would be eventually returned back to the DDOH. On the other hand, the temporary nature of the management transfer from government to PPHI, and then back to the government after a certain period of time, is clearly stated in several provincial government documents.[18]

c. **Weak change management arrangements and their impact on working relations between PPHI and the Departments of Health**. Outsourcing the management of district FLCFs to RSPs was indeed a major change or reform that might have triggered the expected broader systemic change had other reforms taken place simultaneously. However, as previously mentioned, the PPHI scheme was not transferred the management of the entire PHC network in the district, or assigned any responsibility for bringing about reforms within the DDOH (how could it?). PPHI was merely contracted out the management of some FLCFs, whilst overall district management remained in the hands of the DDOH. [19] DDOH neither

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[15] These include: Instructions from the Prime Minister's Secretariat (Public) U.O Number 2-2/Health/DSG/PAW/2005 of 08/X/2005; Power-point presentation to the then Prime Minister of Pakistan on the contracting experience in Punjab; Memorandums of Understanding signed between RSPs in Sindh, Balochistan and KPK (then NWFP); Federal Government "Rules of Business" with regard to health; among others

[16] To emphasise this point, both the original instructions from the Prime Minister's Office as well as several memorandums of understanding signed at the time between Provincial Governments and the RSP in that province refer to the PPHI model as "Health Sector Reforms". Likewise, when the PPHI programme was launched in Sindh, it was referred to in internal government documents as the *Sindh Health reforms*.(Report: Summary for health Minister Sindh, 2007)

[17] The TPE saw documents dating back 2006 (from the National Reconstruction Bureau, for instance) showing discussions about some possible reforms, but for some reason these ideas did not see the light to become policy at the federal MOH or anywhere else.

[18] For example, a summary note prepared for the Chief Minister of Sindh in 2007 clearly stated that PPHi was expected to transfer its management of FLCFs back to the Provincial DOH within 30 months, starting from January 2007. For NWFP (KPK), the position seems to be different, and according to MOU, PPHI was to be allowed to continue managing the FLCFs subject to the results of an evaluation, to be conducted 2 years from the launch of PPHI in that province.

[19] The only "experiment" in Pakistan that we are aware of where an external entity was handed over BOTH the management of FLCFs (including RHCs) AND the management of the entire PHC network in

had instructions from higher authorities to reform its management and organisation structures and approaches, nor were there incentives for such self reform. So, the reality has been one of both organisations –PPHI and DDOH - operating in parallel, with PPHI being expected to report to the DDOH. This model could not possibly deliver changes within the DDOH. Furthermore, implementation in the absence of government reforms has generated considerable animosity in many districts between the two organisations, with the DDOH perceiving a loss of control over its FLCFs to the PPHI, whilst the PPHI has perceived that the actions, the passivity or even the antagonism of parts of the DDOH have not helped PPHI to fulfil its mission of developing a better managed and organised district health system.

d. **The importance of the regulatory framework**: Our view as evaluators is that the PPHI has been, primarily, a contracting out scheme, which represents a tremendous opportunity for introducing innovation into the health care system by clearly separating the roles of the government on the one hand, as a policy maker, regulator and financier/guarantor of public funding for essential health care, and the role of potential service providers –contractees- on the other. The model can and should pave the way for other potential service providers, similar to RSPs but not necessarily limited to RSPs to be attracted through the right incentives. However, for these opportunities to materialise, a much more robust government framework for regulating, overseeing and monitoring contracting out arrangements is required, which is also discussed later in this paper.

e. **Was competion built in the PPHI model?** To date only RSPs can opt for the PPHI scheme. Therefore we should conclude that there is no competition built in the model so far. While absence of competition might be taken as a "failure" of the original PPHI model it should be noted that this is a fairly common situation when the first health contracting experiments have been launched in other parts of the world (Cambodia, Gujarat (India), Bolivia, etcetera). The main justification for a restricted approach is, usually, lack of confidence in the availability of alternative service providers or lack of confidence on their competence. In Pakistan, the existence of Rural Support Programmes with experience in delivery of social services was probably perceived as a safer choice for delivering health care by the Federal Government of the time. On the other hand, absence of competition does not either invalidate the contracting model or preclude the future involvement of alternative service providers should the government adopt such a decision. In fact, such decision would be easier now than it was in 2005 thanks to the experience gained with the PPHI, as the Batagram district model in KPK (where district FLCFs have been contracted out to SCF – see Annex 3) has shown.

5.2 What is being contracted under PPHI?

While PPHI focuses on the PHC level there are slight differences in the types of facilities it manages from province to province. Thus, in Balochistan and Khyber Pakhtunkhwa PPHI services are focused on Basic Health Units, while the scope of management in Sindh is broader and covers BHUs, MCH Centers, Dispensaries, Unani Shafa Khanas and a few (very few) Rural Health Centers.

The PPHI Manual of Operations as well as the provincial MOU (signed between provincial government and RSP) and the district contracts for PPHI all specify that PPHI FLCFs will deliver the whole range of PHC which are preventive, curative and promotional in nature.

that district was in Batagram District (KPK), where Save the Children Fund (US) were handed over those responsibilities by the KP DOH following the 2005 earthquake.

In this section we review whether PPHI can realistically be responsible for delivering the whole range of PHC these services in view of certain implementation arrangements.

The PPHI Service Package

In a contracting arrangement it is the responsibility of the financing or oversight entity, in this case the provincial or district DOH, to specify what services should be delivered by the contractor. Often, specifications are also included about the volume and quality of services expected to be delivered. In fact, such definition is important even in the absence of a contracting arrangement, since it is otherwise not possible to hold service providers – public or private accountable for their performance. Without a clearly defined service package, it is also impossible to develop a costed service package to be used for resource allocation purposes, across districts and facilities.

Our provincial and district assessments, in addition to a review of provincial MOUs and district contracts, suggest wide variations in terms of defining the services to be delivered through the PHC network.[20] In Sindh and Balochistan we could not find a service delivery package being implemented throughout the whole province. Only in KP did we observe a policy document containing a "Minimum Health Services Delivery Package for Primary Health Care", but this was still a draft document, yet to be implemented. In sum, there is either no established service package across all FLCFs in all provinces or it has been only vaguely defined in most cases.

In the absence of an accepted service package PPHI has defined its own list of services to be delivered in the BHUs. This is quite a conventional, generally acceptable list of services, to which PPHI has added new services, such as blood sugar and haemoglobin tests. anti-snake venom (ASV), anti-rabies vaccine, among other services, to be available across the PPHI FLCFs. However, controversy has emerged at times, with the provincial or district DOH, when PPHI introduced certain new services, such as ultrasound machines for pregnant women, or diagnostic facilities for Hepatitis B & C, which some authorities saw as outside the service delivery remit of FLCFs. This matter would not have arisen if a prescribed service package for implementation had been defined at the outset. The evaluators suggest that the minimum health services delivery package needs to be discussed among partners including DOH, PPHI and other institutions including academics, for a uniform set of services and standards.

Are there clear arrangements for PPHI to deliver preventive services?

While PPHI is expected to deliver the whole range of PHC services from its BHUs it is less clear whether it can be held accountable for preventive and health promotion services in the catchment area of the BHU. This is because the line management of staff responsible for preventive and health promotion programmes remain line managed by the DDOH. As a result the MO in charge of the BHU in a PPHI district has no line management authority over national programme staff. This might not be an issue IF the working arrangements between PPHI managers (DSU) and District DOH had been clearly defined and allowed for effective coordination of service delivery. However, not only were those arrangements never clearly defined but the working relationships between DDOH and DSU reviewed by this TPE were found to be ineffective and often characterised by mutual distrust.

In theory, when PPHI takes over the management of FLCFs, all the staff operating from that FLCF should report to the Medical Officer (MO) in charge of the facility. In theory also, when PPHI manages a FLCF, it should take responsibility for all the PHC services being

[20] A service package should define what services should be delivered to a specified target population using a set of predefined static and outreach services.

delivered within the catchment area of that FLCF. In practice, neither of these generally accepted principles apply to most PPHI managed BHUs covered in our BHU survey, and in our district assessments. The prevailing situation is:

a. PPHI appoints mainly MOs, LHVs, technicians (i.e. for lab tests) and ancillary staff in its BHUs. If the MO and LHV were already in place when PPHI took over management they become line managed by and accountable to the District Support Manager (DSM) appointed by PPHI in that district.

b. Other staff working for the national Vertical Programmes[21], whether operating from the BHU or providing outreach services or based at community level (such as the Lady health workers – LHW - and their supervisors, the Lady Health Supervisors – LHS) all continue to be line managed and accountable to their respective programme managers operating and coordinated from the DDOH office.

c. The situation described above applied in all 3 provinces covered by this study. In KPK and Balochistan, this was viewed as normal practice, even though the MOU between PPHI and the Provincial Government clearly specifies *that PPHI is responsible for the delivery of all types of services in that district.* In Sindh, the situation was detected as early as 2006 as an anomaly and, as a result, the Provincial Government (through its Chief Secretary) issued several orders instructing the provincial DOH to "immediately transfer all their programme staff and their assets (vehicles, kits, etc.) to PPHI managers in PPHI districts". However these instructions were not implemented.

