

Title	Review and Assessment of Various Primary Health Care Models in Pakistan
Author	TACMIL Health Project
Project Title	TACMIL Health Project
Contract/Project Number	GHS-I-01-07-0003-00 Order No. 01
SO Number	SO 7
Sponsoring USAID Office	USAID/Pakistan
Contractor Name	Abt Associates Inc. in collaboration with AASA Consulting, Banyan Global, Internews, Logistics Management Institute and UTi Pakistan Pvt. Ltd.
Date of Publication	June, 2009



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# REVIEW AND ASSESSMENT OF VARIOUS PRIMARY HEALTH CARE MODELS IN PAKISTAN

**JUNE 2009**

This publication was produced for review by the United States Agency for International Development. It was prepared by Dr. Sohail Amjad, for Technical Assistance for Capacity Building in Midwifery, Information and Logistics (TACMIL) Health Project

Technical Assistance for Capacity building in Midwifery, Information and Logistics, (TACMIL) Health Project is a USAID funded health systems strengthening activity under Task Order # GHS-I-01-07-00003-00

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**DISCLAIMER**

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

# Acknowledgements

This study was done for the Technical Assistance for Capacity Building in Midwifery, Information and Logistics (TACMIL) project, funded by the United States Agency for International Development (USAID) and implemented by Abt Associates Inc. (USA). Thanks to Dr. Tariq Azim, Monitoring and Evaluation (M&E) Advisor of the Pakistan Initiative for Mothers and Children (PAIMAN) led by John Snow International, for suggesting refinement for the quality of care checklists and TACMIL SM Senior M&E Advisor Dr. Israr, for his valuable inputs and advice on sample size and methodological clarification for field activities. Special thanks go to William Conn of USAID and Dr. Zafarullah Gill, TACMIL Chief of Party, who defined the study's boundaries and dimensions, which allowed the study team to focus appropriately. Many thanks also go to Dr. Arif Hussain, UNFPA Reproductive Health Analyst, for peer review of the draft report, especially for providing valuable inputs for the quality of care data analysis. Finally we are grateful to Dr. Sania Nisthar, President of Heartfile, for reviewing the draft report and offering useful pieces of advice.

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**Disclaimer:** The Consultant and his team members have made every effort to provide the most accurate information, data, statistics, facts, figures, drawings and procedural descriptions contained in this document. However, the limitations of the accuracy of the information at the source remain. The conclusions and recommendations herein are based on the data and information available to us. The study team reserves the right to make corrections and changes in any information contained in this and in subsequent versions of this document.

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## Acronyms and Abbreviations

<b>A/DSU</b>	<b>Agency/District Support Office</b>
<b>ACR</b>	<b>Annual Confidential Report</b>
<b>ANC</b>	<b>Antenatal Care</b>
<b>APH</b>	<b>Antepartum Hemorrhage</b>
<b>BHU</b>	<b>Basic Health Unit</b>
<b>CCB</b>	<b>Citizen Community Board</b>
<b>CMIPHC</b>	<b>Chief Minister's Initiative for Primary Healthcare</b>
<b>DCO</b>	<b>District Coordination Officer</b>
<b>DDHO</b>	<b>Deputy District Health Officer</b>
<b>DGHS</b>	<b>Director General Health Services</b>
<b>DHD</b>	<b>District Health Department</b>
<b>DHIS</b>	<b>District Health Information System</b>
<b>DHMT</b>	<b>District Health Management Team</b>
<b>DHQ</b>	<b>District Headquarters</b>
<b>DOH</b>	<b>District Officer (Health)</b>
<b>DPM</b>	<b>District Program Manager</b>
<b>DSM</b>	<b>District Support Manager</b>
<b>DSU</b>	<b>District Support Unit</b>
<b>DTL</b>	<b>Drug Testing Laboratories</b>
<b>EDL</b>	<b>Essential Drug List</b>
<b>EDOH</b>	<b>Executive District Officer for Health</b>
<b>EPI</b>	<b>Expanded Program for Immunization</b>
<b>FATA</b>	<b>Federally Administered Tribal Areas</b>
<b>FLCF</b>	<b>First-Level Care Facility</b>
<b>FP</b>	<b>Family Planning</b>
<b>HMIS</b>	<b>Health Management Information System</b>
<b>HO</b>	<b>Health Officer</b>
<b>IMR</b>	<b>Infant Mortality Rate</b>
<b>IUD</b>	<b>Intrauterine Device</b>
<b>LGO</b>	<b>Local Government Ordinance</b>
<b>LHC</b>	<b>Local Health Council</b>
<b>LHS</b>	<b>Lady Health Supervisor</b>
<b>LHV</b>	<b>Lady Health Visitor</b>
<b>LHW</b>	<b>Lady Health Worker</b>
<b>M&amp;E</b>	<b>Monitoring and Evaluation</b>
<b>MCH</b>	<b>Maternal and Child Health</b>
<b>MCL</b>	<b>Metropolitan Corporation, Lahore</b>
<b>MDG</b>	<b>Millennium Development Goal</b>
<b>MO I/C</b>	<b>Medical Officer In-charge</b>

<b>MOH</b>	<b>Ministry of Health</b>
<b>MMR</b>	<b>Maternal Mortality Ratio (Rate)</b>
<b>MS</b>	<b>Medical Superintendent</b>
<b>NCHD</b>	<b>National Commission for Human Development</b>
<b>NGO</b>	<b>Nongovernmental Organization</b>
<b>NHPU</b>	<b>National Health Policy Unit</b>
<b>NIH</b>	<b>National Institute of Health</b>
<b>NRSP</b>	<b>National Rural Support Program</b>
<b>NWFP</b>	<b>North West Frontier Province</b>
<b>OPD</b>	<b>Outpatient Department</b>
<b>OT</b>	<b>Operation Theatre</b>
<b>OTA</b>	<b>Operation Theatre Assistant</b>
<b>PHC</b>	<b>Primary Health Care</b>
<b>PHCE</b>	<b>Primary Health Care Extension</b>
<b>PHD</b>	<b>Provincial Health Department</b>
<b>PIPHCMP</b>	<b>Punjab Integrated Primary Health Care Model Program</b>
<b>PMU</b>	<b>Program Management Unit</b>
<b>PNC</b>	<b>Postnatal Care</b>
<b>PPH</b>	<b>Postpartum Hemorrhage</b>
<b>PPHCI</b>	<b>People's PHC Initiative</b>
<b>PPHI</b>	<b>President's PHC Initiative</b>
<b>PRSP</b>	<b>Punjab Rural Support Program</b>
<b>PSU</b>	<b>Program Support Unit</b>
<b>QOC</b>	<b>Quality of Care</b>
<b>RHC</b>	<b>Rural Health Center</b>
<b>RYK</b>	<b>Rahim Yar Khan</b>
<b>SWOT</b>	<b>Strengths, Weaknesses, Opportunities, Threats</b>
<b>THQ</b>	<b>Tehsil Headquarters Hospital</b>
<b>TT</b>	<b>Tetanus Toxoid</b>
<b>UC</b>	<b>Union Council</b>
<b>VP</b>	<b>Vaccination Program</b>
<b>WHO</b>	<b>World Health Organization</b>

## Executive Summary

While Pakistan has made reasonable progress in developing its primary health care (PHC) infrastructure and human resources for health, and in reducing rural-urban disparities in access, coverage, and availability of health services, progress on improving health outcomes remains poor due to management issues and constraints in PHC service delivery. The government has tested various PHC models in a handful of districts; this study assesses those models to generate evidence for restructuring PHC service delivery for better health outcomes.

A variety of qualitative and quantitative methodologies were used to review the performance of the PHC models in terms of accessibility, acceptability, infrastructure, resources, knowledge of service providers, service delivery and utilization, community participation, and quality of care (QOC). The qualitative research was conducted through key informant interviews to understand management structure and functions, organization of service delivery, coordination and linkages with the overall health system, and community participation. The QOC was assessed in four sampled districts at the rural health facility level (32 basic health units [BHU], 16 rural health centers [RHC]) by implementing two separate QOC checklists designed for the respective type of health unit.

**Findings and Results:** In the public health sector, districts are responsible for implementing routine health services and federally funded national programs through a network of BHUs, RHCs, maternal and child health centers, and secondary and tertiary hospitals. Interviews with key informants revealed that health facilities that employ integrated routine health service delivery and evidence-based decision making are quite uncommon. Fragmented outreach and facility-based service delivery, vertical information systems, and lack of essential service packages and QOC standards further mar the system. Monitoring and evaluation (M&E) activities in the health sector are confined to supervisory practices and there is no built-in routine M&E system in place to track the progress of National Health Policy implementation.

Since introduction of PHC reforms in the public health sector, various initiatives have initiated models of PHC service delivery. These models can be grouped into **three key public sector PHC models:**

- the Executive District Officer for Health (EDOH) model, managed by the district health department,
- the Punjab Rural Support Program (PRSP) or “public-private partnership” model, which outsources BHUs, and
- the National Commission for Human Development (NCHD) model, which restructures and strengthens BHUs through community participation.

The current study compares these three basic models of PHC delivery using a strengths, weaknesses, opportunities, and threats (SWOT) analysis.

The **EDOH model** receives a budget from the provincial government as a grant in aid through the respective district government.

The **PRSP model** has been implemented under various initiatives and names to encourage political ownership and support in each province. The global budget for the PRSP-operated health facilities is transferred by the district government to respective district PRSP Program Implementation Units (PIUs)

for target health facilities. The provincial government also provides additional support to PIUs to cover the operating costs. To increase utilization of BHUs, the PRSP model has introduced clustering of BHUs to ensure the scheduled availability of a doctor; each cluster is visited by a doctor on scheduled days of each week. The model contracts with doctors at higher pay than they formerly received and provides nominal performance-based incentives to junior staff. The PRSP model has no role in BHU management or provision of outreach preventive services except for health promotional activities at schools. It addresses community participation by establishing “community support groups,” but these groups do not have a role in PHC service delivery and management.

The **NCHD model** has been scaled up in selected districts of Punjab. It does not receive a budget from the district government; it pays for staff salaries and other operational costs through a provision in the Planning Commission Proforma-I (PC-I). Like the PRSP model, the NCHD model works at the BHU level and does not get involved in facility management, but it has a greater role in the integration of facility outreach preventive services. It has a robust model of community participation in PHC service delivery and management. It focuses on strengthening the referral system from the community level up to secondary-level hospitals. The PRSP model lacks such an arrangement, and this is one of the obstacles to its effective delivery of PHC services.

Introduction of an M&E system is one of the key changes introduced by the PSRP and NCHD models. The NCHD model enjoys superiority to PRSP model in establishing baseline data for its catchment population and therefore monitors progress toward targets against the baseline data. The PRSP intervention is limited to routine monitoring and supervision of implementation.

Both models have strong political support and commitment from federal and provincial levels and therefore have been replicated at a rapid pace to other provinces. This rapid scale-up is a clear indication of the readiness of policymakers and politicians to support initiatives aimed at improving health services for the citizens.

The SWOT analysis of the PHC models identifies the need for a results-oriented PHC model to address the community health care needs and inefficiencies in public health sector performance. It is further recommended that each provincial government establish its own Health Management Cadre to ensure that administrative/ managerial positions are staffed by trained and experienced managers who can effectively implement reforms in good governance, accountability, and performance monitoring and incentives. Finally, lessons learned from the current contracting models must be applied to the development of frameworks for public-private partnerships, to ensure equity for the vulnerable and the poor.

## Background and Introduction

Desire to improve health care system performance has pushed governments throughout the world to propose and implement health sector reforms. The broader context for these pragmatic country-specific reforms<sup>1</sup> is a part of the global strategy for primary health care (PHC) originating from the World Health Organization's (WHO) declaration of "Health for All by the Year 2000"<sup>2</sup>. While the specific objectives cited for PHC reforms differ by country, most can be captured under a few common themes. These are:

- ✚ to shift the emphasis from secondary, tertiary, and other levels of care to PHC;
- ✚ to increase accountability in the use of resources by PHC providers and managers;
- ✚ to improve integration and coordination of service delivery within the health sector and between PHC and other parts of the health care system;
- ✚ to increase the involvement of the public, consumers, and communities in identifying needs, planning, and setting priorities for the delivery of services;
- ✚ to increase the responsiveness of the PHC system to the population's health needs;
- ✚ to strengthen the role of disease prevention and health promotion in PHC.

Approaches taken to achieve these objectives also differ from one jurisdiction to another. Some have proposed or introduced decentralized systems of funding, management, and service delivery with the aim of increasing the accountability and responsiveness of the health care system to local communities<sup>3</sup>, while others have focused on developing a comprehensive PHC system that emphasizes the delivery of a carefully selected set of services and the achievement of objectives for improving the population's health.

In the past two decades, Pakistan has made reasonable progress in developing its PHC infrastructure and human resources for health and reducing rural-urban disparities in terms of access, coverage, and availability of services, but progress in various key health indicators (table 1) remains poor compared with Pakistan's South Asian neighbors (table 2). Although many factors contribute to the gap between health policy and its effective implementation, one of the most critical ones is the fragmentation of the public health care services delivery network.

PHC forms the basis for many health systems by providing accessible and comprehensive preventive and curative care for most of the population's most common health needs and by coordinating with other levels of care when referral is necessary<sup>4</sup>. However, it can be the 'weak link in the chain' in health systems as health sector reforms and other processes have left these front-line services with inadequate resources, staffing, and management capacity<sup>5</sup>.

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<sup>1</sup> Evans, R.G. What Seems to be the Problem? The International Movement to Restructure Health Care Systems. Health Policy Research Unit Discussion Paper 92:8D, Centre for Health Services and Policy Research, University of British Columbia, 1992.

<sup>2</sup> World Health Organization. Primary Health Care. A joint report by The Director General of the World Health Organization and The Executive Director of the United Nations Children's Fund. Alma Ata: WHO, 1978.

<sup>3</sup> Malcolm, L. Towards a Health System based upon Primary Health Care: Radical Health Reform in New Zealand. Paper prepared for presentation to the Health Futures Consultation, Geneva, 1993.

<sup>4</sup> Starfield B. Primary care: balancing health needs, services and technology. New York: Oxford University Press, 1998.

<sup>5</sup> Freedman L, Wirth M, Waldman R, et al. Who's got the power? Transforming health systems to improve the lives of women and children. Millennium Project Task Force 4: Child Health and Maternal Health Final Report. New York: UN Millennium Project, 2005.

**Table 1: Health Indicators during Year 1988/89 to 2006/07**

Indicators	1988/89	1990/91	1992/93	1994/95	1996/97	1998/99	2002/03	2004/05	2006/07
Infant mortality rate/1000 live births	122	120	105	101	105	90	75	73	72
Under 5 child mortality rate/1000 live births	140	140	137	107	104	104	103	97	92
Crude death ratio/1000 live births	10.5	10.2	9.3	9.3	9.3	7.8	7.8	7.8	7.7
Maternal mortality rate/100,000 live births	500-700	550	400-600	400-600	400-600	350-400	350-400	350-400	276
Life expectancy male (years)	57.1	n/a	59	61	64	63	63.2	63.2	63.3
Life expectancy female (years)	57	n/a	n/a	60	n/a	62	63	63.2	63.4
Low birth weight babies %age	35	35	32	32	32	30	23	20	20
Malnourished children under 5 years % age	47	n/a	45	n/a	42	40	39	35	33

Sources: United Nations Development Programme (UNDP), Human Development Report, 2006; Economic Survey 2005-06 (first five indicators for Pakistan); Planning Commission, 2007, Pakistan MDGR 2005, 2006, PDHS 2006-07

**Table 2: Selected Health Status Indicators, Pakistan and Asian Countries, 2006/07**

Country	Life Expectancy		IMR	Under 5 Mortality	MMR	Annual Growth Rate	HDI Rank	H. Exp.% GDP
	M	F						
Pakistan	63	65	74	98	276	1.9	134	0.6
India	62.1	65.3	62	85	540	1.9	126	1.2
Sri Lanka	71.7	77	12	14	92	1.3	93	1.6
Bangladesh	62.5	64.2	56	77	380	2.2	137	1.1
Nepal	61.6	62.4	59	76	540	2.3	138	1.5
China	70.2	73.7	26	31	51	0.6	81	2.0
Iran	69.2	72.3	32	38	37	2.5	96	3.1
Thailand	66	74	18	21	24	1.5	74	2.0
Malaysia	71	75	10	12	30	2.4	61	2.2
Philippines	68.6	72.8	26	34	170	1.6	84	1.4
Indonesia	65.3	69.2	30	38	310	1.7	108	1.1

Sources: United Nations Development Programme (UNDP), Human Development Report, 2006; Economic Survey 2005-06 (first five indicators for Pakistan); Planning Commission, 2007, Pakistan MDGR 2005, 2006, PDHS 2006-07

Recently increasing national and international pressure on achievement of Millennium Development Goals (MDGs) and Poverty Reduction Strategy Paper targets 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<sup>678</sup>. These PHC reforms vary widely from country to country and sometimes within a single country. Models, approaches, and priorities have varied, and often very specific, goals and at times reforms have touched only one or few aspects of PHC<sup>9</sup>. In Pakistan, there has also been a general realization that the country's health care system needs to be overhauled and reshaped. Collins et al.

<sup>6</sup> Report on consultative meeting on primary health care policy review in the Eastern Mediterranean region, Muscat, 2002.

<sup>7</sup> Macinko J, Almeida C, Oliveira ES, de Sa PK. Organization and delivery of primary health care services in Petropolis, Brazil. *International Journal of Health Planning and Management* 19:303-17, 2004.

<sup>8</sup> Atun, Rifat Ali, Menabde, Nata, Saluvere, Katrin, Jesse, Maris, Habicht, Jarno. Introducing a complex health innovation—Primary health care reforms in Estonia. *Health Policy* 79: 79-91, 2006.

<sup>9</sup> Atun, Rifat. Advisory Support to Primary Health Care Evaluation Model: Estonia PHC Evaluation Project. Final Report, World Health Organization Regional Office for Europe, 2004.

refer to several earlier initiatives<sup>10</sup> undertaken by the Punjab Government to reform the managerial inefficiencies and apathy of the health care system. These reforms included delegation of financial powers, the Sheikhpura PHC pilot project, district health authorities in Multan and Jhelum, and hospital autonomy in selected teaching hospitals – but results were never evaluated. Furthermore, since devolution, the complex administrative structure<sup>11</sup> of the health sector has further disrupted the ‘system’ by creating confusion about the relationship of various levels in terms of their roles, responsibilities, authority, and functional linkages.

In its efforts to address management issues and constraints in PHC service delivery, the government has tested and implemented PHC models in a handful of districts, with mixed results. This makes it imperative to examine these interventions to assess their performance in terms of structure and functions, efficient and effective service delivery, changes in access and reported coverage, desired quality of care (QOC)<sup>12</sup>, and improvement in management practices. In this regard, this study – by reviewing the strengths and weaknesses of PHC models – is intended as an input to the broader examination of interventions and will provide evidence for reformulation of health policy (annex A).

**Rationale and context of study:** Assessment of existing PHC models that generates evidence for a robust model is timely and important for several reasons: The devolution of power under the Local Government Ordinance (LGO) 2001, made districts responsible for managing health resources and improving service delivery, particularly of the preventive, promotive, and curative health services provided at first- and second-level care facilities, and implementation of national programs (annex B). Furthermore, decentralization of national program resources to provinces and reformulation of National Health Policy is high on the political agenda. Finally, the new health policy will help accelerate progress towards achievement of Millennium Development Goals (MDG) and Poverty Reduction Strategy Paper targets.

## Study Objectives

The specific objective of this assignment was: **To review and assess various PHC models implemented in Pakistan to generate evidence for restructuring of PHC service delivery for better health outcomes.** The assessment was to gain knowledge on the current major PHC models in Pakistan, and to assess their strengths, weaknesses, opportunities, and threats (SWOT), to improve the PHC network. The other **objectives** of the rapid assessment were to investigate and understand:

- ✚ The PHC models of different initiatives in terms of their performance and achievements in addressing the health policy objectives;
- ✚ Coordination with national vertical programs and higher tiers of the health care delivery system; and
- ✚ Best practices, QOC, and community satisfaction offered by these PHC and other models.

## Methodology

The study team felt that the research methodology should not so much evaluate the success or failure of the assessed PHC models but rather describe each model in terms of its institutional structures as well as its capacity to implement and achieve National Health Policy objectives. The assessment would identify the strengths and weaknesses of each model and point out the opportunities and threats facing each.

<sup>10</sup> Collins, CD, Omar, Mayeh, Tarin, Ehsanullah. Decentralization, Health Care and Policy Process in the Punjab, Pakistan in the 1990s. *International Journal of Health Planning Management*, 17, 123-146, 2002.

<sup>11</sup> Ritu Nayyar-Stone, Ebel, Robert, Ignatova, Sonia, Rashid, Khalid. Assessing the Impact of Devolution on Healthcare and Education in Pakistan, UI Project 07862-001, report prepared for USAID, February 2006.

<sup>12</sup> Campbell SM, Roland MO, Buetow SA. Defining quality of care. *Social Science and Medicine* 51(11), 1611-25, 2000.

**Information gathering** would be done through a combination of literature/document review, semi-structured questionnaires, and QOC checklists that looked at multiple dimensions of the models.

The literature/document review, mainly of background material and legal documents, provided an insight into the philosophy and mechanisms for PHC model creation and implementation strategy, and support of the field data. Documents came from Ministry of Health (MOH), National Health Policy Unit (NHPU), provincial health departments, national vertical programs, Punjab Rural Support Program (PRSP), National Commission for Human Development (NCHD), and LGOs.

The tools and instruments that the study team designed for field study included quantitative and qualitative questionnaires and checklists for rapid assessment of PHC model performance in terms of planning, management, and organization of service delivery, coordination and linkages with national programs, and mandated service delivery packages. The semi-structured questionnaire investigated PHC structure and functions under devolution; coordination mechanisms, especially with other social sectors, for PHC service delivery; and factor that influence monitoring and evaluation (M&E) of performance. The decision-making structures at all levels were also probed to clarify the roles, responsibilities, and authority linkages for PHC planning, performance management, and accountability. These questionnaires, used for in-depth key informant interviews and focus group discussions at all levels of PHC service delivery and management, served to ensure that all possible areas were discussed during the meetings.

The information collected through primary field study along with the secondary data fed into the SWOT analysis. Findings were used as a basis for recommending to the government of Pakistan the strategies and policy parameters for restructuring and re-vitalizing PHC to accelerate progress towards MDG and Poverty Reduction Strategy Paper targets. No further interviews were taken once saturation was reached and no new information was emerging.

The **selection of districts** was driven by the objectives and therefore was purposive and focused on generation of maximum information in limited time. Four districts (Rahim Yar Khan [RYK], Gujrat, Sialkot, and Sargodha) were selected based on evidence for PHC models and in consultation with the client. Within those districts, a total of 48 rural health facilities, 32 basic health units (BHUs) and 16 rural health centers (RHUs) (see annex C), were selected through random sampling for visits by the study team; questionnaires and checklists were administered to in-charge health facility/service providers responsible for QOC. The team also visited Lahore and Islamabad to interview provincial- and federal-level managers and key informants.

### **Quantitative studies**

Two quantitative studies to assess service delivery performance in terms of accessibility, coverage, utilization, and QOC were carried out as follows:

- I. Service provision and utilization data from various PHC models to assess availability of mandated services.
- II. QOC assessment: Structured questionnaires were administered, focusing on quality of infrastructure, resources, knowledge of service providers, service utilization, client satisfaction, and health management information system (HMIS) performance.

Two QOC checklists, one for BHUs and the other for RHCs, were developed for the assessment. The BHU checklist contained 50 variables on essential dimensions of PHC, the RHC checklist contained 64. The variables were by topic: infrastructure, resources, knowledge of service providers, service utilization, client satisfaction, and HMIS performance; responses were rated 'unacceptable', 'satisfactory', or 'good', as judged by the enumerators based on pre-set criteria<sup>13</sup> for each variable.

### **Qualitative studies**

Key stakeholders, staff, and other individuals were identified (annex D) and interviewed to get their views on PHC model performance and management. Their valuable inputs have helped to understand strengths and weaknesses of different PHC models in place. In addition, two focus group discussions were carried out with stakeholders in Sargodha and Gujrat districts.

More specifically, qualitative data were collected:

- I. At the community and facility level, key informant interviews and focus group discussions with facility staff and other stakeholders were carried out to capture their views on their respective PHC model, its organization of services, management practices, utilization pattern, and performance management system.
- II. At the district level, semi-structured interviews with key informants – Executive District Officers Health (EDOHs), coordinators/managers of vertical programs such as the Expanded Programme on Immunizations (EPI), and Lady Health Workers (LHWs) and their supervisors (LHSs) – to understand the context in which existing PHC models operate and how useful these models are in meeting the needs of the communities.
- III. Semi-structured interviews with the medical superintendents of at least two secondary level hospitals to understand their linkages with the PHC models.
- IV. At the provincial level, individual Director General Health Services (DGHS), provincial PRSP managers, and provincial program coordinators, to identify their roles and responsibilities in organizing PHC services.
- V. At the federal level, interviews were conducted with the Chief of the NHPU, NCHD managers, NRSP Health Manager, and WHO's Medical Officer for PHC.
- VI. Two focus group discussions were carried out, in Sargodha and Gujrat.
- VII. Assessments of individual best practices in PHC, for example, Al-Kidmat PHC Network, Aga Khan PHC Network, and Lahore City Government PHC Network.

### **Study Team**

The study team comprised the team leader (the consultant) and four enumerators who were qualified senior public health experts with 20-24 years of experience in managing BHUs/RHCs. All the enumerators have also worked at BHUs and RHCs, while serving in the public health sector<sup>13</sup>. The team was divided into two groups and each group implemented the field activities in two districts. Once the facility-based activities were completed, the senior support member participated in data analysis and key informant interviews at the federal level.

### **Data Processing and Analysis**

The information collected from key informants was compiled and tabulated using MS Office software for each question, and then inputs were organized by themes and dimensions of PHC service delivery and management. Important quotes and observations were identified and used to build the analysis. Data emerging from interviews were validated internally through triangulation with information from documentary, routine, and other sources gathered prior to and during the fieldwork. The interpretations of triangulated thematic data were discussed with higher-level key stakeholders for further modification and amendment. Information was synthesized by creating matrices around identified

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<sup>13</sup> Enumerator judgment on variables was useful to minimize bias in rating as the enumerators were very knowledgeable about practices at health facilities. The criteria for judgment were developed by the study team.

themes, and findings were organized (annex E). The outputs of in-depth inquiry were integrated with secondary information for presentation in the report.

The primary quantitative data captured for the QOC assessment were compiled in MS Excel and manually analyzed by the consultant. In this study, all responses are dichotomized (unacceptable is coded 1, while 2 and 3 [satisfactory and good] are coded as '2'). This was done to minimize any potential bias introduced by observer/respondent difficulty in effectively discriminating between responses (between 'satisfactory' and 'good', for example), a common technique in survey research<sup>14</sup>.

QOC assessment checklists used six PHC dimensions for BHUs and seven for RHCs. Each dimension comprised 5-12 variables and responses for each variable were recorded (unacceptable, satisfactory, and good) through observation by enumerators, asking respondent/service provider, facility records, and comparison of data for the same month in the previous year. The responses under each variable and dimension (infrastructure, resources, knowledge of service provider, service utilization, client satisfaction, support services, and HIMS) were summed up for each district and type of health facilities to generate percentages. Data analysis included description of the performance by facility type, comparison among PHC model districts, and relationship of physical infrastructure, availability of staff, support services, and client satisfaction and utilization of health facilities.

This study has some limitations. First, it did not collect data on the technical quality (skills of PHC providers) of PHC delivered. Thus, it cannot directly assess whether better skills of service providers are associated with improved QOC received. Secondly, because of resource limitations, this study did not assess QOC performance in other provinces; therefore results can not be generalized. Finally, comparison of regular facility users with infrequent users or those who use only the private sector cannot be assessed.

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<sup>14</sup> McDowell I. Measuring health: a guide to rating scales and questionnaires. New York: Oxford University Press, 2006.

## Findings and Results

Before describing various PHC models in detail, it will be very useful to summarize key findings learned from the qualitative research:

### Summary of Findings

**Changes in organizational structure and management:** Since introduction of PHC reforms, three basic public sector PHC models have been developed, and implemented under various initiatives or names: i) EDOH (district health department [DHD])-managed PHC model, ii) PRSP PHC model, which outsources BHUs through public-private partnerships, and iii) NCHD PHC model, which restructures and strengthens BHUs through community participation. The PRSP PHC model is rolled out under various initiatives to gain political ownership and support in all provinces, while the NCHD model has been scaled up to selected districts of Punjab.

**Changes in resource allocation:** The EDOH model receives its budget from the provincial government as a grant in aid through their respective district governments. The budget for PRSP-operated health facilities is transferred en bloc (global budget) by the district government to respective district program units for participating health facilities. Provincial governments provide additional financial support for operational costs. The NCHD model does not get a budget allocation from the district government; the federal government provided funding initially, for staff salaries/operational costs and now it is funded by the Punjab government through provision in the PC-I.

**Changes in salary and incentives systems:** The EDOH and NCHD models pay staff according to government pay scales. The PRSP model hires doctors on contract at higher pay and provides nominal performance-based incentives to junior staff.

**Changes in organization of service delivery:** The organization of service delivery outlets are the same for all PHC models except for a few changes introduced by the PRSP and NCHD models. The PRSP model has introduced clustering of BHUs, with each cluster visited by a doctor on scheduled days of each week. This has ensured availability of a doctor on specific days and increased utilization of BHUs. Despite this organizational change, the PRSP model has no role in provision of outreach preventive services except for health promotional activities at the school level. The NCHD model also works at the BHU level, and also does not get involved in facility management, but it plays a role in the integration of facilities' outreach preventive services; the medical officer of NCHD-supported facilities is responsible for the catchment population, which is not the case in PRSP-managed health facilities.

**Changes in role of communities:** The NCHD has provided a robust model of community participation for PHC service delivery and management. The PRSP has addressed community participation by establishing 'community support groups', but these groups do not have any role in PHC service delivery and management.

**Changes in referral system:** The NCHD model has placed great priority on strengthening of referral system from the community up to the secondary hospital level. For example, in Gujrat, it has community-managed and -supported ambulances for transport; another strength of this model is the school health services linkage with the referral path. PRSP lacks such an arrangement, and this is one impediment it has in effective delivery of PHC services.