This matter is central to understanding what the TPE team consider an important incongruence in the way the PPHI model has been implemented. The situation described is well documented and discussed not only in government documents but also in previous evaluations of CMIPHC in Rahim Yar Khan (2005, the World Bank), and in recent evaluations of PPHI conducted in 2010 in KP (DHW/USAID 2010), and Punjab (UNICEF, 2010). Specifically, the Rahim Yar Khan evaluation that was used to justify the scaling up of the PPHI model in 2005 made specific recommendations on the need to expand the scope of the services by "*not simply improving BHU performance ... community services such as those provided by LHWs, vaccinators and other outreach staff will be essential for people living in remote rural areas .. so future agreements should cover the support, supervision, and management of LHWs, vaccinators .. and could involve other parts of the PHC infrastructure, such as family welfare centers and rural health centers*" (page 30).

The implications of assigning the responsibility for the delivery of all services to PPHI without transferring the management of staff and VPs has already had important consequences. Some problems have affected this evaluation, as we regularly struggled to gather reliable data about the delivery of preventive services beyond BHU facilities. For example, The TPE has constantly faced the attribution issue: who is ultimately responsible for low immunisation coverage in one particular district when responsibilities are split between DDOH and PPHI in such an unclear manner?

The most important consequence of the current state of affairs is for the performance of the national health system and, more specifically, for the delivery of preventive programmes. Our impact assessments suggest that the delivery of preventive services in BOTH PPHI and DDOH BHUs is extremely low, and we think that one of the reasons –there are surely other reasons- is because the ultimate responsibility for delivering preventive

[21] These programmes include: EPI, MNCHP, LHWP, TB Control programme, among others.

services included in national vertical programmes are not clearly linked to the BHU network. This results in a huge waste of resources and in many missed opportunities at the point of service. As a result, many rural Pakistanis, particularly poor women and children continue to experience among the highest maternal, neonatal and child mortality and morbidity rates, as well as the lowest contraceptive use rates (CPR) in the world. Many die unnecessarily, even if they have a health facility nearby, because these facilities are unable to meet their needs as a result of programme boundaries, resistance and turf wars in service delivery. This is why action to resolve this incongruence in the application of the PPHI model is urgent and long overdue.

RHCs and referral issues in PPHI implementation

For a comprehensive PHC service delivery operational linkages should be established between first line service providers and first line referral facilities, as well as between "static" health workers based in the facilities and other health workers that are either mobile or community based. In Pakistan, the PHC scenario entails static facilities like BHUs and RHCs and essential outreach workers of national programmes, including the National Program for Family Planning and Primary Health Care (also called the Lady Health Workers Program), the TB control program, Malaria Control Program and the Expanded Program of Immunization. The need for links between various levels of facilities (BHUs and RHCs) and staff are apparent when one considers that, in the TB control programme for example, whereas the laboratory facilities are based in the RHCs, and the Anti TB drug distribution takes place also at the BHU level, the compliance of TB patients (TB DOTS) is overseen by LHWs, who are also responsible for TB case identification and referral to BHUs and RHCs for diagnosis and clinical management.

The TPE team did not perceive that many of these necessary links were always in place in either PPHI or DDOH districts, although in the PPHI districts the issues were more serious because the MO in charge did not have authority (orm given delegated authority by the EDOH) over national programme staff. Similarly, the links between BHUs and RHCs were perceived to be generally weak in both PPHI and DDOH districts, but in the case of PPHI districts referrals between BHUs and RHCs were complicated by the fact that while BHUs were managed by PPHI the RHCs continued under DDOH management.

Poor referral practices had many causes and manifestations, ranging from poor upkeep of referral records to insufficient follow up of complicated cases referred (including women in complicated delivery). However, an additional issue linked to the role of BHUs was that many BHU staff interviewed did not have confidence in referring patients to RHCs because these were often understaffed or poorly resourced, and could not possibly deliver a 24/7 service.

Understaffing and under-resourcing of RHCs was often mentioned by DDOH staff as well as by BHU MOs in both PPHI and non-PPHI districts. The situation was peculiar in several PPHI districts where staffing levels had improved markedly at BHU level yet remained too low in the associated RHCs. The implication of the situation is that in both PPHI and non PPHI districts, RHCs were often perceived as failing to fulfil their role as referral facilities, which compromised the effectiveness and efficiency of the entire district health system.[22] This situation has important implications in terms of health outcomes, particularly those linked to neonates and pregnant women whose lives depend on effective referral when complications occur around delivery time.

[22] The TP did not undertake assessments of RHCs – most of the information presented here originates in interviews held in the districts and BHUs, both PPHI and DDOH.

From the viewpoint of delivering an integrated service package in the districts it would make sense if all PHC facilities included the RHCs were managed by the same entity. The experience from other countries (as well as that emerging from Batagram district – see Annex 3) is that handling both the FLCFs and the RHCs would enable district managers much more flexibility to attempt the delivery of services at RHCs on a 24/7 basis. This is because a single management structure is better suited to look at and implement staff mixes, staff shifts[23] and other economies of scale among BHUs and RHCs, particularly in rural areas where attraction and retention of MOs competent to deliver EmONC or CeMONC is known to be difficult. Without a well performing RHC many life saving interventions delivered from BHUs are simply not possible.

It is therefore our recommendations that where FLCF are already outsourced the provincial governments should consider the possibility of also outsourcing RHCs, as long as the support systems and monitoring arrangements that we discuss later have been sufficiently strengthened.

5.3 Oversight & Performance Monitoring of PPHI

In contracting terms it is not always possible to neatly separate the contractual oversight from the performance monitoring arrangements – both should be closely interrelated. Without oversight it is not possible to establish whether public money spent is delivering expected services, or take remedial action when performance falls below standards. This is even more compelling when services are contracted out to private providers, as in the PPHI. The oversight of a contracting arrangement should cover three important areas:

a. Technical oversight, to oversee what health services are offered, under what quality specifications and using which service delivery strategies by service providers – this has been earlier discussed in relation to the service package;

b. Performance monitoring, to periodically measure the volume and quality of services delivered, and the impact that these are having on public health (on the health of the public);

c. Contractual oversight that reviews the performance of purchasers (those who provide the funding) and providers (who deliver the services) against the clauses and obligations established in the contracts.

Technical oversight and performance monitoring

When the PPHI was launched, first the Ministry of Industries, Production and Special Initiatives (MIPSI) and then Cabinet Division (CD) were assigned by the GoP specific tasks "*in planning, implementing, monitoring, guiding, facilitating and for the regulation of the PPHI operations*". (Memorandum September 2007) A National Steering Committee (NSC) and a Federal Support Unit (FU) were established. While this approach might have been appropriate from a government perspective, it fell short of defining how several essential tasks would be performed, for example:

i. **Technical Oversight**: In most countries the MOH is the one tasked with the technical oversight of service providers. In the case of PPHI there was not a clear role assigned to the MOH, or the provincial, or district Departments of Health, in terms of technical oversight. The MOUs and contracts seem to take for granted

[23] In many countries providers use the doctors who are already delivering health care in primary level facilities (FLCFs in Pakistan) to strengthen the medical teams who manage the first referral facilities (RHC in Pakistan). This is what is meant by economies of scale in this context.

that that the provincial or district DOH would perform this task, but neither of them has developed such capabilities, or put in place the institutional arrangements (a department, a unit, and external agency, etcetera) for them to implement this task.

ii. **Performance Monitoring:** As for technical oversight, MOUs and contracts signed with RSPs assign responsibility for performance monitoring of PPHI districts to the provincial and district DOH respectively. However, it is obvious that performance monitoring has never been defined operationally (i.e. how this would be done, how often and by whom) in the PPHI context. As a result, performance monitoring -a key function in any contractual arrangement- has never been performed in relation to the PPHI scheme. Performance monitoring could have been easily performed by the DOH since PPHI has been regularly feeding data from its facilities through the standard HMIS form but, unfortunately, such information was never used to monitor performance of PPHI in service delivery. In fact, there is little evidence to suggest that DDOH offices in Pakistan understand how to do performance monitoring of their own facilities, so how could they do it convincingly, and fairly, in relation to PPHI?

iii. One indication that MOH/DOH were not given a central role in monitoring the PPHI scheme is that the three provincial MOUs reviewed by this TPE conditioned the renewal of the PPHI scheme to the performance of external evaluations to be conducted 2-3 years after the launch of the initiative. The only such evaluation that the TPE team are aware is the one conducted in KPK in 2009/10. However, while external evaluations can play a role in assessing some aspects of PPHI implementation they are not the best or the most cost-effective means for monitoring performance by either purchaser or provider of services. In contracting arrangements performance monitoring is usually a regular, periodic feature enabling purchaser and provider to look at the service results of the contracting arrangements, and to act on it.