**Changes in monitoring and evaluation practices:** Introduction of a monitoring and evaluation (M&E) system is one of the key changes introduced by both the PRSP and NCHD models. NCHD's M&E system is superior to PRSP's in that it establishes baseline data for the catchment population and monitors targets and achievements against the baseline data. The PRSP's M&E is more limited, focusing on routine implementation monitoring and supervision.

**Changes in enabling environment for rapid uptake of reforms:** Both the PRSP and NCHD models have strong political support and commitment from the federal and provincial levels and therefore replicated at a rapid pace to other provinces. Rapid scale-up clearly indicates the readiness of policymakers and politicians to support initiatives aimed at improving health services for the citizens.

## A glimpse of important inputs and deliberations by key informants

In field interviews, respondents voiced mixed views on the PRSP PHC model and were very interested in learning its implications on health sector in general and overall health service delivery and management. The EDOH in RYK specifically mentioned that “[We] can better manage BHUs provided same authority and decision-making [as to PRSP] delegated to us”... and he added...“Our hands are tied up and...[we].are asked by the authorities to show performance”. He agreed that [PRSP] data shows improved service utilization but [we-public health sector managers]...have reservations on PRSP's data. He quoted various examples of discrepancies in service delivery and utilization data.

The DGH (Punjab) named two achievements of the PRSP PHC model: (i) the availability of a medical officer, and (ii) increased utilization of BHUs for curative services, but also clearly said that the “public-private partnerships” had demotivated the health managers. He further pointed out that there are stakeholders with vested interests who have pushed this PHC model. The DGH added that “...our own district health model has all the potential to deliver ...[but]...we have problems in implementation...staff is continuously leaving public sector due to poor salaries and lack of career structure...“Human resource shortage is an issue...”Experienced people have moved to the private sector or working with international agencies...”No clear plans for incentives ... [to] retain health professionals”. He further...emphasized that it is very difficult to deliver integrated services under “three” different managements: PRSP, national programs, and EDOH...we need to address this issue”. When asked which PHC model currently implemented in Punjab is delivering the best care, the DGH laughed and declined to comment.

Responding to another question regarding NCHD's Gujrat PHC model, the DGHS Punjab said that in 2002-03, while he was working as District Officer (Health) (DOH) with the EDOH in Gujrat, “we envisaged community participation model and proved its worth for BHU improvement. Once we showed improvements, it was ‘hijacked’...[now]...why is it not working well in other PIPHCMP [Punjab Integrated Primary Health Care Model Program] districts?...This is all about improving management and support from district government”. This was also one of the key findings by the team in respect to NCHD PHC model districts. In Sargodha (NCHD model district), there was lack of coordination and ownership among various actors, so picture was quite different from Gujrat [prototype NCHD district]. On the other hand, the EDOH in Sialkot, who was ‘responsible’ for the successful implementation of the Gujrat model from 2002 to 2007, is now bringing improvement in service delivery through BHU restructuring. Therefore commitment and motivation of the EDOH should not be underestimated. A particularly interesting comment by one of the EDOHs was that “BHUs were established with the policy decision to have medical officer available six days a week...How can you leave it without a doctor for four days in PRSP PHC model districts? This a clear deviation from National Health Policy!”

The views of other staff (e.g. district coordinators of national vertical programs, DOHs, and even the Medical Officer In-charge in RYK were not very positive regarding “outsourcing of BHUs”. According to

the LHW program manager, “[they] interfere in our program activities...try to use our field staff for [their] activities...do not participate...and allow their BHU staff to work for national immunization days campaigns. [They] have created insecurity and threats for our staff...We are not involved in planning but they expect us to support [their] activities”.

The PRSP side of the picture also is discouraging. The PRSP Project Director complained about lack of coordination and cooperation by the EDOH and national program coordinators. He emphasized that “Vertical Programs (National Program) like EPI, LHW, etc. are directly under the administrative control of EDOH. PRSP has no authority to hire and fire VP staff. For example, a field staff does not route through medical officer, neither have we known his movement that what is he doing or his plan...most of the preventive services revolve around VPs...[services] of preventive program can be improved if administrative control of staff working under VPs be handed over to PRSP. We will definitely show much better results than the existing one...Budgetary issue is the major problem...budget is not timely provided.....[they] use delaying tactics...if RHC and hospitals are also handed over to us, [we] can give better results.

“Our medical staff does refer the case to RHCs/tehsil district headquarters hospital but there is no feedback on referred cases. On the other hand, retired Sobadar (junior-ranked army officer) are appointed by the government for checking the quality of treatment and attendance of staff...This creates bad impression on the working of our staff”. He added that there is “need to reorganize and re-engineer the health department and...PRSP would have no objection if provincial health department give us management of whole district health department”. When asked to comment on strengths and weaknesses of the NCHD PHC model, the Project Director said that “NCHD derive resources from various departments and government...has no major role except training and there is no visible improvement”.

When NCHD managers and other staff (both at federal and district levels) were asked about their roles and responsibilities in terms of public health management, they categorically said that they are not managing BHUs or other health facilities but work through the EDOH and district government by assisting them to deliver services. They added...“EDOH is our team leader...[we] work together for same purpose...support and assist him...[We] are not interested in taking over management...when our program will end according to PC-I, [we] will leave”. The NCHD General Manager in Gujrat explained the reason behind success in Gujrat: “[we] have support from district administration, district health management, district education department...[community] leaders provided ambulances, laboratories, and salary support for staff”. The EDOH Gujrat specifically mentioned that “our strength is teamwork and without teamwork...[we] have not been so successful...if services are delivered and visible to community...community supports you”.

The Chief of the NHPU said “[our] policy is not supported by strategy and planning”. The biggest barrier to development of PHC is the “lack of real knowledge about PHC at the policy level and amongst the politicians. Politicians get involved in micro issues but ignore macro and structural issues. Very few people have real knowledge on health systems organization and management”. Furthermore, “development of human resources in PHC is too scarce and [there is] no flexibility for skills substitution or multipurpose paramedics.”

The aforementioned quotes offer a glimpse of views of several key informants. The comments gathered were compiled and used to describe various PHC models supported by secondary data and information.

The observations and assessment by the study team regarding the PHC system in the public sector are briefly described below.

## Public Sector PHC System

The public health delivery system in Pakistan has four major components: (i) outreach and community-based activities, which focus on immunization, malaria control, maternal and child health (MCH) and family planning (FP), and the LHWs program (ii) PHC facilities, mainly for outpatient care; (iii) *tehsil* or *taluka* headquarters (THQ) and district headquarters (DHQ) hospitals for basic inpatient as well as outpatient care; and (iv) tertiary care hospitals located in the major cities, and in the case of medical colleges, teaching hospitals for more specialized care. Primary care facilities (BHUs and RHCs) are usually managed by a medical officer, except for MCH centers, which are managed by a lady health visitor (LHV). Dispensaries are generally run by dispensers.

## Structure and Management of PHC in Public Health Sector

Health care is mainly a provincial responsibility. Districts are responsible for implementing routine health services and federally managed national programs. The national program provides basic PHC services to women and children in villages through locally hired LHWs. This dual line of authority has created management conflict because LHWs are part of the federally administered national program, while the BHUs, and RHCs – other pillars of the PHC system – are managed by DHDs, part of the provincial bureaucracy. Since devolution, the EDOH has been the overall in-charge of the district health care system.

This assessment's key informant interviews revealed that management practices that employ integrated routine service delivery and needs-based resource allocation are uncommon. It found **four major gaps** that need to be filled to improve PHC performance.

The first major gap found in PHC management is a **lack of culture of evidence-based decision making in the public health sector**, especially at the district level. The decision making, especially resource allocation, is based mainly on capacity and the historic structures, (number of hospital beds, health outlets, and staff strength) rather than performance (units of service provided) or need (size and health status of the population).

A second major issue is the **fragmentation of outreach and facility-based service delivery**. The EDOH is responsible for ensuring implementation of national programs but overall resources and decision making is retained by federal program units. This situation has created management conflict and poor ownership of national programs by the district health department.

The third major issue is the **vertical HMIS** owned by various national programs. The information systems are too vertical, centrally oriented, and poorly linked to program subsystems; in addition, they are overloaded with data that are of little relevance to the technical management of the health programs at the operational level. M&E processes are usually not built into the HMIS. Therefore, a holistic picture of a district's overall health performance is not available in one place – instead, information is fragmented, and so is the management of health programs and activities.

The fourth major gap is **no clear definition and provision of an essential health services package** by various levels. Most of the health care providers at rural health facilities are not aware of essential health services package for their respective levels.

**Finally**, the team did not find any example of operational policies by which to perform various management functions. The only so-called policy, which was mentioned by all district health managers, is financial procedures and guidelines issued by the provincial government.

## **Service Delivery and Utilization**

Apart from community and outreach services of national programs, public health care delivery system has three tiers (i) first-level care facilities, i.e. BHUs and RHCs, which are to provide outpatient and limited inpatient services. Each BHU is located in a union council and serves 10-15,000 people, while each RHC provides PHC coverage to a population of 50,000-60,000. (ii) THQ hospitals with 60-70 beds and DHQ hospitals with 200 or more beds provide secondary health care services to a population of over 2 million people. They also offer first- and second-level referral services. (iii) Teaching hospitals located at provincial headquarters or in big cities are attached to medical colleges and well equipped for all kinds of health services at the tertiary care level. These tiers are not linked by a proper referral system and therefore, the first- and second-level facilities are underutilized, while tertiary facilities are overutilized.

There are also MCH centers and civil dispensaries, which provide MCH and FP services. The services also are supported by several vertical programs. Local government and nongovernmental organizations (NGOs) play a very modest role in the provision of health services. The government is the major provider of hospital services in rural areas and preventive services throughout the country.

## **Lack of Institutionalized Referral Systems**

The poor integration of services at both the facility and outreach levels mean weak organizational and functional linkages between primary and secondary health care levels. As noted above, no referral path has been defined – the patient referral system is either poor or does not exist. Thus, self-referral is very common. This bypassing results in underutilization of rural health facilities and overutilization of hospital health services, leading to high per unit costs of care.

## **Poorly Located Health Facilities with Missing Domestic Amenities**

In addition to the major gaps mentioned earlier, a critical issue is the location of health facilities. Due to circumstances known to all planners, the distribution and location of health facilities has been done on a less-than-ideal basis. This has resulted in some facilities located at peripheries of catchment populations, creating problems of overlap and under-utilization. Added to this, there is lack of domestic amenities, and poorly maintained infrastructure to facilitate staff to reside at the health facilities. Therefore, almost all the BHUs are functionally closed after 2 pm.

## **Lack of Community Participation**

Community participation, a pillar of the PHC strategy, is seen as a threat to the decision making of public health sector management, which plans and implements health care interventions without any consultation with service users. Community participation is perceived only as a strategy to generate financing or in-kind donations, which has kept the communities at a distance from the system.

## **Fragmented Health Information Systems**

The Pakistan National Health Management Information System (NHMIS) was established in 1993 to help bring fundamental changes to the health care delivery system. The national programs have their own HMIS, which are tailored to their information needs but have no linkages with district health system. Therefore, it is not possible to get a holistic picture of the district's performance and health profile.

## Lack of Standards for Quality of Care

In the public health sector, PHC-level service packages and QOC standards<sup>15</sup> are defined but vague. Deficient areas include: weak arrangements for dealing with non-communicable diseases and mental and geriatric problems. QOC standards do not address knowledge of health care providers' and patients' rights and obligations. Although government has notified various standards for infrastructure, resources, drugs and equipment, and level of services, e.g. standard lists of drugs and supplies for all service delivery outlets are available<sup>16</sup>, these are rarely observed and maintained. An Essential Drugs List (EDLs) was developed in 1988 and updated in 1998, but there is no system of regular EDL revision per changing needs, demographic transition, and burden of disease. Furthermore, there are no guidelines for operation of an effective and comprehensive logistics system for drugs and supplies. This situation has forced service users to desert public sector health facilities in favor of private providers.

## Monitoring and Evaluation Practices in Health Sector

M&E is intended to enhance the quality of decision-making processes by supplying public health sector managers with a flow of reliable information and analysis about what works and what doesn't. The assessment found M&E activities in the health sector to be confined solely to supervisory practices; no routine M&E system is in place to track the implementation of National Health Policy.

## Summary

The above-mentioned issues observed during investigation of the public sector PHC models indicate that a number of factors impede the delivery of good-quality PHC. In fact, the public health care system at all levels has not performed up to people's expectations due to fragmented services, ill-defined job descriptions and procedures, lack of accountability, urban-rural disparity, weak referral system, poor human resource management, fragmented HMIS, and insufficient funding.

## Punjab Rural Support Program PHC Models

**Background:** In 1999, the Punjab Health Department decided to upgrade the management and expand service delivery of BHUs through public-private partnerships. As a first step, the management of three BHUs in Lodhran District was outsourced to the National Rural Support Program (NRSP), forerunner of the PRSP. The salient features of the pilot were as follows:

- ✚ Management of the three BHUs transferred from the district to the PRSP.
- ✚ The three BHUs were operated as a "cluster" and the medical officer's salary was raised from Rs 12,000 per month to Rs. 25,000 per month for working at a cluster of BHUs.
- ✚ The doctor resided at the focal BHU and private practice was not allowed.

## The PHC Model in Rahim Yar Khan

The Lodhran PHC pilot was a success and the government of Punjab decided to test the intervention on a wider scale. It therefore launched a pilot project in RYK District in April 2003 in three phases to restructure the PHC system through reorganization of BHUs in rural areas. The district government signed an agreement with the PRSP for outsourcing of the management of all 104 BHUs in RYK for a period of five years. The district government also agreed to transfer budgetary provision relating to

<sup>15</sup> Standard is a "benchmark" of achievement that is based on a desired level of excellence. As such, standards are models to be imitated and may serve, in turn, as the basis for comparisons. Standards are a means of describing the level of quality that health care system are expected to meet or to aspire to. The performance of health care system can be assessed against this level of quality.

<sup>16</sup> Formulary for RHCs and BHUs, Notification NO SO (DC) 10-2/2005 Department of Health, Government of Punjab

unfilled posts, medicine, maintenance and repair of buildings and equipment, utilities, stores and office supplies for the relevant financial year to the PRSP. Salient features of the RYK model are as follow:

1. All BHUs are organized into clusters of two or three, with manageable distances between facilities in a cluster, not more than 15-20 kms apart. The doctor is the administrative head of a cluster rather than a single BHU
2. With fewer doctors employed under the new contract, the salary of each was increased from Rs12,000 to Rs30,000 per month so as to give the doctors incentive to reside at the focal BHU. The doctor is not allowed to establish a private practice and must ensure that no staff member has in such a practice within a BHU. Paramedical staff are given a monetary reward based on their good performance.
3. The mobility of the medical officer is ensured by providing an interest-free loan of Rs100,000 to buy a vehicle. The doctor covers all BHUs according to a timetable.
4. The doctor is responsible for overall discipline, records, and improvement of his/her cluster, and tending to emergency cases even after office hours. In return, he/she receives better residential facilities along with availability of electricity and water.
5. A Project Management Unit (PMU) is established in the district and led by a project director and support staff. The PMU is responsible for the maintenance of stock and budget, which have been handed over by the district government. Under no circumstances is it permissible to use funds from the district government for the PMU.
6. The monitoring system is independent of the DHD. The PMU is responsible for monitoring, supervision, and collection of data. The project director visits at least 60 BHUs per month. The assistant project director makes a similar number of visits to BHUs.
7. Community mobilization and health education is an integral component of the project. To provide health education, all doctors focus on this activity on the second Monday, Tuesday, and Wednesday of each month. They talk to groups of patients and women and children, giving them health tips. They visit schools to talk to children on the third Thursday, Friday, and Saturday of every month.
8. On an experimental basis, the PRSP posted women medical officers (WMOs) in Khanpur, which is one of the tehsils of RYK. Under this strategy, one WMO provides services to a cluster of five BHUs by attending each BHU once a week; this is apart from the appointment of the male medical officer, who works on a cluster of three BHUs. On the sixth day of the week, the WMO provides health education in a female school within the cluster.
9. The district government remained responsible for the funding necessary to run each facility and PRSP was required to provide all the services and perform all the functions that the BHUs were providing before the commencement date of the agreement.