It is **important** to note that, throughout the process of launching and implementing the PPHI the MOH/DOH were passive players who found themselves in an uncomfortable position because:

a. **PPHI was perceived as a response to MOH/DOH failure** to manage the PHC system effectively and;

b. **MOH/DOH were in fact the targets, not the implementers of management reform,** a reform that never happened, as mentioned earlier.

The issues described above seem to be the main cause of the tensions and distrust between PPHI and MOH/DOH managers observed by our study, and witnessed in all provinces, and in most districts (with some, but few notable exceptions). These issues are also responsible for the fact that today, five years since it PPHI was started, it is still extremely challenging to compare performance in either DOH-managed or PPHI managed districts because too little effort has been put on using the HMIS for performance monitoring purposes. This dynamic and tension has also resulted in other adverse effects on PPHI PHC providers, such as an isolation in terms of integration into the PHC national health system, and a lack of technical support being provided to PPHI for its district and facility managers to do a better job in terms of public health practice, as discussed later.

Contractual oversight in the districts

While contracts are the basis for regulating relationships between PPHI and District Governments, the evaluators struggled to find examples of institutional arrangements put in situ by either party, for contracts to be periodically reviewed, or for such a contract review process to be used as a tool for performance monitoring purposes. In other words, the contracts seemed to be more a formal requirement but not a management tool. Some of the reasons for this were identified by our district assessment:

a. **Lack of contract management experience in government:** There is no practical experience in the government system about how to follow up contract arrangements. With regard to the PPHI, its district managers are senior civil servants themselves, so they too lack expertise in contract monitoring.

b. **Lack of clarity and understanding of the contractual penalty system**: The purpose for overseeing contract implementation was never very clear to either DDOH or PPHI district managers, since it was unclear what actions would follow a breach of contract on either side.

c. **Conflict resolution & Contract Weaknesses:** Many conflicts did occur in relationships between PPHI and DDOH in the districts, but contracts did not seem to play a role in their resolution. For example, if a DDOH did not agree with some of the services being delivered by PPHI in the FLCF (such as the use of ultrasound machines), the contracts could not be used to settle the issue because no service package was ever specified. This resulted in the service provider being the one deciding what services to deliver.

d. **Lack of the use of arbitration:** The use of an arbitrator to resolve conflicts that could not be settled amicably did not seem to have been used in any of the districts we visited, neither was it clear who that arbitrator might be. In terms of contract design and content, this matter should have been covered at the time contracts were being drawn up.

In our opinion, and based on international experience, contracts can and should become useful tools to regulate the relationships between contractor and contractee, but for this to happen they should be much more specific about the following issues:

- **Content of service package**: The service package to be offered by the contractee (service provider) needs to be clearly specified, along with a quantification about *how much* service uptake should improve for performance to be considered acceptable.[24]

- **Clarity about breach of contact:** It is important that contracts contain clauses that set out what action will be taken in relation to poor performance. For example, some national health systems where performance is measured annually, or every two years, act following two consecutive assessments demonstrating poor performance, at which time an independent review is undertaken and a plan of action is drawn up. A third negative report may trigger the contract being put out to re-tender.

[24] In many countries this is done after the first or second year of contract implementation, when a "baseline" service utilisation has been established. This is standard practice in all health systems where, similar to Pakistan, there is not a clear baseline from which to measure contractee performance.

- **Performance Incentives**: The incentives that the provider may be entitled to if performance is above a certain level. Incentives can be in cash or kind, in person or for a group, and could target both service providers and the District Health Management team.

Conclusions and implications

PPHI and DOH PHC services cannot, and should not, continue to operate in the absence of any performance monitoring, and PPHI should operate within a stronger framework providing technical or contractual oversight. This has always been important but is now more crucial, in the context of the 18th Constitutional Amendment (devolution), and the resolutions of the National Finance Commission award that apportion more resources to the provincial level. PHC has been traditionally under funded, and there is a risk that it could become even more under-funded, unless provincial governments are helped to increase and better target resources for health.

If the recommendations of this evaluation are accepted, there will be a need to further analyse and appraise options to ensure that key principles of good practice in public health and health systems strengthening receive due attention in the immediate future. For example:

a. A publicly funded national health system should be able to measure and monitor the performance of health service providers at all levels – public or private it does not matter- in order to ensure efficient and transparent use of public money, and to be able to tell apart, good from poor performers. Attempting to answer these questions via a third party evaluation is costly, and not necessarily effective, when time adds pressure to the interpretation of information, and when information is of unknown quality because it has either not been systematically validated or because denominators are unknown.[25]

b. The HMIS, and the more recent DHIS, should be able to provide required information for performance monitoring over time, if necessary adjustments are made to more systematically report on indicators, validate information on a regular basis, and adjust denominators (in this case by districts) to ensure comparability with other districts, and to better link service outputs with health outcomes, when MICS, DHS and other surveys are conducted. For performance monitoring of service providers we would recommend a simple framework consisting of between 10-15 indicators combining service input and output indicators.

c. Using health information for performance monitoring of service providers has the added advantage of paving the way for other more sophisticated means of targeting resources to the PHC level, to reward innovation and good performance, and better support and deal with poor performers. This approach is likely to be interesting to Provincial Governments, and to the external donors, who provide financial support for health, since it would enable aid to be better linked to results (more services, better outcomes), and to performance (reward good performers and support, deal with poor performers).

d. In order to improve performance monitoring and technical oversight, there is a need to create or modify existing structures, within the federal and provincial health administrations, and to assign them a clear mandate. There are several options for doing this, from an internal department within the MOH/DOH to an

[25] This comment relates to an emphasis on programme evaluation studies to measure the effectiveness of the PPHI in detriment of rigorous monitoring.

externally contracted agency tasked with these responsibilities. The appraisal of these options should be made once the GoP and the provincial governments define their position, in relation to the future of contracting out of health care in Pakistan.

e. The current legal vacuum following the expiry of the Local Government law relating to the status of District Governments is of concern, in our opinion. Districts remain the best option for integrating health and other services, while taking sufficient account of local realities. In any case, District Health Administrations remain in place, and could play a key role in terms of technical oversight and performance monitoring, but for this to occur, they should decrease their involvement in service delivery, and micro-managing VPs, and concentrate on new functions. This is easier said than done, so an incremental approach to piloting various options might be necessary. In any case, the mistake made at the launch of the PPHI should not be repeated again, and district health administrations should not be left to reform themselves.

5.4 PPHI - Technical Support & Staff Competence

Similar issues to those recorded above were observed in relation to the technical support that PPHI, and its facility-based staff, received to ensure they delivered services in line with required technical and service specifications. In most contractual arrangements in the public sector, it is a government agency (often the MOH or DOH), who exercise such responsibility, but in the case of PPHI technical oversight is weak, partly because such function has not been clearly operationalised, and partly because the relationships between the PPHI managers and the DOH tend to be difficult.

The contractee – PPHI in this case- shares responsibility in terms of technical oversight of the services it provides, as any provider organisation should be able to assess the quality of the services it is expected to deliver. Our is that the internal technical oversight provided by PPHI to its provincial, district and BHU managers in terms of public health and health service management is weak and highly insufficient. Often oversight seems to be driven, at most, by increases in the delivery of some services (OP) but not others (Preventive, FP, etc). Many important aspects, such as, ensuring services are delivered according to correct service protocols and quality standards, and that staff are trained and supported to deliver these services, or that referrals are properly followed up, currently receive limited attention in the PPHI scheme.

PPHI has developed several steps to increase and improve its capacity for internal technical oversight. The most clear example has been the establishment at provincial and federal levels of the so called Resource Group, a group of "*distinguished health professionals*" to be appointed at both national and provincial levels to "*provide guidance to the PPHI operations appropriate to their specialties*" (Manual of Operations, January 2010 p.16). The TPE discussed the role of the Resource Group with Provincial and Federal PPHI managers, and even met with a member of the Federal Resource Group. These are our observations:

a. **The Resource Group (RG) is a worthy initiative** of the PPHI to improve its own internal technical oversight. However, the RG is too small, and its mandate too broad, for it to perform such technical oversight given the size of the PPHI scheme, to date.

b. Our impression is that **the provincial RGs have not been able to play their expected role**. For example, their members do not meet regularly (in Sindh they have been named but had never met at the time of our visit), and their role is not clearly linked to the planning and review mechanisms set by PPHI in each province.