### **Chief Minister's Initiative for PHC**

Within six months of implementation of the RYK model, the Punjab government identified the potential of the two piloted improvements – staff presence and availability of medicine – in RYK and was convinced to roll out the model to other districts of Punjab.

- a. The initiative was named The Chief Minister's Initiative for Primary Healthcare (CMIPHC) to proclaim the earnestness of ownership. Its extension was approved to such other districts as opted for it.
- b. The government of Punjab agreed to bear the cost of a Program Support Unit (PSU) at Lahore and a District Support Unit (DSU) in each of the participating districts.
- c. The government of Punjab agreed to provide the services of handpicked personnel to the PRSP for leadership roles in the operations and the initiative was extended to another 11 districts (table 3). Since February 2009, the PRSP has also taken over in Multan.

**Table 3: List of CMIPHC Districts of Punjab**

S. No.	Districts	Date of Agreement	S. No.	Districts	Date of Agreement
1	Chakwal	17-12-2003	7	Mianwali	14-01-2005
2	Vehari	19-12-2003	8	Toba Tek Singh	24-03-2005
3	Lahore	01-04-2004	9	Hafizabad	05-05-2005
4	Faisalabad	05-08-2004	10	Lodhran	06-05-2005
5	Sahiwal	25-09-2004	11	Pakpattan	30-06-2005
6	Kasur	01-01-2005			

An agreement with district governments of above districts was undertaken with the following main features:

- i. Protection of the terms of employment of the BHU staff;
- ii. Continued implementation of “national” and “provincial” programs through the BHUs;
- iii. Full discipline, responsibility, and transparency in the use of public resources, regular flow of financial information, and statutory audit of funds;
- iv. Observance of budgetary limits of the district government. Additional budgetary allocations to be considered where justified;
- v. No liabilities to be left behind for the district government;
- vi. Due maintenance of buildings, equipment, and furniture to be ensured;
- vii. Third-party evaluation of performance at the end of Year I.
- viii. Continuance for the following four years will depend on the findings of the evaluation.

### **An Overview of CMIPHC Structures in Punjab**

A total of 1046 health facilities are being managed by PRSP in 12 districts: 845 BHUs, 181 Zila Council Dispensaries (ZCDs), 6 Unani/Tibbi dispensaries and 14 MCH centers. About 777 medical officers are responsible to manage the facilities as follow:

- One medical officer for a cluster of three facilities, currently implemented for five clusters;
- 193 clusters have one medical officer for cluster of two health facilities;
- 559 medical officers are now catering to single health facilities;
- 128 WMOs under the WMO Program to provide gynecological services to rural women.

**Improvement in staff availability and service utilization:** All vacant posts of medical officers and paramedics are filled, with almost 100 percent availability of staff. Availability of medical equipment and a back-up stock of medicines has further built the confidence of the communities and therefore enhanced the utilization of services. The general outpatient department (OPD) utilization has grossly increased due to the intervention (table 4).

**Table 4: OPD Attendance Performance in PRSP PHC Model Districts (Jan 03 to Oct 08)**

Districts	2003	2004	2005	2006	2007	2008
<b>Rahim Yar Khan</b>	1,250,924	1,214,328	1,578,969	1,695,934	1,764,010	1,423,388
<b>Chakwal</b>	286,596	305,332	770,579	818,224	712,051	578,379
<b>Vehari</b>	318,078	371,404	1,100,113	1,106,630	1,203,919	1,032,965
<b>Lahore</b>	340,601	1,371,845	3,321,746	3,755,487	4,007,405	3,744,917

<b>Faisalabad</b>	1,261,091	1,371,845	3,321,746	3,755,487	4,007,405	3,744,917
<b>Sahiwal</b>	396,564	370,074	1,118,603	1,192,770	1,201,967	858,136
<b>Kasur</b>	410,852	409,390	832,640	1,199,071	1,269,519	1,139,223
<b>Mianwali</b>	172,099	142,429	375,537	536,940	621,334	510,307
<b>Toba Tek Singh</b>	190,830	217,159	495,828	956,394	1,286,024	1,144,034
<b>Lodhran</b>	249,275	224,242	386,798	680,335	813,274	737,643
<b>Hafizabad</b>	238,043	354,528	378,166	485,507	499,176	412,801
<b>Pakpattan</b>	363,270	345,329	425,098	571,838	675,171	557,637

**Procurement of medicines:** About 93 essential medicines/items have been classified into three groups on the basis of their consumption/utilization pattern in consultation with all medical officers, the Resource Group, and the Health Department.

**Linking the community:** Mobilization of local communities and organized to form support groups (table 5) for long-term sustainability of services. The role of support groups is to:

- ✓ Provide community “ownership” of health facilities;
- ✓ Provide local feedback and suggest improvements;
- ✓ Optimize access to preventive programs and extend the appeal for promotive programs;
- ✓ Organize community health education sessions and organize school camps at BHUs with the focus on hygiene, sanitation, and nutrition.

**Table 5: Established Support Groups (till October 2008)**

Districts	BHUs	Support Groups Established	Sessions Jan 05 to Oct 08
Rahim Yar Khan	104	104	3,947
Chakwal	65	65	2,148
Vehari	77	77	3,292
Lahore	37	61	1,425
Faisalabad	168	168	6,719
Sahiwal	75	75	2,767
Kasur	81	81	2,436
Mianwali	40	40	1,355
Toba Tek Singh	66	66	2,605
Lodhran	48	48	1,682
Hafizabad	31	31	875
Pakpattan	53	53	1,572
<b>Total</b>	<b>845</b>	<b>869</b>	<b>30,823</b>

### Issues and Challenges Faced by CMIPHC

The CMIPHC is facing many challenges and impediments that need to be addressed, for example:

- ✚ Non-integration of national programs at BHU level;
- ✚ Obstacles in transferring budget to PIUs by districts;
- ✚ Indifferent attitude of district health officials;
- ✚ Delays in deciding the references regarding disciplinary action and grant of long leaves to doctors and paramedics;
- ✚ Frequent/ repeated training;

- ✚ Interference by local politicians and elite groups to influence the decisions/actions taken against corrupt/defaulting employees;
- ✚ The security situation in sub-urban areas is unfavorable;
- ✚ The Union Council Nazims do not actively participate in rehabilitation and repair process of BHUs.

## President's Primary Health Care Initiative

The government of Pakistan, through the Special Initiatives Division, launched a program known as the President's Primary Healthcare Initiative (PPHCI) with the emphasis to expand it all over the country. The PPHI is another key policy decision and the federal government has agreed in principal to hand over all the BHUs to RSPs in all provinces under the PPHI. Essentially, this is the same PHC model tested in RYK and replicated in 11 districts of Punjab under CMIPHC. The same PHC model has now been initially replicated in six districts of Balochistan (Nushki, Chagai, Mastung, Musakhel, Barkhan, and Pishin) under PPHI.

## People's Primary Health Care Initiative

In 2007, after the induction of the new government, the PPHCI was initiated in the North West Frontier Province (NWFP) and Federally Administered Tribal Area (FATA). It has been re-designated as the People's Primary Healthcare Initiative (PPHCI) and attached to the Cabinet Division, Islamabad.

The program has established agency/ district support units (A/DSUs) in each selected agency/ district to take over the management of BHUs. An agency/ district support manager (A/DSM) heads the A/DSU. The program is fully owned and funded by the federal and provincial governments. The focus of the PPHCI is to provide quality health care services to the rural population through efficient and effective service delivery system that is accessible, equitable, acceptable, affordable, and sustainable. PPHCI strives to improve rural health facilities, focusing on curative care, along with the system of outreach activities for provision of preventive and promotive services. The PPHCI has started operation in the 14 districts/agencies in NWFP and FATA as shown in table 6.

Table 6: PPHCI Districts/Areas of Operation

S. No.	District	BHUs
1	Peshawar	50
2	Kohat	21
3	Nowshera	31
4	Swabi	40
5	Karak	19
6	Upper Dir	32
7	Chitral	21
8	Mardan	51
9	Charsadda	45
10	Haripur	41
11	Malakand	23
12	Khyber	13
13	Kurram	22
14	FR Peshawar/ Kohat	16

## OBJECTIVES OF PPHCI

The PPHI program has the following objectives;

1. Significantly strengthen PHC in the districts/ agencies so as to ensure the delivery of a standard package of preventive, curative, and promotive services that will help NWFP achieve the Health MDG.
2. Significantly improve the:
  1. Coverage and utilization of services,
  2. QOC, and
  3. Equity of access to the services by geographical areas, by income level, and by women and children.
3. Ensure that patients and communities are increasingly involved and satisfied with publicly financed health services and facilitate the community's participation in the design, delivery, and evaluation of health services.
4. Build the capacity of health workers so that they can provide better services to the community within an available budget.

### **National Commission for Human Development PHC Models**

**Background and Introduction:** The NCHD was established under Ordinance No. XXIX of 2002 by the President of Pakistan as a “Fast Track Initiative” to help Pakistan achieve MDGs with the mandate to strengthen the PHC system, universal primary education, capacity development, and community mobilization. The approach was to develop partnerships with provincial and district governments to address community needs in terms of primary health and education service delivery and utilization. The core concept to achieve the stated goals and objectives was to:

- ✚ Establish community health needs at the union council level and align services with needs;
- ✚ Analyze health service delivery mechanism and status;
- ✚ Integrate preventive and curative services with an effective referral system;
- ✚ Build capacities of health care managers/providers;
- ✚ Establish community governance mechanisms

Based on the abovementioned concept and approach, NCHD in collaboration with Apna Sehat (an NGO patronized by NCHD founders) launched a **Primary Health Care Extension (PHCE)** project from Mardan in October 2002. The aim was to provide PHC coverage in those areas where DHD field presence was insufficient, i.e. where LHWs were not deployed. The pilot showed promising results and in 2004-05 PHCE was extended to 16 districts, four districts in each of Pakistan's four provinces.

### **Gujrat PHC Model**

The Gujrat PHC model was a partial replica of the PHCE project, with some changes in implementation strategy and intervention design. Under the model, the NCHD became the direct partner of provincial and district government and implementation of interventions was under the leadership of the DHD and district government administration. The project was named **Re-structuring and Strengthening of PHC System**, with the goal “To ensure access to quality PHC to every individual of Gujrat”. The key strategy and salient features are as follows:

**Strategy:** Strengthen PHC by focusing on the union council as the basic operational unit for effective service delivery and therefore restructuring the BHU through:

- ✚ Determining the real community health needs;
- ✚ Doing a system's analysis of BHUs and allied services;
- ✚ Aligning service delivery with health needs.

**Process:** Restructure the PHC system in a phased approach by:

- ✚ Establishing community health needs through a door-to-door baseline health census;

- ✚ Doing a comprehensive systems analysis of the BHU;
- ✚ Strengthening the capacity of BHUs;
- ✚ Redefining of catchment area;
- ✚ Redefining roles and responsibilities to integrate curative and preventive services;
- ✚ Establishing community participation and ownership;
- ✚ Establishing a simple referral system.

**Establish community health needs (baseline health census):** The district health supervisors, LHWs, LHSs, and health officers are trained on data collection and registration of households and population. The data are processed by data assistants at each BHU. This establishes the benchmarks on key health indicators.

**Establish current state of health care delivery system:** A systems' analysis of management of BHUs and outreach services at the district and union council level was done to identify type and nature of services, BHU utilization rate, staff competencies, infrastructure/ logistics support systems, HMIS utilization in decision making, and community involvement in BHU management.

**Restructure the BHU:** This was considered through redefining the catchment area of BHUs and aligning health services with community needs. Other components included:

- Training of DHD and health officers;
- Redefine roles and responsibilities of health officers (medical officer BHU), who is team leader and responsible for ensuring health care services for the catchment population;
- Redefine roles and responsibilities of vaccinator and LHWs;
- Rationalize LHS-LHW ratio to 1:8 (current 1 > 20);
- Strengthen outreach services through robust monitoring support;
- Set BHU-specific targets;
- Set performance-based incentives and accountability;
- Institutionalize training need assessment and periodic trainings.

**Establish community governance structure:** One of the core interventions is sensitizing communities on actual health needs and mobilizing communities to support the public sector health initiatives. This is done by:

- Bringing communities and health department together;
- Training communities in health service management;
- Establishing a representative Community Governance Structure comprising communities and DHD.

**Strengthen HMIS:** The project established a database at each BHU for its catchment population and considered integration with the existing national HMIS, to get a holistic health picture of the district.

**Strengthen referral system:** Effective linkages from household to BHU/RHC and secondary-level health facilities are established.

**School health program:** A system that identifies and helps correct common learning impediments among primary school students due to health problems and facilitates corrective actions. The project has set a target of screening 2.4 million primary school children.

The implementation of the project started with baseline census of 50 union councils, starting with a group of 13 union councils. Household data were collected to establish community benchmark health status and their specific health needs. The data collected were computerized by installing computers at

each BHU. The second step was making the medical officer in-charge of BHU as a health officer, and making him/her responsible for preventive and limited curative services for the catchment population. Health officers were further mandated to have five field visits per month and motorcycles along with POL (Petrol, Oil and Lubricants) support was ensured by the project. Thirdly, vacant LHW and LHS posts in the National LHW Program were filled. Initially, salary support for recruited staff was provided by NCHD; later, new staff was absorbed by the National LHW Program. Another important step taken was to redefine the supervisory role of LHS, who were now responsible for field visits (8-10 LHW/LHS monthly work plans) instead of supervising 20-25 LHWs in a union council. Finally, a school health program was initiated, and it became mandatory for every health officer to make a monthly visit to all schools in his/her catchment area for health education sessions.

Finally, local health councils (LHCs) were established at each union council level to participate in decision making, management, and support so that their local BHU would meet their health needs. NCHD and district health staff considered this intervention as key to success of the Gujrat PHC model. The NCHD Director of Health at the federal Program Implementation Unit (PIU) validated this finding and further emphasized that community motivation to participate in facility management is a token of acknowledgement for addressing their needs. The study team was fascinated to observe some exciting examples of community participation:

- ✚ Citizen community boards (CCBs) in consultation with LHCs and DHD have provided 32 ambulances to BHUs with their operation managed solely by the community on a “no loss-no gain” basis.
- ✚ At least 40 BHUs have been provided with a basic clinical laboratory set-up for routine blood and urine tests (laboratories are not included in the government’s BHU service package).
- ✚ WMOs are placed at four very busy BHUs and their salaries are sponsored by the LHC.
- ✚ The study team visited eight BHUs and four RHCs and was surprised to see renovation and maintenance work done with community support.
- ✚ There is chronic shortage of sanitary staff especially at BHUs and cleanliness was ensured by staff, sponsored by LHCs.
- ✚ The health facility staff was very motivated by and satisfied with working with and for the community, and there was no feeling of any threat to the staff by the community, which is a usual perception by public health staff.

## **Punjab Integrated Primary Health Care Model Program**

Starting in September 2007, the Restructuring and Strengthening of BHUs demonstrated by the Gujrat PHC model was approved by the Punjab Government through a PC-I jointly prepared by the NCHD and Punjab Health Department and has been replicated in other 11 districts of Punjab under the name ***Punjab Integrated Primary Health Care Model Program (PIPHCMP)***. The program is aimed at restructuring and strengthening PHC and improving health of primary school students. With the approval of the Chief Minister of Punjab, the program is part of Punjab Health Sector Reforms and, in its first phase, is being carried out in all the primary schools and the catchment areas of 919 BHUs in 12 districts of Punjab.

The ***program objectives*** align with the objectives of the public health sector. The government of Punjab envisages achieving these objectives through improving the performance of the HMIS; improving access and quality of services through trained human resources, drugs, and technology; reviewing existing policy frameworks; improving infrastructure; creating mass awareness of health; introducing public-private partnerships; and broadening health financing mechanisms.

The key strategies and interventions identified to achieve program objectives are:

- i. Strengthening and Restructuring of the PHC System:**
  - a. Establishing health needs of the population;
  - b. Determining catchment area and population;
  - c. Building capacity of the district health management team (DHMT);
  - d. Registering households and population;
  - e. Establishing current status of health care delivery by BHU and outreach;
  - f. Integrating BHU and outreach services;
  - g. Redefining roles, responsibilities, authorities, and accountabilities;
  - h. Defining clear and achievable targets;
  - i. Redefining staff remuneration and incentives;
  - j. Establishing a referral system;
  - k. Developing HMIS
  - l. Doing research and development.
  
- ii. Establishing School Health System**
  - a. The school health interventions aim at increasing learning ability of primary school students through addressing major determinants of learning ability impediments like visual and hearing impairments, and dental, skin, and personal hygiene problems.
  - b. A core group of master trainers from the district education department will be trained on simple and scientifically proven screening methods for identification of students with the above-mentioned health problems and referring them for consultation; and on monitoring and reporting procedures.
  - c. These master trainers will in turn train the primary school teachers. The teachers will screen the students and refer all those students found to be suffering from any of these problems.
  - d. A referral system, with the BHU as the essential component, will be established to entertain referred students. Each BHU will be equipped to provide basic assistance to these students. Other referral outlets/sources of help including private medical practitioners, RHCs, eye and ENT specialists, dentists, etc. will be identified and linked with the BHUs.
  - e. Each primary school student will receive de-worming medication twice a year.
  - f. All students identified as suffering from vision problems will be provided with eyeglasses.
  
- iii. Community Governance Structure**
  - a. Governing the activities of health in general, the community governance structure, consisting of community members from all sections, will be established to assist and facilitate these activities.

The program is designed to establish a sustainable system at the district level with active and effective involvement of all the stakeholders. These stakeholders include the education department, parents, and other community entities (volunteers, philanthropists, private sector physicians, etc.) and health department (health care providers and managers).

### ***Primary Health Care Service Delivery Model by City District Government Lahore***

**Organizational structure and functions:** In 2001, the health services of the Metropolitan Corporation Lahore (MCL) and Zila Council were devolved to the City District Government Lahore. The post of Director Health Services was re-designated as DOH-II and the post of Zila Council Health Officer was re-designated as DOH-III. All the health facilities/services were placed under the control of

the EDOH including the defunct MCL, Zila Council, Epidemic Control Office, Food Department, MCH centers, and Health Promotion Unit. All the offices were renamed as District Office Health II, District Office Health III, District Office (Public Health), District Office (MCH), District Office (Food), program director of District Health Development Unit along with medical superintendents of two district hospitals (annex F). With devolution, all the offices operate independently and have separate budgets, under the administrative control of EDOH. The management and service delivery functions carried out by the re-designated offices are briefly described below:

### 1. District Officer Health-II

The DOH-II is now responsible for managing the following health facilities: Eye Clinic Rehmanpura, (1), diagnostic centers (9), allopathic dispensaries (36), homeo dispensaries (14), Unani Shifakhana (11), and filter clinics (4) in the vicinity of the city relating to former MCL. The DOH also participates in activities like polio, measles, and dengue campaigns and provides health coverage during emergencies and disasters. The health facilities under the control of this office provide outdoor allopathic, homeopathic, and Unani medical services. The DOH office is also responsible for facility human resource, financial, and material management. About 582,000 patients were examined, diagnosed, and treated in these facilities in the year 2007/08. The key functions performed are as follow:

- ✚ Provision of PHC at different health facilities of in the urban area of the city, District Government Lahore (former MCL) providing outdoor medical facilities in dispensaries and laboratories and diagnostic facilities in filter clinics and diagnostic centers and one center for secondary health care.
- ✚ In emergencies/ disasters, establishment of camps for medical coverage during rainy season, Muharram-ul-Haram, dengue fever campaign, etc.
- ✚ Special duties like preventive services (polio and measles campaign and TB DOTS), medical coverage on the occasions of the Hajj, sports events, etc.

### 2. District Officer Health-III

Prior to 2004, rural dispensaries (24) were under the administrative control of the DOH-III. In 2004, these dispensaries were taken over by the PRSP and now the role of the DOH-III is limited to supervision of preventive services delivered in these health outlets.

### 3. District Officer Public Health

Responsible for public health functions including EPI through static immunization centers in both urban and rural dispensaries, vital events registration, management of stray dog killing and communicable disease control.

### 4. District Officer (MCH)

The district officer (MCH) is responsible for the management of MCH services through 53 MCH centers located in nine towns of the City District Government, Lahore. The MCH centers provide antenatal, natal, and postnatal services along with vaccination, nutrition advisory services, and FP services.

### 5. District Officer (Food)

The district officer (Food) is responsible for ensuring the quality of edible items in the best interest of public. The City District Government has its own independent food laboratory, where food samples are analyzed.

The City Government Lahore also runs two hospitals, the Eye Clinic Rehmanpura and the Infectious Diseases Hospital, each with 150 beds. Both hospitals provide secondary- and tertiary-level health

services. The referral system is linked with all the dispensaries and other health outlets. The hospitals have separate budgets and are headed by a medical superintendent.

## **Best Practices in Primary Health Care**

### **Aga Khan Health Services Network**

Aga Khan Health Services (AKHS) is one of the largest not-for-profit private health care networks in Pakistan. Its goal is to supplement the government's efforts in health care provision, especially in the areas of MCH and PHC. The first health institution that the network established in Pakistan was a 42-bed maternity hospital (formerly known as the Janbai Maternity Home), which opened in Karachi in 1924. While it maintains that early focus on MCH, today the Aga Khan Health Services offers services that range from PHC to diagnostic services and curative care. It reaches over 1.1 million people in rural and urban Sindh and Punjab, as well as in NWFP (Northern Areas and Chitral). It now operates 47 health centers in Karachi, 27 in Sindh, 14 in Punjab, and, in NWFP, 33 in the Northern Areas and 31 in Chitral.

Essentially, services are delivered on a subsidized fee-for-service basis and exemption from payment, even for the poor, is rare. Although patients are not declined due to non-payment, collection of fee is ensured – fee collection may be deferred in the form of credit and the service user pays upon availability of cash. The collection is ensured through community-based health committees attached to each health center or service outlet.

### **Al-Kidmat PHC Dispensary Network**

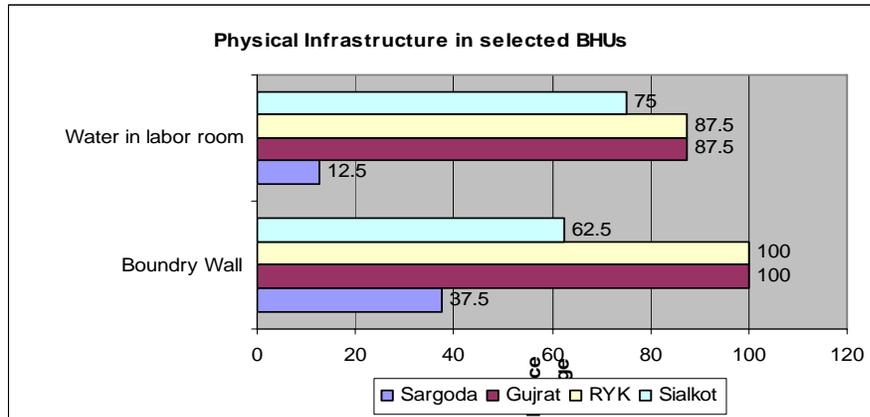
Al-Kidmat dispensary network operates urban-based PHC service outlets and is funded through philanthropy. The dispensaries provide limited curative and diagnostic services by charging subsidized fee-for-service. Most dispensaries are in large urban areas; the network has a negligible presence in rural localities.

## **Assessment of Quality of Care at Various PHC Models**

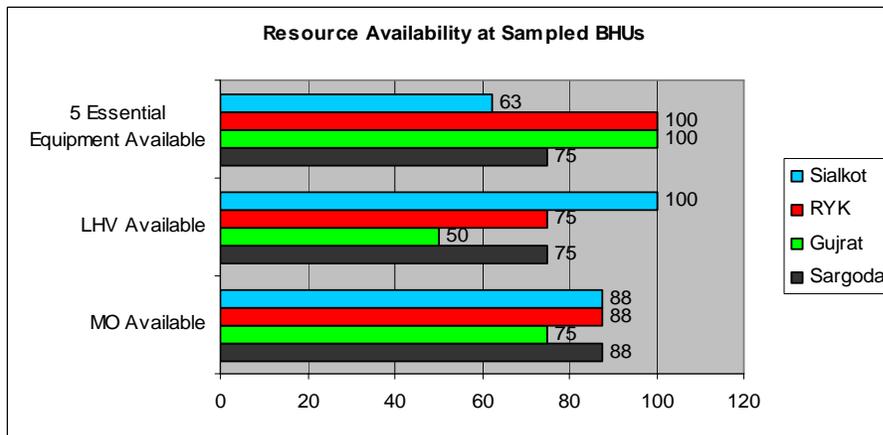
Key informant interviews were complemented by completion of QOC checklists for overall assessment of QOC standards. As BHUs and RHCs provide different sets of health service packages, the data for these two sets of health outlets were analysed and presented separately. The data are presented in bar graphs with values in the data labels. **For more tables, analysis and presentation of various components of quality assessment, please see annex H.**

### **Quality of Care Performance at Basic Health Units**

**Infrastructure:** The physical infrastructure in the BHUs is much better in Gujrat and RYK than in Sargodha and Sialkot. All BHUs in the two former districts have 100 percent boundary walls intact and 87.5 percent have a water supply in labor rooms as compared with 37.5 percent intact boundary walls and 12.5 percent water supply in labor room in Sargodha. In Sialkot, 62.5 percent of BHUs have intact boundary walls and 75.00 percent have a water supply in labor rooms (figure 1). The overall quality of physical infrastructure was found to be good in Gujrat and RYK. The Gujrat PHC model stood was top in terms of facility renovation, maintenance, cleanliness, availability, and functional status of necessary equipment.

**Figure 1: Comparison of Physical Infrastructure in Selected BHUs, by District**

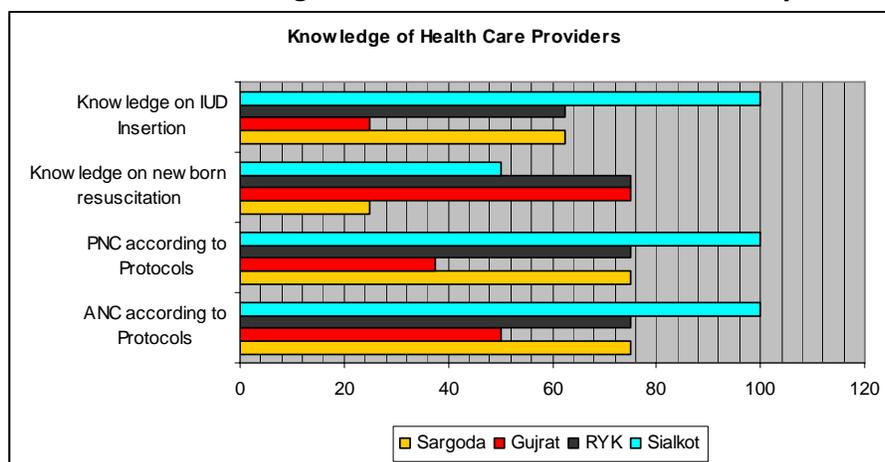
**Physical resources:** HMIS tools and instruments were available in all the BHUs in the study districts. All BHUs except two in Sargodha had had no stock-out of essential medicines in the month preceding the survey. Similarly, only two BHUs in Sargodha had had a stock-out of FP material in the last month, while all other BHUs had the required FP material stock. All the BHUs except one in Sargodha had a functional and maintained cold chain for EPI vaccines.

**Figure 2: Availability of Resources in Selected BHUs, by District**

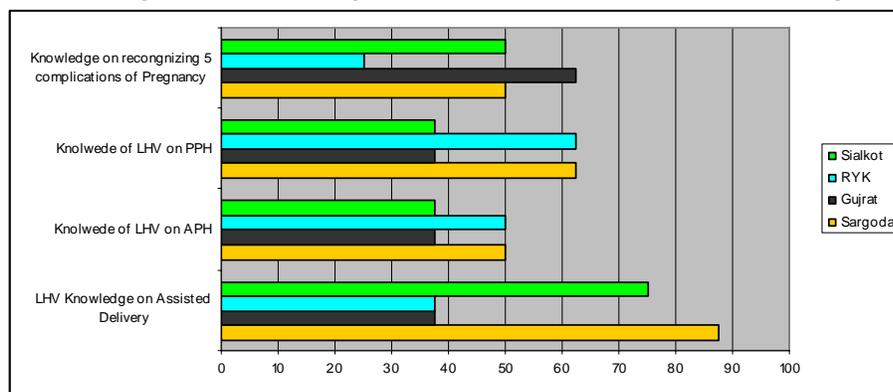
Resource availability is very good in Gujrat and RYK, with all the BHUs in these two districts having the five types of essential equipment compared with 63 percent of BHUs in Sialkot and 75 percent in Sargodha (figure 2). As for human resource availability, 88 percent of the BHUs in Sargodha, RYK, and Sialkot and 75 percent in Gujrat have a medical officer posted and available, with comparable availability of LHV. Gujrat BHUs showed the lowest availability of the LHV, where only 50 percent BHUs have an LHV as compared with 75 percent in RYK and Sargodha and all BHUs in Sialkot.