It was also our impression that the ***membership and composition of the RG (at least the one in Sindh) has significant skill gaps.*** *For instance, it included several medical and surgical specialties but not a single public health professional, epidemiologist, PHC professional, or health economist, to mention four areas that* we consider important for an organisation delivering PHC.

c. Given the weak institutional relationships between the MOH/DOH and the PPHI, and between program managers of vertical programmes and PPHI, the initiative has tended to operate in relative **isolation** from the MOH/DOH and its defined policies and priorities. In this context there is a **danger** of using the RG as some sort of internal "policy maker," a role that the RG was not designed to play.

In sum, PPHI needs to develop much stronger internal technical oversight that is much more integrated with its planning and management systems and that is proportionate to the needs of an organisation attempting to deliver PHC to tens of millions of Pakistanis.

Competence of PPHI staff on health care management

The composition of professional staff covers areas including: management, M&E, procurement, finance and engineering. Each staff member has a job description which is specified in the Manual of Operations. Based on our district and provincial assessments, it is our understanding that hardly any staff, at any province or district support units, had previous experience of managing health care, and had minimal understanding of public health issues. Our understanding is also that there has been no induction training for provincial or district managers of the PPHI about the organisation and management of health services, health facility management, or public health and disease control matters.

Because of the reasons above most PPHI provincial and district managers are not technically qualified in either health service delivery or public health. For example, while supervision visits do take place these tend to focus on "housekeeping" matters, like ensuring that staff and supplies are in place, while we found much less emphasis being placed on technical and service delivery matters such as whether each BHU has a clear plan for improving specific services tailored to its own performance.[26]

PPHI has its own monitoring system to oversee the delivery of key services in the BHUs. Information from BHUs is compiled at the district level, then consolidated at the provincial level, and then compiled into a monthly report. Our impression is that PPHI managers are quite diligent in ensuring that this information is produced and maintained. However, we failed to see, or identify examples of, how this information is *used* operationally in terms of setting targets at BHU level, or at district level, for example. In addition, we failed to see how such information informs and drives the annual planning process within BHUs, districts, or PPHI more generally.

PPHI were found to comply diligently with filling in the HMIS/DHIS monthly returns, and to sending these to the DoH. However, HMIS/DHIS data generated does not seem to be used much by government health authorities, at least not for the purposes of monitoring service delivery, and ensuring service providers – government or non government - use such information to adjust their own performance, and set targets for improvement. This is a real missed opportunity.

[26] We have looked at Monitoring/Inspection reporting formats used by PPHI district managers – an excellent initiative. These are quite thorough yet do not envision ANALYSIS of service delivery data or service coverage figures using population denominators.

In general, there is a need to strengthen the health service planning elements at districts and BHUs, not just in PPHI districts but also in the DOH managed districts, where the situation was generally worse. In our district assessments we failed to find examples of meaningful local planning that resulted in annual plans for districts or provinces or that set performance targets for specific services. Whilst Provinces told us they develop PPHI strategic health plans these did not seem to be based on thorough assessment of service coverage targets by BHUs using, say, service mapping techniques that point to the areas where uptakes of services is lower. In sum, we got the impression that most health plans were, if at all, being prepared and implemented by well intentioned public servants with little understanding of public health planning.

Given the issues that have been raised earlier (absence of health service background among most provincial or district PPHI managers, shortcomings of the technical oversight function, etcetera), we were interested to document whether PPHI has a systematic approach to managerial, service or public health related capacity development. Our overwhelming conclusion was that, PPHI does not have a explicit capacity building plan involving induction and refresher training, for either its managerial staff at district, or provincial levels. Some activities relating to capacity building do take place (particularly as part of monthly meetings in districts) but are very ad hoc, and insufficient given the complexities involved in managing a district health system.

Competence of service delivery staff

Similar issues to those raised for district and provincial managers might be raised in relation to the MOs responsible for managing the BHUs. PPHI draws its service delivery staff from the open market and, as such, it does not always have much of a choice in terms of *who* is selected for specific positions like MO or LHV because these professionals are either scarce, or hard to attract/retain to work in rural areas. However, given the emphasis of the PPHI model on improved management, it came as a surprise to the evaluators that the MOs (or any other staff appointed by PPHI) did not undergo a process of induction, or additional training on matters relating to the management of a health facility like a BHU, or on public health/disease control strategies needed for them to effectively manage their health facilities.

6. Conclusions and recommendations from the TPE

The main objectives of the Third Party Evaluation have been are to study and assess the changes caused by the PPHI as compared to the conventional management by the District Departments of Health (DDOH) with special reference to:

d. Utilization of first level care facilities, especially by the poor;

e. The range, volume and quality of services at FLCF;

f. "Community Participation" in delivery of services at and from FLCF;

g. Efficiency and effectiveness of management structures at all levels, from National to Provincial to District to Community level.

6.1 Impact Assessment

PPHI was launched to overcome the failure of many First Level Healthcare Facilities in Pakistan to deliver PHC services through health facilities that were understaffed, poorly resourced and/or ineffectively managed. It is quite clear that in the districts where PPHI has been operating for the longest time (approximately 2 years since mid or end 2007 until January 2010) PPHI has achieved significant **improvements** in **staffing**, availability of **drugs and equipment** and **physical condition of facilities**. Improvements have also been measured by this TPE in terms of **services delivered** from those facilities - summarised in Table form in Annex 2- such as:

- **Outpatient attendance** increased by 20% on average in PPHI districts and fell by about same in DDOH districts between 2007 and 2010 (with unexplained ups and downs at certain cut points). Significant increases in outpatient attendance were confirmed in the 32 oldest PPHI districts from KPK (three times as many), Balochistan (twice as many) and Sindh (25% more) using PPHI data[27]. The number of women seen by Female Medical Officers in PPHI BHUs increased five-fold in the same period.

- Attendance for **antenatal and postnatal care** services increased in PPHI districts when compared to the starting point, yet attendance figures for both PPHI and DDOH districts were found to be quite low when population estimates were used. For example, 80% PPHI and 86% DDOH BHUs reported fewer than 2 users per day between January and March 2010. TT vaccinations to pregnant women were higher in DDOH BHUs, where 50% DDOH BHU reported 60+ vaccinations versus 10% in PPHI BHUs. On postnatal care 88% PPHI and 95% DDOH BHUs reported less than 1 postnatal case per day in the same period.

- In terms of safe delivery the household surveys report higher percentage of **deliveries performed by BHU staff** in PPHI districts (37%) than in DDOH districts (18%), although most of these deliveries are taking place in the home rather than in BHUs. This was matched by an accompanying reduction of births **attended by unskilled birth attendants** in PPHI areas (59%) when compared to DDOH areas (71%). Quality of delivery care was given as main reason for using BHU staff in 60% of households from PPHI districts against 20% of households in DDOH districts.

- Availability of certain **diagnostics tests** (eg. Malaria) and treatment for snake and dog bite was found higher in PPHI BHUs, which also conducted a larger number of **school and community health sessions** than DDOH managed ones.

[27] PPHI data is shared with DDOH on a monthly basis so it is verifiable.

- PPHI BHUs had slightly better **referral record keeping** practices, although here too much more can be done to better follow up referred patients, particularly women in complicated delivery.

- Availability of **telephone** communications and **transport** arrangements was better in PPHI districts.

- Improvement were detected in consumer satisfaction measured in the **760 BHU exit polls**, where users stated that they had selected the BHU because it offered **better quality** than other providers (47% in PPHI and 36% in DDOH BHUs) and better **drug availability** (31% in PPHI and 19% in DDOH). In addition, 81% of users in PPHI BHUs stated that they had **received all the prescribed drugs**, versus 51% in DDOH BHUs. This was confirmed by household survey results.

All these improvements are very encouraging but are nowhere near enough, particularly when population denominators are used to assess service coverage, a practice that was seldom used at either PPHI or DDOH districts. When catchment population estimates were used by the TPE it became apparent that utilisation of essential MNCH services is extremely low and that for reproductive health services is simply abysmal, in both DDOH and PPHI BHUs, so the chances of making a substantial impact on MDGs 4 and 5 through the PHC network in Pakistan remain, at this point, improbable without substantial reform.

The impact assessment exercise undertaken by this TPE revealed substantial limitations in the reliability of HMIS data, suggesting that a simple comparison between PPHI and DDOH BHUs was not always possible, particularly in the absence of baseline data[28] or simply because 2 years of implementation[29] is probably not long enough to demonstrate unequivocal results at service delivery level. Therefore, information on impact should be interpreted carefully: data collected tells a story, but it may not always tell the full story. For example, our regression analysis suggests that the PPHI BHUs are serving a higher proportion of poorer consumers than DDOH BHUs, and while this reflects positively on the PPHI model it should be interpreted with caution given the modest sample size and quite a few confounding variables that could not be isolated in the time and resources available.

6.2 PPHI funding and expenditure

The following issues have been highlighted in the section looking at the financing or the PPHI scheme:

- Funding for the PPHI programme comes from a number of sources – practices in different provinces vary. Some provinces have demonstrated significant commitment to PPHI by devoting discretionary resources to the programme.
- PPHI funding only represents a share of total BHU spending. BHUs and district receive inputs form other sources including "in kind" flows and individual BHUs do not have separate accounts. As such it is not possible to get a comprehensive picture of funding at BHU level
- There is a wide variation in resource allocations between districts irrespective of whether they are PPHI districts or not. In many cases funding appears way below

[28] Baseline data for some districts of KP was indeed available but the TPE team could not use it as it learnt too late about its existence.

[29] Assuming an average Funding for the PPHI programme comes from a number of sources – practices in differege of a year for PPHI to assess the needs, rehabilitate, staff and equip a BHU following the transfer of funds from the District Government, the first BHUs taken over by PPHI in 2007 only became fully operational in mid to late 2008. This means that impact on services measured even in the "oldest" PPHI BHUs and districts is often less than 2 years old by March 2010, the last measurement made for impact assessment.

what is required to deliver an essential health care package. Thus, much of the difference in performance between districts and facilities may reflect differences in per capita resource allocation rather than the impact of PPHI itself.

- PPHI have been accorded more flexibility in the use of district programmatic budgets, including the possibility to vire between salary and non-salary budgets. PPHI districts are also allowed to keep unspent yearly balances which DDOH districts are not authorised to do. As a result of the latter, some PPHI districts have been accumulating significant balances by carry-over unspent allocations from the previous year(s), in some cases over a year`s allocation. It is not clear whether this represents a rational response to the additional flexibility provided to PPHI.
- Given the inability to get a comprehensive picture of inputs (staffing salaries, budget and national programme allocations and other allocations by external sources) and conclusive results in terms of improved outputs a value for money assessment was not feasible as part of this TPE.
- Though private out of pocket spending is extremely high in Pakistan there is little evidence that financial cost - through official fees - is a significant barrier to access. Charges tend to be low – revenue raised is negligible. Only around 5% of patients cite financial cost as a major driver in their choice of facility

6.3 The PPHI model and its implementation

The data collection methodology adopted by the TPE necessitated casting a wide net and applying a process of triangulation to arrive at best estimates. Even so, there are limits to what the empirical data can demonstrate, and much of this TPE has been concerned with evaluating the structure and process of the PPHI programme against what is being learned elsewhere about delivering primary care, institutional change and contracting. It is here, in fact, where action-oriented lessons are to be learned and hopefully applied to improve the delivery of services.

The most salient features relating to the PPHI model and to the way it has been applied are the following:

- In its original design PPHI was conceived as a trigger for management reforms to improve PHC management by district and provincial departments of health. However, these reforms were neither defined nor implemented by either provincial or district governments and, as a result, the changes that were introduced by PPHI have not permeated into the relevant government structures.
- Key elements of a contracting arrangement have not been operationally defined for PPHI in relation to, for example, the service package to be delivered, the institutional relations between contractor and contractee or the means to oversee contract implementation or performance monitoring of service providers. Deficiencies have been also observed in the technical competence of district and BHU managers affecting both PPHI and DDOH districts that would require a more robust approach to induction training and continued professional development of these cadres.
- The absence of performance monitoring arrangements (a framework) in the public sector is currently the main impediment for the GoP to assess the performance and the value obtained for the money spent through BOTH private and public service providers. The HMIS and DHIS should be the main instruments to monitor performance of service providers. Using the HMIS/DHSI would provide powerful incentives for improving the quality of the data.

Most shortcomings such of the ones above relate to the institutional context in which PPHI has been operating and do not reflect poorly on the performance of PPHI as such. In fact, the PPHI model has made important contributions to PHC delivery in Pakistan, demonstrating that it is possible to increase staffing levels and delivery of essential services within a relatively short period of 3 years. These improvements have also paved the way for introducing more accountability for service provision (subject to improved oversight and performance monitoring) and for bringing in additional service providers to the PHC network in Pakistan. At this point it is no longer a question of whether contracting can work for PHC, but about **how to make it work for improved PHC delivery** using a well tested model covering more than 60% of districts in Pakistan.

6.4 Main recommendations

On the basis of our analysis we would like to make the following broad recommendations (more detailed, specific recommendations can be found within each section of Volume 1):

a. The institutional framework under which the PPHI and DDOH models operate should be reformed and strengthened along the lines suggested in the previous section. In essence, the provincial and district health administrations should incrementally focus on overseeing the performance of service providers, whether these be public or private.

b. In PPHI districts the DDOH should be assisted to change its role to one of contractor (purchaser) focusing on performance monitoring of service providers. DDOH staff should acquire further competence in performance monitoring and provided with technical support to become informed purchasers (contractors). They should be rewarded for their success, first in completing their management training and subsequently for performance in public health indicators, thus encouraging them to get good results from service providers (the DSU in PPHI districts).

c. In PPHI districts, provincial governments and district administrations should consider the merits of allowing PPHI take responsibility for the management of RHCs (on an incremental basis and linked to performance) so as to enhance the management of referrals and thus deliver a more integrated service package in the district.

d. Disease-specific programme staff integrated in the national programmes should report plans and activities at BHU level to achieve more effective integration of outreach and facility based services in the BHU catchment area. This would enable that MOs in charge become accountable for coverage with essential health care in the entire catchment area, not just at BHU level. There is no contradiction between being part of a national programme and reporting to the local BHU, as many preventive programme staff actually do in many countries.

e. The PPHI model relies on competent management and public health skills – skills different from those learned by the civil servants who have typically taken on the DSM roles and also different from the clinical skills of the doctors who are taking the MO roles. Neither has received sufficient appropriate training to perform the functions expected of them and neither receives sufficient ongoing training and technical support. At national and provincial level, PPHI should now develop basic training and continued support packages for its district and facility level staff, and ensure that these are rolled out across the PPHI network. Delivering public health is a complex business and the medium term vision should be to develop a cadre of competent PHC managers in Pakistan (there are various examples and options for doing this from around the world). This will require investments in training and incentives for staff interested in becoming professional health care managers.

f. Experience from Batagram district, from other parts of Pakistan (the Aga Khan Health Services network) and from the rest of the world (Cambodia, Nepal, India and many more) suggests that as the contracting capabilities of the DDOH are improved the door should be opened to contracting other potential health care providers using similar arrangements to the PPHI scheme. The country is too diverse and the delivery of PHC too complex to expect a single contractee to do it all. Under tight contracting arrangements, other NGOs could help reach those currently badly served.

g. Experimentation is needed in reward for performance, and in DSUs networking with private sector providers (including TBAs) in their districts to improve their quality and the access to services by consumers. This might be achieved by employing a franchise-type model to supplement the work of its own staff – the RSPs do not have to employ all health care providers but might piggy back on the investment that private skilled and unskilled workers have made and the credibility they have in their communities. Pakistan has the experience of working with PSI/Greenstar and Marie Stopes International in reproductive health services to build on.

h. The financing of PPHI is of great concern to the TPE (as is the very low levels of funding for PHC that were observed in many PPHI and DDOH districts during our study). Our concern related to the impact that resource shortages in PPHI districts would have on access to health care, particularly among poor women and children in rural Pakistan.

i. Funding from the federal government for PPHI was intended as a temporary measure and may now be directed or shared by the provincial governments under the scenario post 18th Constitutional Amendment, in which the funding of the entire PHC network is being revised. In order to avoid disruption to service delivery we recommend that the Federal Government should ensure that the management costs of PPHI are covered until such time as a definitive arrangement or formula can be put in place. More rather than less financial and technical support is needed now to embed the contracting arrangements and to develop management capacities.

j. The external development partners who support health care in Pakistan might prove key partners in these efforts to support and sustain PHC in the provinces. They are likely to be attracted by schemes such as PPHI where strengthened contracting could lead to various forms of performance based financing to deliver an essential health care package through the PHC network. In other words, the greater the performance orientation of the PHC network the more attractive it will be for donors, particularly large donors supporting the principles of Results-based Aid (RBA).