**Knowledge of health care providers:** Results were also varied for the knowledge that health care providers have, which reflects the amount and quality of trainings in specific settings. Provider knowledge was checked in respect to maternal and newborn health care variables (antenatal care [ANC] and post-natal care [PNC] protocols and intrauterine device [IUD] insertion). It was found to be much better in Sialkot than in the other districts (figures 3 and 4). None of the facility staff was able to present any written guidelines or protocols for case management and delivery of preventive services.

**Figure 3: Level of Knowledge of Health Care Providers at BHUs, by District**



**Figure 4: Knowledge of LHVs on Reproductive Health at Selected BHUs, by District**

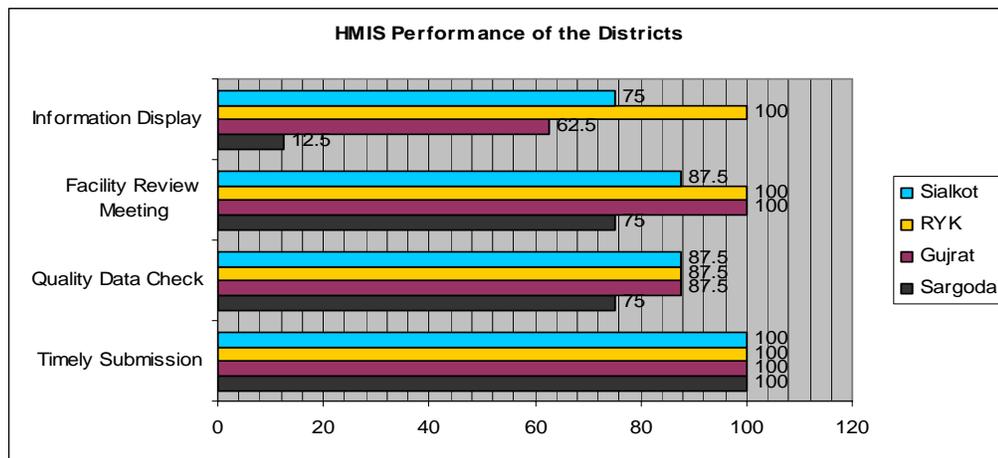


**Client satisfaction:** Physical access, usually thought to be one of the main barriers to service utilization, was not a major determinant as per patient interviews: 100 percent of the patients in RYK and Sialkot find it satisfactory, as do 75.0 percent in Sargodha and 87.5 percent in Gujrat. Almost all the respondents consider the services acceptable. But as this was an exit interview of the patients who used the BHU – it did not include interviews with persons who had not used the BHUs – it could be an overestimate. In addition, most respondents found BHU staff to be friendly enough. Waiting time also did not seem to be a barrier to health seeking from BHUs; only one respondent was dissatisfied with the waiting time during their visit to the BHU.

**HMIS performance:** All the BHUs submit HMIS reports on a timely basis, 88 percent implement data quality checks, all the BHUs in RYK and Gujrat carry out facility performance review meetings as compared to 88 percent in Sialkot and 75 percent in Sargodha. There is wider variation in displaying the data at the BHUs; only 12.5 percent of BHUs in Sargodha display the data at BHUs, 62.5 percent in Gujrat, 75.0 percent in Sialkot, and 100 percent in RYK (figure 5).

**Table 6: Client Satisfaction with Various Aspects of Service at PHC Model Facilities, by District**

Districts	Physical Access	Acceptability	Staff-Friendliness	MO Available	LHV Available	Cleanliness	IEC Material Provision	Acceptable Waiting Time
Sargodha	75%	75%	100%	75%	87.5%	75%	50%	87.5%
Gujrat	87.5%	100%	87.5%	75%	50%	100%	62.5%	100%
RYK	100%	100%	100%	100%	75%	100%	75%	100%
Sialkot	100%	100%	87.5%	87.5%	100%	62.5%	75%	100%

**Figure 5: Comparison of HMIS performance in Selected BHUs at PHC Model Districts**

### Quality of Care Performance at Rural Health Centers

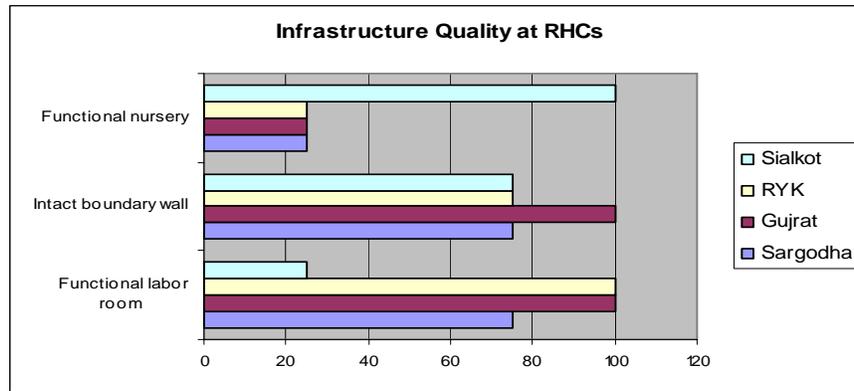
**Infrastructure:** In terms of the variables assessed for quality of infrastructure, RHCs showed better results than BHUs in all districts. A small number of quality performance indicators showed variation among RHCs: 100 percent of RHCs visited in Sialkot have functional nurseries compared with 25 percent in the other three districts, while an intact boundary wall was available in 75 percent of all sampled RHCs except in Gujrat, where 100 percent of facilities have an intact boundary wall. RHC labor rooms were 100 percent functional in Gujrat and RYK, compared with 75 percent in Sargodha and 25 percent in Sialkot (figure 6).

Functional telephone, electricity, and ambulance were available at all RHCs visited except one in RYK. None of the health facilities has an isolated dark room for eclampsia management except two RHCs in RYK. The same finding was observed regarding geysers, which was available in only one RHC in Gujrat. The availability of dustbins and piped water supply is shown in figure 7. Seating was inadequate in the waiting areas of all the RHCs in Sialkot as compared with the other three districts. The availability of five essential pieces of equipment for the labor room<sup>17</sup> and operation theatre<sup>18</sup> was also assessed and all were available in the sampled RHCs in four districts. Availability of other resources is presented in figure 8.

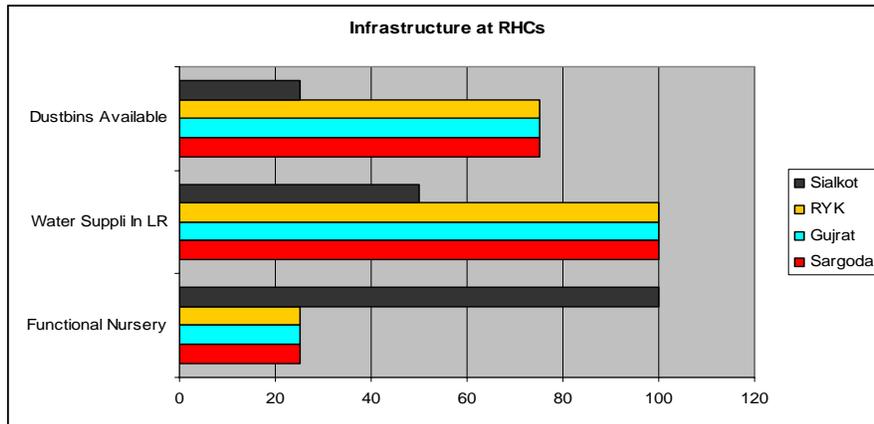
**Figure 6: Comparison of Physical Infrastructure in Selected RHCs**

<sup>17</sup> Five essential pieces of equipment for the labor room are a delivery table, functional suction machine, obstetric forceps, sterilizer, and blood pressure apparatus.

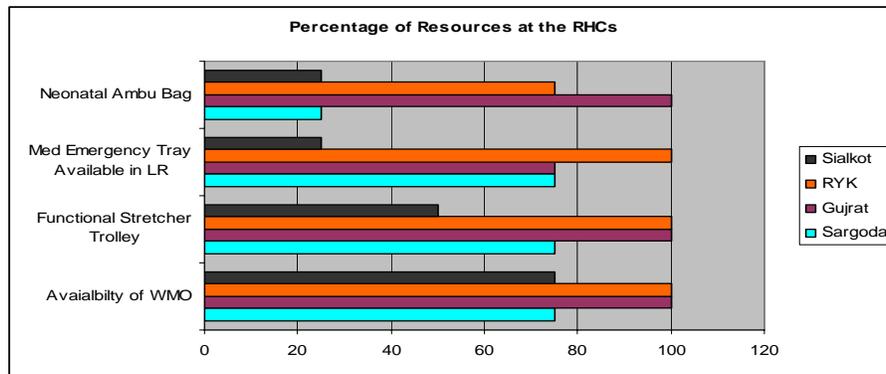
<sup>18</sup> Five essential pieces of equipment for the operation theatre (OT) are adjustable OT table, functional OT light, functional anesthesia machine, functional sucker machine, and autoclave.



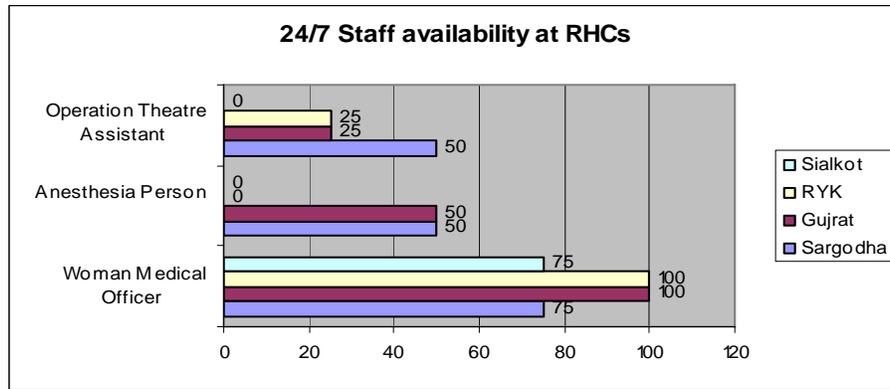
**Figure 7: Physical Infrastructure in Selected RHCs**



**Figure 8: Physical Infrastructure in Selected RHCs**



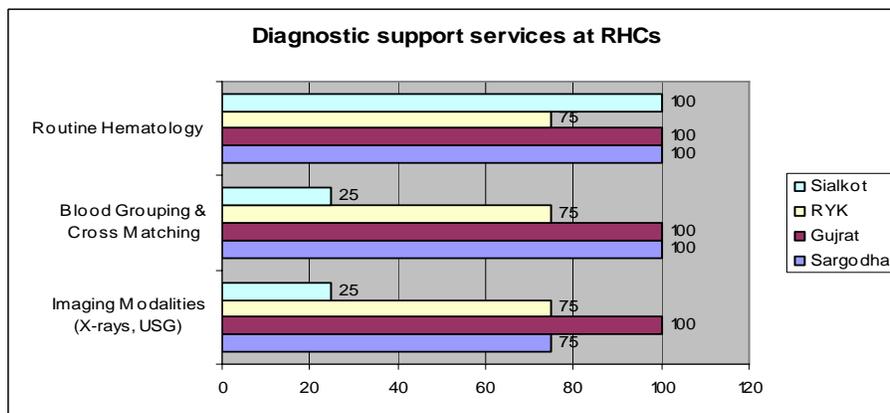
**Figure 9: Staff Availability at Selected RHCs**



**Human resources:** Staff availability, especially WMOs, was found to be 100 percent in Gujrat and RYK RHCs, compared with 75 percent of RHCs in Sargodha and Sialkot. Availability of other staff such as operation theatre assistant (OTA) and anaesthesia technician (AT) was unsatisfactory (figure 9). There was no anaesthesia technician at Sialkot and RYK, and no operation theatre assistant in Sialkot.

**Diagnostic and support services:** All RHCs are supposed to have laboratory and X-rays services available at all times. The study team found that 100 percent of selected RHCs in Gujrat have three key diagnostic support services (routine blood test, blood grouping, and X-ray) available around the clock, while the same services were available in 75 percent of sampled RHCs in RYK (figure 10). In Sialkot, 25 percent of facilities have blood grouping and X-ray services, while routine blood tests were performed in all the facilities.

**Figure 10: Availability Diagnostic Services at Selected RHCs**



**Knowledge of service providers:** All the relevant service providers have good knowledge of the ANC package (100 percent) according to guidelines and protocols, while 100 percent of LHV/WMOs in Gujrat and Sargodha were knowledgeable on assisted delivery. In contrast, only 50 percent of service providers in Sialkot and RYK were found to have satisfactory knowledge on assisted delivery. The staff at Gujrat and RYK were also good on newborn resuscitation but in Sialkot, knowledgeable was very poor (none of the relevant staff) and only 25 percent in Sargodha were able to correctly describe newborn resuscitation (figure 11).

**Figure 11: Level of Service Providers' Knowledge at Selected RHCs**

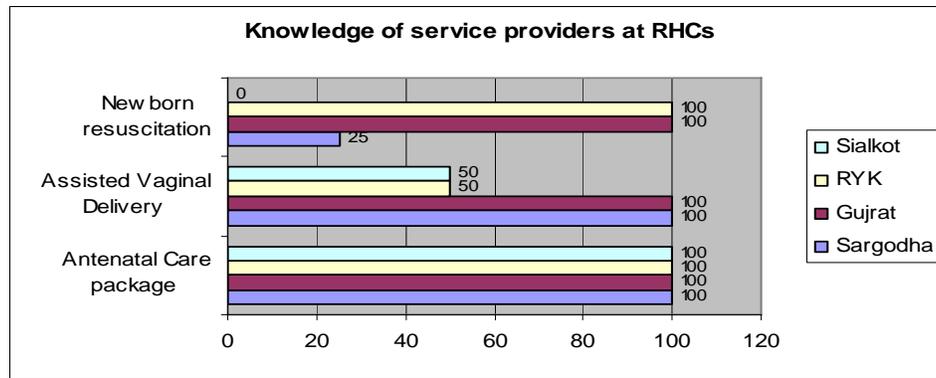
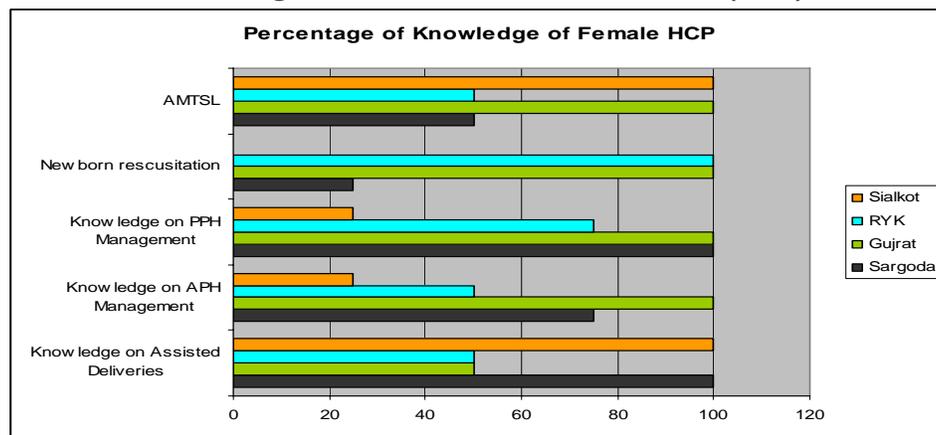


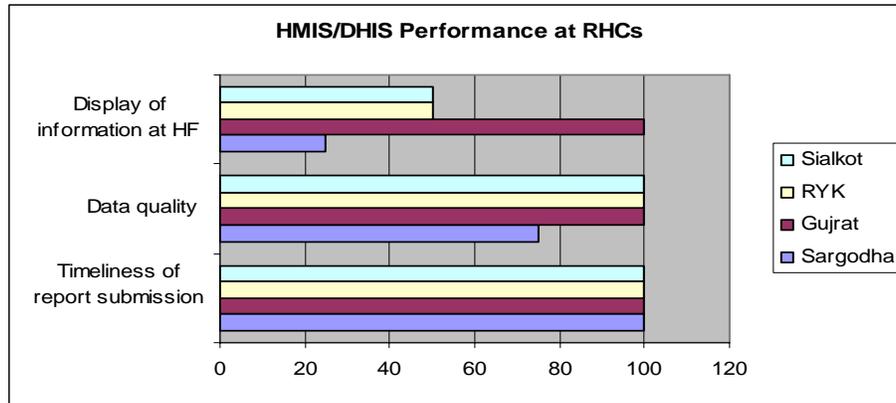
Figure 12: Level of Knowledge of Female Health Care Providers (HCP) at Selected RHCs



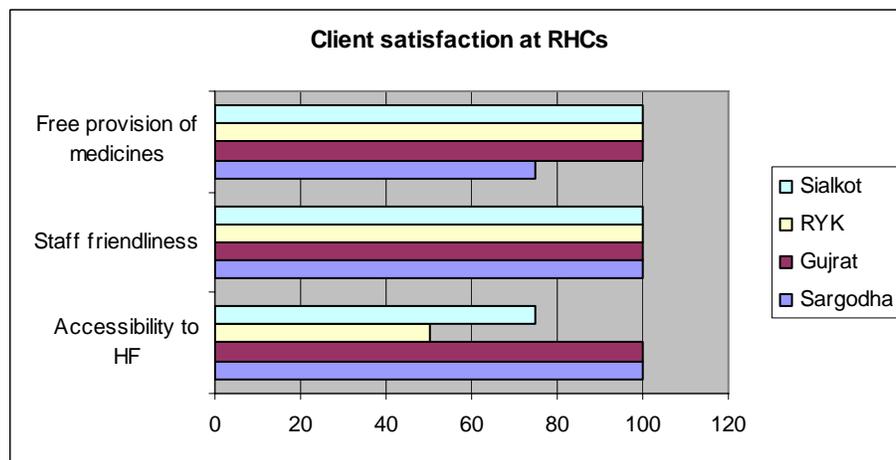
The knowledge regarding recognition of five key complications<sup>19</sup> and Active Management of Third Stage of Pregnancy (AMSTL) was poor; however, knowledge on clinical management of these complications varied among staff at all sampled RHCs (figure 12).

**Health Management Information System (HMIS)/District Health Information System (DHIS) performance:** The performance in terms of timely submission of HMIS reports and data quality checks were found good in all study districts except in Sargodha, where 75 percent of all visited RHCs were ensuring data quality (figure 13). In contrast, except for Gujrat (100 percent of RHCs), the districts showed varied performance on display of data in their facilities; this was 50 percent of RHCs in Sialkot and RYK, and only 25 percent in Sargodha. Key informant interviews revealed that timeliness of submission of the HMIS reports is due to the fact that release of salaries of staff is tied to report submission.

<sup>19</sup> Five key complications of pregnancy are pre-eclampsia/eclampsia, obstructed labor, fetal distress, fetal malpresentation and uterine dystocia.

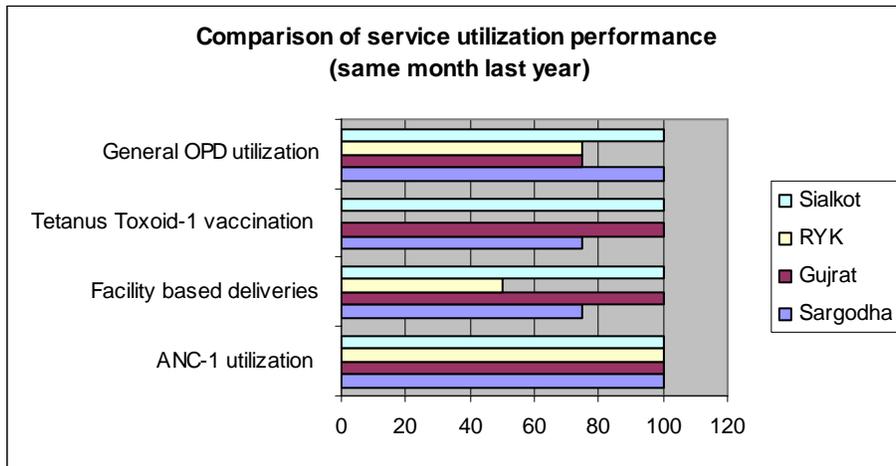
**Figure 13: HMIS/DHIS Performance at Selected RHCs**

**Client satisfaction:** The overall QOC in terms of provision of free medicines and staff friendliness was rated satisfactory by service users and only 25 percent of clients complained of non-availability of free medicines in Sargodha. Physical accessibility was rated 100 percent in case of Gujrat and Sargodha, while it was less accessible in Sialkot (75 percent satisfied) and 50 percent in RYK respectively (figure 14). The waiting time was between 10 and 25 minutes at various facilities and this was acceptable to the communities. All the clients were satisfied with the behavior of the staff in response to their treatment-related queries.

**Figure 14: Client Satisfaction at Selected RHCs**

**Service utilization:** The service utilization performance on five key indicators was compared with the performance in the same month last year through facility records. Findings on four variables are presented in figure 15. When services utilization was found high in numbers as compared to last year, it was rated good, and declining trends were rated unacceptable. Based on actual data, general OPD utilization was found good (100 percent) in Sialkot and Sargodha, while it had declined (75 percent) in Gujrat and RYK. All districts showed improved utilization (100 percent) for ANC-I and the same level of performance on tetanus-toxoid (TT)-I and assisted deliveries was found in Sialkot and Gujrat. The TT-I immunization was poor in RYK and declined in Sargodha.

**Figure 15: Service Utilization at Selected RHCs**



## SWOT Analysis of Various PHC Models

For comprehensive SWOT analysis of all PHC models, please see annex G:

### SWOT Analysis Matrix (RYK and CMIPHC, PPHCI Models)

Internal factors	External factors
<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>Autonomous body with government and political support</li> <li>Hire-and-fire authority</li> <li>Allocate and reallocate service delivery functions</li> <li>Strong M&amp;E system</li> <li>Flexibility in financial management and budget utilization</li> <li>Additional budgetary support from provincial governments</li> <li>Performance-based incentives for staff</li> <li>Simple and result-oriented management with clear focus on OPD utilization for curative services</li> <li>Support groups for community participation</li> </ul>	<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>Interest of multilateral and donor agencies</li> <li>Community support</li> <li>Quick decision making due to provincial government support</li> <li>Testing the model (contract out management) for secondary hospitals</li> <li>Pilot the model for purchaser-provider split arrangement</li> </ul>
<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>Focus on facility-based curative services</li> <li>No financial incentives for paramedics and other junior staff at BHU</li> <li>Deviation from National Health Policy mandate for BHU, where a doctor should be available six days a week</li> <li>Negligible linkages with national programs</li> <li>No role in provision of preventive services</li> <li>No control over community-based outreach staff</li> <li>Weak referral linkages and system</li> <li>Another vertical system within the district</li> <li>Lack of explicit QOC standards</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>Public sector district health managers</li> <li>Federally administered national program managers</li> <li>Regular district health system's professional staff</li> <li>Regular paramedical staff in the district</li> <li>Additional resource burden – budget from district and provincial government (administrative cost)</li> <li>Lack of clear cut exit strategy</li> <li>Management of conflict with DHD</li> </ul>

### Identification and Analysis of Strengths and Weaknesses with Recommendations (PRSP Models)

Strengths	Weaknesses	Recommendations
<ol style="list-style-type: none"> <li>Autonomous body</li> <li>Political support</li> <li>Hire-and-fire authority</li> <li>Performance-based incentives for staff</li> <li>Flexibility in financial management and budget utilization</li> </ol>	<ol style="list-style-type: none"> <li>Focus on facility-based curative services</li> <li>No financial incentives for paramedics and other junior staff at BHU</li> <li>No role in provision of preventive services</li> <li>No control over community-based outreach staff</li> <li>Lack of explicit QOC standards</li> <li>Deviation from health policy objective for presence of doctor at BHU</li> </ol>	<ol style="list-style-type: none"> <li>Develop comprehensive PHC model and pilot</li> <li>Provide same level of autonomy to DHD and test the model</li> <li>Introduce Performance-linked Contracts in DHD for both managers and service providers</li> <li>DHD should implement and monitor QOC standards</li> <li>Develop and implement operational policies for DHD</li> <li>Health policy should clarify functional status of BHU in terms of availability of doctor during whole week</li> </ol>

### Identification and Analysis of Opportunities and Threats with Recommendations (PRSP Models)

Opportunities	Threats	Recommendations
<ol style="list-style-type: none"> <li>1) Interest of multilateral and donor agencies</li> <li>2) Community support</li> <li>3) Quick decision making due to provincial government support</li> <li>4) Testing the model (contract out management) for secondary hospitals</li> <li>5) Pilot the model for purchaser-provider split arrangement</li> </ol>	<ol style="list-style-type: none"> <li>1) Resistance from DHD managers (Management of Conflict) and federally administered national programs managers</li> <li>2) Resistance from regular district health system's professional staff</li> <li>3) Additional resource burden – budget from district and provincial govt.</li> <li>4) Lack of clear exit strategy</li> <li>5) Management of conflict with dual lines of authority</li> </ol>	<ol style="list-style-type: none"> <li>1) Purchaser-provider split may be incorporated through a comprehensive primary and secondary health service packages</li> <li>2) District health management team concept could reduce the resistance from DHD</li> <li>3) Perception of verticality of PRSP model will endanger its replication</li> </ol>

### SWOT Analysis Matrix (Gujrat and PIPHCMP)

Internal factors	External factors
<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Autonomous body through federal ordinance</li> <li>• Support from provincial government-PC-I</li> <li>• Work through district government</li> <li>• EDOH is the team leader and all interventions by the NCHD are delivered through the DHD</li> <li>• Strong M&amp;E system with baseline surveys</li> <li>• Provide financial support to fill the vacancies in the DHD</li> <li>• Focus on both curative and preventive services</li> <li>• Community participation and mobilization is the strongest component of this PHC model</li> <li>• School health services, which are currently missing both in PRSP and DHD PHC models</li> <li>• Additional budgetary support from provincial and federal governments</li> <li>• Incentives for BHU staff</li> <li>• Community governance structure</li> <li>• Participation of CCBs for resource generation</li> <li>• Coordination with education, water and sanitation departments through district coordination officer (DCO) and respective EDOs is another mean to deliver their interventions</li> </ul>	<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Revitalization of community participation and recognizing the effective role of CCBs in strengthening health care service delivery and management</li> <li>• Ownership of health facilities by the communities</li> <li>• Linking school health services with PHC services</li> <li>• Strengthening of comprehensive system approach</li> <li>• Strengthening of referral systems through provision and management of community-based ambulances provided at BHUs</li> </ul>
<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• In districts where DCO, EDOH, and NCHD program unit have weak coordination, NCHD is not very effective</li> <li>• NCHD lacks political and administrative support, and therefore is struggling to reduce resistance from DHD in many districts</li> <li>• No financial incentives available for the junior staff (LHVs, dispensers, medical technicians) at the BHUs</li> <li>• No mechanism to ensure implementation of QOC standards</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Resistance from public sector district health managers</li> <li>• Resistance from federally administered national programs managers</li> <li>• Sustainability depends on continuous financial support from federal government</li> <li>• Provincial ownership of NCHD program is weak and therefore threat to its sustainability</li> </ul>

### Identification and Analysis of Strengths and Weaknesses with Recommendations (NCHD Model)

Strengths	Weaknesses	Recommendations
<ol style="list-style-type: none"> <li>1) Autonomous body with federal and provincial support</li> <li>2) EDOH is the team leader and all interventions by NCHD are delivered through DHD</li> <li>3) Performance-based M&amp;E system with baseline surveys</li> <li>4) Financial incentives for staff</li> <li>5) Focus on both curative and preventive services</li> <li>6) Community participation and mobilization is the strongest component of this PHC model</li> <li>7) School health services are integral part of this PHC model</li> </ol>	<ol style="list-style-type: none"> <li>1) In districts where DCO, EDOH, and NCHD program unit have weak coordination, NCHD is not very effective</li> <li>2) NCHD lacks political and administrative support, and therefore is struggling to reduce resistance from DHD in many districts</li> <li>3) No financial incentives available for the junior staff (LHVs, dispensers, medical technicians) at the BHUs</li> <li>4) QOC standards have not been spelled out and therefore no mechanism to access knowledge and skills of service providers and ensuring basic QOC standards</li> </ol>	<ol style="list-style-type: none"> <li>1) Develop comprehensive PHC model and pilot</li> <li>2) Experience gained from school health component should be incorporated in PHC service package</li> <li>3) DHD should implement and monitor QOC standards</li> <li>4) Develop and implement operational policies for DHD</li> </ol>

### Identification and analysis of opportunities and threats with recommendations (NCHD Model)

Opportunities	Threats	Recommendations
<ol style="list-style-type: none"> <li>1) Revitalization of community participation and recognizing the effective role of CCBs in strengthening health care service delivery and management</li> <li>2) Ownership of health facilities by the communities</li> <li>3) Linking school health services with PHC services</li> <li>4) Strengthening of referral systems through provision and management of community-based ambulances provided at BHUs</li> </ol>	<ol style="list-style-type: none"> <li>1) Resistance from public sector district health managers</li> <li>2) Resistance from federally administered national programs managers</li> <li>3) Sustainability depends on continuous financial support from federal government</li> <li>4) Provincial ownership of NCHD program is weak and therefore threat to its sustainability</li> </ol>	<ol style="list-style-type: none"> <li>1) Establish DHMT and draw its membership from all stakeholders to reduce resistance from DHD</li> <li>2) Community governance structure should be institutionalized</li> <li>3) Develop clear exit strategy</li> </ol>

## Concluding Remarks and Recommendations

PHC is the foundation of Pakistan's health care system. For most people, PHC is their first point of contact with the health care system, often through outreach health workers or PHC facilities. It is at this point that minor health issues are managed and preventive services are provided, which has long-term effects on health status of the communities. It is also where health promotion and education efforts are undertaken, and where patients in need of more specialized services are connected with secondary care.

The past two decades have seen increasing concern about access to and quality of PHC services in Pakistan. This elicits many questions on the relevance, acceptability, and viability of the PHC models in the public health sector and emphasizes the need to explore alternative reforms to sustain the health care system. Therefore to address the inefficiencies and ineffectiveness of PHC service delivery in the public sector, various PHC models and initiatives are being tested; this study assesses the three basic models. Each of the PHC models studied has its strengths and weaknesses – essentially, each model focuses on strengthening of one of the pillars of PHC strategy through targeted interventions, and neglects other key pillars necessary for integrated delivery of PHC services. As a result, no model perfectly fulfills PHC needs of its community.