In its original conception PPHI was not only a contractual arrangement but a programme of public service change and reform that did not receive the support required for achieving that aim. PPHI must now be supported with change management and technical health skills, and become much more performance oriented to help Pakistan meet its health care needs including its MDGs 4 and 5.

This is a medium term and substantial programme of change that requires leadership but will be achieved and sustained if the right incentive structure is built for key participants. It is time for a change of gear, a restatement of the aims of the programme at the highest level, and a commitment to the basic model and its improvement.

Annex 1 Terms of Reference

People's Primary Health Care Initiative (PPHI) Third Party Evaluation

Terms of Reference
(revised in April 2010 following review of study design with the Advisory Forum)

Introduction and Background

In the past two decades, Pakistan has made efforts in developing its Primary Health Care (PHC) in terms of access, coverage, and availability of services. However, this has not been matched by improvements in key health indicators which remain poor as compared to other South Asian countries.

Also the recently increasing national and international pressure on achievement of Millennium Development Goals (MDGs) has pushed governments to search for ways and means to address the existing inefficiencies and poor responsiveness of health care systems, especially of PHC service delivery and management, through the development and testing of innovative models.

A number of PHC reforms have been introduced in developing countries which vary from country to country and sometimes within a single country. These reforms or innovations have adopted approaches such as outsourcing the management of PHC services or alternate management arrangements; adopting public private partnerships (PPP) modalities and introducing innovations within components of the existing PHC system. Lessons are to be learnt from these experiences.

The administrative set up of the health system in Pakistan comprises the federal, provincial and district levels. At the federal level the Ministry of Health (MOH) is responsible for policy, planning and coordination with bi-laterals, multi-laterals and international organizations. A number of vertical programmes such as: National Programme for Family Planning and Primary Health Care, Nutrition, TB Control and others are also under the overall management of MOH. Although the National Health Policy is formulated at the federal level but provinces and districts are responsible for its implementation. After devolution in 2001, provincial health department's roles and responsibilities include province specific policy formulation, standard setting and technical support in the areas of M&E, management and training of staff. The district level is responsible for management and provision of health care facilities through District Head Quarter Hospitals (DHQ), Tehsil Head Quarter Hospitals (THQ), Rural Health Centres (RHC) Basic Health Units (BHU); Mother and child Health Centres (MCH) and Dispensaries; the BHUs, MCH Centres and Dispensaries are commonly known as the First Level Care Facilities (FLCF). The districts are also responsible for prevention and control of infectious and contagious diseases, data collection, monitoring, supervision and planning.

As part of the National Health Policy of 2001 and considering the inadequate functioning of the primary health care facilities, the policy suggested testing different models and building public private partnership for provision of health care services through the existing public health facilities. One such model was tried out in Punjab, under the Chief Minister's Initiative on Primary Healthcare starting in Rahim Yar Khan District in 2003. This model

was evaluated in 2005 by the World Bank which showed positive results in terms of interalia, increasing the utilizations rates of the facilities.

In 2005, the Federal Government launched a country-wide Programme, known as the People's Primary Health care Initiative **PPHI** (formerly known as President's Primary Healthcare Initiative) for improving the service delivery at first level care facilities (FLCFs). The purpose of this initiative was to strengthen the curative and preventive services provided in FLCFs, by handing over the management and finances of running the BHUs to the Rural Support programmes (RSPs) in their respective provinces. The objective of the initiative was to re-organize and re-structure the management of all the BHUs in the district with a central role for community-based support groups. Currently the PPHI model is being implemented in 2,390 BHUs out of a total of 5310 BHUs (Economic Survey 2008-09) through-out the country.

The PPHI model is being implemented by the RSPs in respective provinces and districts. Contractual agreements which outline the terms of conditions and services provided by the BHUs (preventive and curative) have been signed between the respective PPHI/ RSPs and District Governments in Punjab, Sindh, NWFP and Balochistan. Similar agreement was executed in Gilgit Baltistan.

The Program Support Units (PSU) and District Support Units (DSU) have been established for oversight and management of FLCF. The cost of the PSUs and DSUs is borne by the government. While the management of the BHUs is solely under the control of PPHI/ RSPs, government personnel are engaged by PPHI for leadership roles in the management of the initiative.

Cabinet Division and The Ministry of Health, Government of Pakistan plan to arrange an independent evaluation of the PPHI so as to assess its impact on the delivery of primary healthcare and to ascertain whether PPHI is a successful model for replication. The evaluation is expected to highlight successes and failures as the case may be, identify gaps and issues and formulate recommendations for consideration of various stakeholders.

Objectives

The main objectives of the Third Party Evaluation (TPE) are to study and assess the changes caused by the PPHI as compared to similar other innovations and the conventional management with special reference to the following broad areas.

h. Utilization of first level care facilities, especially by the poor and marginalized
i. The range, volume and quality of services at FLCF
j. "Community Participation" in delivery of services at and from FLCF
k. Efficiency and effectiveness of management structures at all level from National to Provincial to District to Community level.

Recommendations will be formulated in light of the above, on improvements in the existing model and its future.

Specific Objectives

The specific objectives of the TPE are:

c. to assess the PPHI "model" in terms of its conceptualisation, design, organisation, governance, financing, implementation and monitoring arrangements at federal,

provincial, district and facility levels;

d. to assess the impact of the PPHI at service delivery level by comparing results between PPHI and non-PPHI BHUs, with special reference to the following broad areas.

c. Utilization of preventive and curative services;

d. Increases in the range, volume and quality of services delivered, and in the numbers of staff available to manage the facilitiews from which those services are delivered;

e. Access to those services by the poor and marginalized;

f. Involvement of the community in the delivery of services;

g. Efficiency and effectiveness of management structures at all levels from National to Provincial to District to Community level.

A follow up to the evaluation to be undertaken by the Government of Pakistan on the basis of this Third Party Evaluation should be:

a) development of consensus on the clarity of roles of all the stakeholders
b) development of the strategy for the future

Scope of Work

The evaluation will be based on quantitative and qualitative data / information collected for PPHI districts. The analyses would be done for pre and post PPHI time period and comparison of PPHI districts and other district where PPHI is not being operating would be done in each province and FATA & FANA (Gilgit-Baltistan) specifically focusing on the following points:

1) Contract and Service Package
   a) Identify the differences in service packages and terms and conditions among all four provinces
   b) Collect and analyse/ compare the service packages offered by PPHI and other routine health facilities
2) Analysis of governance, management (including contractual arrangement) and organizational structure for pre and post PPHI intervention and comparison of PPHI and non PPHI districts
   a) Review how effectively the respective obligations have been discharged by the partners to the arrangement i.e. the PPHI, the district and provincial and federal Governments with reference to the contractual arrangements in place and their roles and responsibilities.
3) Impact on Preventive Services Delivery
   a) Analyse/ assess that how effectively PPHI is addressing the preventive health care services and programs like immunization, TB, Malaria and HIV/AIDS etc. in comparison with routine MoH facilities
4) Impact on Curative Services Delivery
   a) Analyse the impact on curative service delivery after PPHI being in place
5) Health Facility Assessment
   a) Analyse and compare the physical condition of BHUs
   b) Analyse the facilities for patients
6) Patient Satisfaction Assessment
   a) Compare the utilization rate in PPHI and other public health facilities as well as in PPHI districts before and after starting the program
   b) Access to health facility by poor people
   c) Assess the satisfaction of clients from the facilities and services
7) Expenditure and Cost Analysis

a) Explain in detail the financing mechanism of PPHI
b) Analyse the cost of PPHI package and compare it with cost of other routine health outlet services including (i) BHU cost, (ii) RHC cost, (iii) per patient cost, (iv) management cost,(v) per capita cost of service package and
c) Analyse the out of pocket expenditure and impact of PPHI on OOP expenditures (expenditure on med, fee, transportation etc.)
d) Financial discipline and transparency in application of resources
e) Carry out the efficiency analysis and/or cost effectiveness analysis

8) Quality of Care
a) Assess the quality of care at PPHI and other similar facilities

9) Staff
a) Assess the knowledge and expertise of staff and behaviour analysis
b) Compare the salary structure with other public health facilities and assess its impact on service delivery
c) Assess the availability of female staff
d) Assess the programs for training and capacity building of staff

10) Medicine and Supplies
a) Assess the availability of drugs / stock outs and expiry dates etc.
b) Assess availability of other supplies and assess whether all equipments is in working condition and being handled in proper manner

11) Referral system
a) Assess the referral system and no. of referral cases

12) Data Management
a) Assess the data management and reporting to HMIS and data sharing with other organizations for research purposes

13) Assess the community involvement programs and health promotion activities by PPHI and routine facilities
14) Assess whether there is some innovation in service provision and new services added in the package including emergent needs of catchment
15) Assess and compare the linkages with LHW, vaccinator and other outreach staff and impact of PPHI on outreach services
16) Assess if there are any internal M&E system /result based management at PPHI and routine PHC administration
17) Identify the issues and obstacles in implementing the PPHI and give recommendations to improve the services and implementation of PPHI
18) Discuss and analyse the issues for sustainability
19) Lessons learnt from international/regional experiences and their applicability to the Pakistan context.
20) Lessons learnt for MOH, DOH, Districts, PPHI/Cabinet Division and recommendations
21) Conduct a dissemination workshop

Time lines

Time span for conducting the evaluation will be six months starting from 1st March 2010.

Management and reporting

The evaluation will be managed by TRF in coordination with HSSPU

An Advisory Forum will be set up for overseeing this assignment. The forum shall comprise:

- Secretary Ministry of Health / nominee by the secretary
- Secretary Cabinet Division / nominee by the secretary
- National Program Director PPHI

- Chief HSSPU
- CEO RSPN
- Representatives from AusAID and DFID

The Advisory Forum shall be responsible for the:

- Selection of team of consultants
- Overseeing the TPE as per ToRs
- Review the progress of TPE
- Final Approval of the report

Expertise requirement

An international firm will be responsible for conducting the evaluation. The firm selected will bring in expertise in conducting such types of evaluations at international and regional levels. In addition the international firm will contribute by using state of the art assessment and evaluation techniques to ensure quality assurance. It is suggested that a combination of international and national consultants be engaged to carry out the evaluation. The team should have the following expertise:

- Experience of international / regional level evaluations, for public health interventions/ programmes and experiences of evaluating PPP initiatives.
- Experience in public health and change management and a thorough understanding of the primary health care system / issues in Pakistan and public private partnership in health.
- Experience in financial systems and analysis including cost effective and cost efficiency analysis.
- Expertise in field surveys using qualitative and quantitative methodologies.

Sampling Methodology

Considering the duration of the evaluation, it is proposed that a total of 26 districts will be evaluated (6 per province; 3 PPHI and 3 non PPHI districts and 2 from Gilgit Baltistan). The selection of the districts will be based on the Multiple Indicator Cluster Survey (MICS) methodology of composite ranking of districts which is based on a set of key indicators: adult literacy and primary school enrolment, under five mortality rates, under-nutrition prevalence, adequate water and sanitation, % with skilled birth attendant at birth and modern contraceptive. This will provide district variations in terms of economic and socio cultural considerations and a representative sample will be ensured.

The PPHI model will be assessed on governance, management, financial and service utilization components, to assess client satisfaction and community participation. Exit interviews of clients from facilities and household survey will be conducted.

The detailed sampling methodology including the districts, sample size for number of facilities/per district; number of exit interviews with clients and number of households for the community survey will be determined by the international firm. The firm will ensure that representative sample is ensured with statistical precision.

Follow-up

Based on the above, the international firm will be requested to submit a technical and financial proposal; detailing their understanding of the TORs and the scope of work, including the methodology, a costed work plan and detailed budget ***no later than10th December, 2009.***

Annex 2 Table summarising results from the impact assessment

Summary Table of results from the various attempts at Impact Assessment of PPHI				
	BHU Survey	**Household Survey**	**District Assessments [30]**	**Using PPHI Provincial and district data[31]**
Reliability of data	• Significant differences in service delivery measured in Jan-March 2010 and on days of BHU visit - the latter much higher • Denominators not used & catchment populations not used for local planning	•	• Significant variations within PPHI and DDOH districts question reliability of data. • Reliability + small sample = results should not be generalised	• This does not compare PPHI 6 DDOH – it shows progression from 2007 until now •
Ante natal care services	• Very low utilisation – 80.8% odf PPHI and 86.9% of DDOH receive less than 2 clients/day.[32]	•	•	•
Post natal care services	• Very low utilisation . 88.5% of PPHI and 95.7% of DDOH attract less than 1 client/day.	•	•	•
Deliveries in BHU	• Nearly 50% of BHUs in both models perform no deliveries • 61% in PPHI and 62% in DDOH conduct less than 3 deliveries/month	• PPHI achieving reduction in use of unskilled workers (59% vs 71% in DDOH) • 37% of respondents in PPHI areas said deliveries in last 24months conducted by "BHU" staff, versus 18% in DDOH. • Of those who did not use: in PPHI areas 20% said quality and 53% said "timing" as the reason, against 60% who said quality and 17% timing in	• Numbers of deliveries in BHUs extremely low across the board • Numbers of deliveries conducted at BHUs were slightly increasing (from less than 500 to about 700) in the PPHI districts (including the old PPHI in Balochistan)	•

[30] Sample of 12 districts: 4 DDOh and 4 PPHI in Sindh and KPK; 2 "new" & 2 "old" PPHI BHUs in Balochistan. Measured at 6 cut points: Measured: Aug07; Jan & Aug 08; Jan & Aug 09; Jan 2010

[31] Data obtained from PPHI provincial consolidates in Sindh, KPK and Balochistan, and from all the Districts in those provinces for which funds were transferred to PPHI before December 2007 i.e. the older PPHI districts.

[32] Daily attendance calculated based on 30 days month and 6 working days per week.

Summary Table of results from the various attempts at Impact Assessment of PPHI				
	BHU Survey	**Household Survey**	**District Assessments [30]**	**Using PPHI Provincial and district data[31]**
		DDOH areas.	• In new districts of Balochistan there is a slow upward trend from (close to 0 to around 100) • In DDOH districts same numbers of deliveries in Aug 07 than now (around 900)	
Family Planning	• 34% of PPHI and 45% of DDOH attract no consumers for FP • 84% PPHI and 79% of DDOH attract less than 24 clients a month •	• CPR higher in DDOH areas at 47% vs 40% in PPHI areas • These figures just indicative, not real CPR as sample was biased to women who were in Household.	•	•
Immunisation	• Low delivery of children vaccinations from BHUs in both models, although DDOH appear to perform slightly better • 40% of PPHI and 21% of DDOH BHUs provided no DPT or measles in Jan-March 2010 • Availability of 5 main vaccines rated highly satisfactory in 46% of all BHUs • Considerable regional variations in both models	•	•	•
Outpatient attendance/ curative services	• Unreliable data – big differences in measurements on days of survey and on Jan-March 2010 period • Low average daily attendances in both models (29 DDOH and 27 PPHI) • During 3 days of survey PPHI attendance found significantly higher	**Patterns of use from Community Household Survey** • 24.2% of population reported an illness within the previous 30 days. Around 2/3 of the total illness burden occurs in children < 10 years, and 1/3 in adolescents and adults • Use of PPHI BHUs is higher among the lower income groups, while the opposite is found in DDOH BHUs.	• Outpatient attendance increased by 20& in PPHI districts and fell by about same in DDOH • Productivity of MO (n° of patients seen by MO) slightly falled from 2007 in PPHI districts and slightly increased in DDOH. • Patients seen by FMO increased five-fold between	• Curative services increased markedly in all 3 provinces • In Sindh both outpatients and BHUs increased, but there are strange drops in 2008 and 2009 • The upward trend is lee visible from district data where huge variations are observed (ie some districts perform much better or

Summary Table of results from the various attempts at Impact Assessment of PPHI

	BHU Survey	Household Survey	District Assessments [30]	Using PPHI Provincial and district data[31]
		Difference might be explained by BHUs handed over to PPHI being more dysfunctional & situated in poorer locations. This explanation would be reinforced by consistent pattern of utilisation by income by consumers living nearer and farther away from the BHU. Generally PPHI BHUs are in poorer areas and have poorer consumers. • 99% respondents from PPHI districts in Sindh said they always used BHU as first choice, against 63% in DDOH districts where private providers would be used by 30% of patients. • In KP province results were quite different. In PPHI districts 40% used BHU as first choice against 63% in DDOH districts., with 54% and 22% respectively using private providers. • When all provinces are prorated BHUs are more likely to be used as first choice in PPHI districts. • 44.5% of PPHI BHU users gave "good quality service" as a reason compared with 7.8% in DDOH BHUs. • 86.0% of users in DDOH BHU districts gave "easy access" as a reason compared with 48.2% in PPHI BHU districts,	2007 and 2010 in PPHI districts	worse than others) •
TB DOTS services	• 42% of DDOH provide this service against 14% at PPHI BHUs.		All Preventive services delivered	Laboratory tests as proxy for other services
Malaria, Hepatitis B and snake and dog bites tests	• Higher delivery of these tests in PPHI facilities. Hep B tests not available in DDOH.		• Mixed picture – hard to interpret • Evidence of very low supply of preventive services (ANC, PNC, Child Vaccinations, TT vaccinations across both PPHI and DDOH facilities.	• Steady, significant increase in numbers of lab tests undertaken across PPHI facilities, particularly since 2009
Referral system and practice	• Both models report to have referral system but only 80% PPHI & 53% DDOH produced referral forms • Referral records found in only 43% of PPHI and 22% DDOH. • 28% PPHI and 22% DDOH could produce records of referred complicated deliveries J-M 2010			•
Perceived quality of services measured at exit interviews	• 47% of respondents in PPHI and 36% in DDOH reported good quality service as reason for using BHU. Improvements were perceived more in Sindh and KP, not in Balochistan. • Expected better staff attitudes: 26% PPHI & 14% DDOH.	• 88% of those who had used the PPHI BHUs said they had received all their drugs, vs 63% in DDOH	•	•

Summary Table of results from the various attempts at Impact Assessment of PPHI				
	BHU Survey	**Household Survey**	**District Assessments [30]**	**Using PPHI Provincial and district data[31]**
	• Expected drugs to be available: 31% PPHI & 19% in DDOH. • 81% of PPHI users received all drugs vs 51% in DDOH BHUs • 90% of PPHI BHU users rated service as highly satisfactory or satisfactory, vs 80% in DDOH • 86% of PPHI said they would always revisit BU, vs 64% in DDOH • 76% of users of PPHI BHU could report a quality improvement since last visit, vs 61% in DDOH. More so in Sindh. • 87% of visits on average were for curative care & 13% preventive care – similar in both models(85% PPHI vs 88% DDOH).			
MNCH general points	• Utilisation figures for AN, delivery, PN and FP services are extremely low relative to what one might expect given size of catchment areas	•	•	•
Staffing levels	• Inadequate numbers across the board esp MOs • PPHI slightly better than DDOH generally, esp in KP, worse in Sindh • Good progress in appointing FMOs, esp in Sindh	•	• MOs in PPHI BHU increased more than 50% between Aug07 and Jan10: numbers fell in DDOH BHU by 10% in same period. • Proportion of filled MO posts ibcreased from 60% in 07 to 80% in 2010 • In Aug 2007 there were 12% less MOs in PPHI districts – by Jan 2010 thewre were arounbd 45% more • Singnioficant increases in numbers of FMOs by PPHI –	• General improvements in sanctioned posts filled for MO and LHV, but significant variations across provinces and districts • Sindh PPHI has achieved higher filled positions than 2 other provinces and most of Sindh MOs attend a single facility, while clusters are still the norm in Balochistan and KP. • Contracting MOs has increased very markedly, particularly in 2009

Summary Table of results from the various attempts at Impact Assessment of PPHI				
	BHU Survey	**Household Survey**	**District Assessments [30]**	**Using PPHI Provincial and district data[31]**
			this cadre does not exist in DDOH	•
Availability of essential drugs & vaccines	• 42% of PPHI were highly satisfactory or satisfactory, vs 13.9 in DDOH model from Jan to march 2010 • No significant differences in vaccines stocks, with PPHI BHUs recording 60% "highly satisfactory or satisfactory" against 66.7% in DDOH BHUs.	•	•	•
Availability of essential equipment and supplies	• Generally acceptable, slightly better in PPHI BHUs in Sindh but worse in KP • Still refrigerators not oin all facilities, and hardly any generators – cold chain?	•	•	•
Physical condition of BHUs	• Better in PPHI, and improved access to telephone, water supply, functional toilets, examination room, labour room & store room, roof repairs. • DDOH have more and better staff premises, but few actually used.	•	•	•
School Health Sessions	• 88% of PPHI facilities delivered 1-3 sessions between Jan-March 2010 • DDOH do not appear to perform School Health sessions	• 40% of women in PPHI districts reported receiving health education from BHU staff, against 5.4% in DDOH areas	•	•
Community Health sessions	• 92% of PPHI BHUs provided 1-3 sessions. • No community health sessions in DDOH model	•	•	•

Annex 3 Lessons from the Batagram model

Note: *this summary has been prepared by the TPE team to highlight important differences in design and implementation between two PPP models: the PPHI and the Batagram model. While information on Batagram was provided by SCF US the text is the sole responsibility of the TPE team, not SCF.*

Background

Following on the 2005 earthquake Save the Children – US and the Department of Health (DoH), Government of Khyber Pakhtunkhwa (KP) initiated a public private partnership with Save the Children Fund (SCF) US to revitalize and strengthen PHC facilities in the district. In 2008 and following positive initial results, the DoH of KP requested SCF to expand its scope of services to cover all primary health care facilities including BHUs and RHCs.

Key design features

The following designand implementation features are worth noting:

Two pillars. The Batagram model was built on two pillars: (a) Hub approach for management of health facilities; and (b) performance based incentives, which was linked to capacity building and delivery of services by health care providers.

All PHC facilities and programmes were handed over to SCF. The Batagram model covered the entire PHC spectrum of community based lady health workers / community midwives, static health facilities including the basic health units (BHUs) and rural health centers (RHCs).

Clear division of labour between SCF and EDOH, and mutual collaboration. At the time the program was launched, the EDO Health was hired as a SCF program manager in the district and a new EDO Health was appointed by the DoH who would look after the referral facilities (Tehsil, District and civil Hospitals). This separation of tasks enabled the SCF program manager and the DDOH to each have different responsibilities and to cover a different range of services, staff and health facilities.

Increased focus on capacity building. Through its needs assessment exercise SCF continued to build capacity of the staff. The capacity building process was carried out in systematic manner and was evaluated to show an enhanced knowledge and better practices.

Baseline and clear monitoring arrangements. A baseline was undertaken and performance indicators were set. SCF prepared a monitoring guideline with the involvement of the district health department. The initial teething problems were addressed by joint planning sessions between the SCF district management team and the team of the EDO Health. SCF and EDO Health management teams performed joint monitoring, in addition to the individual monitoring by the District Government including District Nazim (District Mayor), DCO, EDO Planning and Finance. All of the above used the same monitoring guidelines through an agreed monthly monitoring plan.

Evaluation arrangements were defined and implemented. SCF got the project evaluated through a third party during the mid term and also at the end term. The provincial department of health through the Health Sector Reform Unit oversaw the whole process. SCF initially procured the supplies and medicine through its own procurement mechanisms and later shifted to the Government of KP's procurement systems.

Service package. In addition to the services to be delivered through the BHUs Save the Children introduced the round the clock basic EMONC at the RHC level where lady doctors and LHVs were posted for round the clock service. Normal and assisted deliveries were conducted at RHCs. In addition SC introduced the nutrition program after conducting the nutritional baseline. Where there were no Lady Health Workers, community-based women were trained and given a stipend for early identification of malnourished (Severe Acute Malnourished children) and pregnant and lactating women. BHUs were also operationalized to provide nutrition supplements and complicated cases were referred to the RHCs where an additional post of Pediatrician was created and filled.

Financing. The Batagram project worked with core financing from DoH and supplementary finacing from Japan Social Development Fund through the World Bank. Systems related to health planning, logistics, and service delivery were strengthened and the stakeholders from the provincial health department to district health department were involved in decision making.

Clear Exit Strategy. SCF has a clearly laid down exit strategy with a three tier approach, on which a decision has to be taken by the Provincial Department of Health. The exit strategy offered three options, summarized below and each including a linked set of conditions for transfer:

1. SC moves out of Batagram on 31st December 2010 and Government takes over the management;
2. SC moves out of Batagram on 31st December 2010 & a local NGO (SRSP) takes over the management;
3. SC is granted 3-5 years extension by Government of KP.

Results from the 2010 evaluation

In 2010 a third party evaluated the project for its performance based on the mutually agreed performance indicators. The evaluation has demonstrated improvement in several areas, as follows:

- utilization of health services increased across the board to almost five-fold in many facilities;
- essential staff increased in all facilties filling almost all the sanctioned posts;
- reporting on the HMIS increased from 12% to 100%;
- nutrition interventions were quite successful and included community management of severe acute malnutrition along with provision of nutrition supplements for pregnant and lactating mothers.

Lessons learnt included the following:

- Keeping district government including the District Department of Health on board helped to overcome teething problems and potential resistance from Government staff;
- Performance based incentives coupled with clarity around job descriptions, focus on capacity building and improved supervision brought staff absenteeism to zero and HMIS reporting to 100%;
- Providing conducive working & living conditions ensured deployment of female staff;
- Improvement in availability and quality lead to enhanced utilization of PHC services; and
- Delegating more powers to accountable managers at HUB level paved the way for improved supervision.

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