The core components or pillars of PHC as originally described in the Alma Ata Declaration are:

1. Provision of preventive, minor curative, health promotional, and rehabilitative services under one umbrella
2. Decentralized management of PHC
3. Community participation
4. Intersectoral collaboration
5. Strengthened referral linkages

Other than a few scattered PHC best practices, there are three basic PHC models engaged in service delivery; other models simply replicate these models under different initiatives or names. The PRSP and NCHD PHC models focus on two PHC components and therefore lessons learned should be incorporated, while reforming and restructuring the public sector PHC model.

### **Change the Bath Water, Don't Throw the Baby Out**

Keeping the study findings and assessment of various PHC models in mind, there is a need for a results-oriented PHC model to address community health care needs and inefficiencies in public health sector performance. This study does not provide generic recommendations, which are available elsewhere (MoH reports, health policy documents, studies by donors and multilateral agencies); we all are quite familiar with that handful of strategies and reforms recommended over the years to address the public health sector inefficiencies.

Instead, this study recommends a holistic **change in approach**, which should focus on results in health outcomes. The result-based PHC model is an approach that links resources and inputs to activities performed, services delivered, and outcomes achieved. The results-based PHC model is intended to reflect the aims and functions of the PHC system in Pakistan by describing the chain of inputs, activities, outputs, and expected outcomes of this sector, and the contexts that influence PHC services.

PHC inputs include financial, material, and human resources. PHC activities are the work processes intended to produce specific outputs (e.g. products and services), and are the primary link in the chain through which outcomes are achieved. PHC activities are categorized into three types:

policy/governance, health care management, and preventive and curative services. Together these elements form the structure or foundation of a PHC system.

PHC outputs are direct products or services delivered as a result of PHC activities. PHC services include health promotion and disease prevention, and curative, rehabilitative, and supportive services to targeted individuals or populations. These outputs can also be described in terms of responsiveness (e.g. whether they are timely, culturally appropriate, and convenient), as well as the degree to which they are client focused, effective, comprehensive, continuous, coordinated, and community oriented.

PHC outcomes can be immediate, intermediate, or final. Immediate outcomes are those most attributable to outputs, and for which the PHC workforce, policymakers, administrator, and service providers can reasonably assume control, responsibility, and accountability.

Intermediate outcomes include areas in which PHC stakeholders have a lesser degree of control, but for which PHC services are still expected to have an impact. These outcomes include appropriateness of provider and place, health care system efficiency, acceptability or satisfaction, and health care system equity.

Final outcomes include a sustainable and accountable health care system, improvement and/or maintenance of function, resilience and health for individuals, and improved population-level health and wellbeing. It should be recognized that external forces (social, cultural, legal/regulatory, physical and economic contexts, as well as population characteristics and participation in PHC) can influence inputs, activities, outputs, and outcomes and need to be contextualized.

It is further recommended that a separate Health Management Cadre be established by each provincial government to provide trained and experienced managers for administrative/ managerial positions in health institutions and district and provincial health administration. This cadre would be different from the Clinical and Teaching Cadre with its own career progression path. The members of other cadres in health and outside professionals can compete for entry into this cadre provided they meet the eligibility criteria. Since it may take some time before qualified individuals are available, the management cadre may be introduced in a phased manner. Within the structure of the new management cadre, reforms centered on good governance, accountability, and **performance monitoring** should be institutionalized and safeguards may be built against political and external interference, albeit while building appropriate **incentives**.

And finally, it is well established that leveraging the potential of the private sector partners including a growing number of philanthropic and charitable health care providers and facilities can significantly improve outcomes across a range of health services and can enable the state to share responsibility for getting programs out to communities by relying on groups and organizations that have complementary mandates. While developing frameworks for public-private partnerships, lessons learned from the current contracting models must be highlighted. A commentary by Heartfile<sup>20</sup> has shown that the current contracting framework does not ensure equity for the vulnerable and the poor. Secondly, it overlooks the essential function of first-level care facilities (FLCFs) in Pakistan, i.e. preventive and promotive services such as immunization and infectious diseases. Therefore, it is important to make necessary amendments in the contracting arrangements to address these components.

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<sup>20</sup> Nishtar, S. 2006. Basic considerations. The News on Sunday: Islamabad/ Karachi/ Lahore. August 6, 2006.

**Annex A.****Highlights of Previous Health Policies*****National Health Policy 2001***

The 2001 National Health Policy has the following 10 areas key policy areas:

- Reducing widespread prevalence of communicable diseases
- Addressing inadequacies in primary/ secondary health care services
- Removing professional/ managerial deficiencies in the District Health System
- Promoting greater gender equity
- Bridging basic nutrition gaps in the target population
- Correcting urban bias in health sector
- Introducing required regulation in private medical sector
- Creating mass awareness in public health matters
- Effecting improvements in the drug sector
- Building capacity for health policy monitoring

***National Health Policy 1997***

The 1997 National Health Policy announced the aim of ensuring basic health services and promoting better quality of life for attaining maximum national development, with the following major strategies:

- Strengthen the district health system to deliver the essential elements of PHC and provide the necessary support mechanism in terms of training and logistics to effectively supervise the performance of health workers at all levels
- Ensure satisfactory staff levels at RHCs/BHUs and promote the deployment of female workers as a human resource capacity building for the district health system
- Introduce the necessary directives to develop and support decentralization strategies in the organization, planning, and management of the national health system
- Improve the function of the referral system to ensure equitable accessibility to secondary, and tertiary health care services
- Ensure direct and effective community involvement and bring about coordination and collaboration between health and other government sectors and NGOs
- Introduce alternative approaches to financing health care through involvement of the private health sector and the national health care schemes
- Integrate all vertical programs in to PHC at the operational level to create an effective district health services system based on comprehensive PHC
- Deliver reproductive health services including family planning in all health activities and at the household level through home health care
- Promote innovative control strategies for prevailing communicable diseases such as tuberculosis, viral hepatitis, acute respiratory infections (ARI), and diarrhoeal diseases, and undertake control of major prevalent non-communicable diseases
- Decentralize planning to the grassroots level and give the community an active participatory role

The policy includes a National Health Care Scheme (NHCS) for improved quality and utilization, decreasing cost of care, and extending essential health care to all. The main components of the scheme were

- Creation of a District Health Authority, a multisectoral district-level body with representation from government departments and community, to supervise the management of district health system
- Autonomy to selected District Headquarter Hospitals run by Hospital Management Boards, under the supervision of District Health Authorities, with authorization to levy user charges
- Contracting of selected First-level Care Facilities to private physicians, NGOs, or existing staff, to deliver standard package of services at user charges, under the supervision of community-based organizations
- National health cards for families in rural and underserved urban areas, to provide essential health services at nominal charges (and free for poor families) through privatized health facilities

***National Health Policy 1990 (salient features):***

Universal Health Coverage through:

- Improved functioning of existing BHUs and RHCs, mobile units, incentives to health care providers
- Training of 100,000 village health workers
- Enhancing employment opportunities for doctors
- Reduction in essential drugs prices
- Essential drug list for different tiers of health care outlets
- Voluntary health insurance schemes
- Strengthening of health management system through decentralization
- Encouraging and involving private sector in PHC provision
- Medical education made relevant to PHC needs and system
- Scholarship offered to 20 percent of top students from each medical college
- Food supplementation for malnourished and vulnerable groups of communities
- Expanding and integrating FP services with PHC package
- Program for medical aspects of narcotics

## Annex B.

### Public Health Sector Functions after Devolution

#### Structure and Functions of the Public Health Care System

**Organization:** With devolution, the public health sector was organized into three tiers. Policy is formulated at the federal level but provinces and districts are responsible for implementation of the National Health Policy. At the provincial level, the public health care sector is organized in a top-down hierarchy; at the top of the pyramid lies the Health Secretariat, mainly occupied by higher-level civil services employees, while senior-level health managers' staff Director General of Health Services (DGHS). The Health Secretariat is responsible for setting provincial policy and translating the National Health Policy into strategic provincial plans, while the overall operational management of provincial public health care services is the main responsibility of the devolved districts. Currently, the DGHS Office has been delegated the responsibility of supervision, monitoring, and ensuring the implementation of provincial health plans by the lower tiers. Furthermore, the DGHS office is also responsible for collection of health management information from all the districts and transmitting this information vertically upwards to the federal level, thus working as a post office of the health department. The district, which is the operational level in the public health sector, organizes implementation of government health policy and planning through a vast infrastructure which is disproportionately staffed. After some restructuring, the office of the Director Health Services, which was an intermediate tier between the district and province, has been abolished to create the post of Executive District Officer Health (EDO) to manage the District Health System. The District Health Officer (DHO) is responsible for PHC and promotive and curative rural health services, while medical superintendents at district headquarter and tehsil hospitals (DHQs and THQs) are responsible for delivery of secondary health care services.

Apart from the above-mentioned three-tiered structure, there are vertical health programs, which have been vaguely integrated at the district level for implementation. Teaching institutions, teaching hospitals, and special projects are under direct command of the Secretary of Health.

The federal government is responsible for provision of health care in the Federally Administered Tribal Areas and institutions. At the federal level, there are three major functionaries i.e. Ministry of Health, Federal Health Programs, and Ministry of Population Welfare.

#### Main Functions of the Federal MoH

##### Policy and Planning:

- National health planning and coordination in the field of health.
- Negotiations and agreements with other countries and international organizations in the fields of health, drugs, and medicines.
- International aspects of medical facilities and public health, international health, and medical facilities abroad.
- Scholarships/ fellowships, training courses in health from international health agencies such as WHO and UNICEF.
- Medical, nursing, dental, pharmaceutical, and allied subjects:
  - ❖ Maintenance of educational standards;
  - ❖ Education abroad; and
  - ❖ Educational facilities for underdeveloped areas and for foreign nationals and related issues.

- Standardization and manufacture of biological and pharmaceutical products.
- Vital health statistics.
- Medical and health services for federal government employees.
- Coordination with national associations in medical and allied fields such as the Red Crescent Society and TB Association.
- Legislation pertaining to drugs and medicines, including narcotics and psychotropic, but excluding functions assigned to the Pakistan Narcotics Control Board.
- Administration of Drugs Act. 1976 and poison and dangerous drugs.
- Prevention of inter-provincial epidemics, infectious and contagious diseases.
- Lunacy and mental deficiency.

### **Federal Health Programs Management and Coordination:**

The MoH runs the following core programs:

1. National Program for Family Planning and Primary Health Care
2. Expanded Program on Immunization (EPI)
3. Malaria Control Program
4. National AIDS Control Program
5. TB Control Program
6. Nutrition Program

All above programs are directly under the supervision/control of the MoH except EPI and National AIDS Control Program, which are based at the National Institute of Health (NIH) and are coordinated by the NIH Executive Director. All these programs look to the MoH for important policy decisions. Technically they are under the control of the DGH. For planning and development budget, they come to the Senior Joint Secretary (F&D) while for administrative matters they go to the MoH. The in-charge of each program is the National Program Manager/ Coordinator. Every program has its own information system except Nutrition, which is still in its early stage.

### **Functions of Provincial Health Departments**

The role and responsibilities of the provincial health departments after devolution encompass the following major areas:

- a) Policy formulation
- b) Regulatory
- c) Standard setting
- d) Technical support in areas of M&E, management development, and training of health staff
- e) Resource mobilization

The detailed roles and responsibilities of the provincial health departments are:

- Policy development, legislation, and monitoring implementation.
- Supervision and monitoring of provincial institutions and district performance and provision of technical guidance.
- Coordination and regulation of medical, dental, nursing, and paramedic education.
- Recruitment, transfer, posting, promotion, and disciplinary action of all cadres/ grades for provincial institutions.
- Recruitment, transfer, posting, promotion, and disciplinary action from BPS 18 and above for doctors and BPS 17 and above for other cadres of district.

- Planning and development for all provincially managed institutions and macro-level planning for the districts.
- Policy dialogue /coordination with federal /district government and donors.
- Procurement of goods /services for provincially managed institutions, vehicles, electro-medical equipment, technical assistance, and rate contract for medicines for districts.
- Constitution of Medical Boards for provincial employees, Standing and Special Medical Board (SBM) for all employees.
- Data analysis and feedback to MoH and districts.
- Budget allocation and control for provincial institutions only.
- Health and nutrition education activities.
- Health system research.
- Development of minimum standards of service delivery.
- Provision of technical support to the districts in all respect.
- Resolve inter- and intradistrict conflicts.
- Annual monitoring of district performance against agreed indicators.

### **Roles and Responsibilities of District Health Departments**

According to LGDP 2001, each district a separate district health departments (DHDs). The EDOH is the in-charge of the DHD and is assisted by the DHO and medical superintendents of DHQs and THQs. Districts are responsible for primary and secondary health care services under:

- Prevention and control of infectious and contagious diseases:
  - ❖ Tuberculosis
  - ❖ Eradication/Control of malaria
  - ❖ Lepers Act 1898
  - ❖ Treatment of patients bitten by rabid animals
  - ❖ Adulteration of foodstuffs
  - ❖ Government public analyst
  - ❖ Nutrition surveys
  - ❖ Nutrition and publicity in regard to food
  - ❖ Vaccination and inoculation
  - ❖ Maternal and child welfare
  - ❖ Port Quarantine.
- Management of health care facilities and provision of health care services in the district including DHQ and THQs hospitals, RHCs, and BHUs but excluding any hospital/health facility affiliated with the Medical College.
- Audit cell to undertake financial, managerial, and clinical audit of health facilities in district.
- Monitoring and inspection of all health care facilities in the respective district.
- Data collection and compilation of vital health statistics.
- Planning and development of health care services delivery for improving health status of population in accordance with the community-perceived and locally ascertained health care needs through the PHC approach.
- Preparation of development schemes, budget, schedule of new expenditure, and Annual Development Proposals (ADP) up to Rs. 5 million.
- Service matters except those entrusted to Health Department/Services and General Administration Department in case of regular employees of the provincial government including BS-17, recruitment of officers and officials in the district on contract basis from time to time under the District Government Rules of Business.
- Health equipment maintenance (HEM) for ensuring availability of state-of-the-art and functional biomedical technology.

- Transport maintenance as an essential component of speedy provision of outreach health care services.
- District Quality Control Board (DQCB) under the overall technical support from the Provincial Quality Control Board (PQCB) for ensuring supply and availability of quality medicines in line with the National Health Policy.
- Technical scrutiny, standardization, and purchase of stores and capital goods and biomedical equipment for each health facility in respective districts.
- Government Medical Stores Depot (MSD) at each district for ensuring availability of appropriate quantity of reserves and timely distribution of routine and incidental drugs to all health care facilities.
- Surgeon Medico-legal Office and its functions relating to the constitution of Medico-legal examination.
- All administrative and related matters of Nursing Cadres up to BS-17.
- Formulation and implementation of policies pertaining to institution of user charges and levy of related and subsequent fee by medical officers in districts.
- In a time span ranging over five years, the office of the Chief Chemical Examiner will be transferred and its responsibilities thereof will be entrusted to the districts.

**Annex C.****List of Facilities Visited for Field Activities**

<b>S. No.</b>	<b>Health Facilities, Sargodha</b>	<b>S. No.</b>	<b>Health Facilities, Gujrat</b>
1	BHU 84 SB	25	BHU Gorala
2	BHU 85 NB	26	BHU Moeen udin Pur
3	BHU 100 SB	27	BHU Jamal Pur Sadan
4	BHU 36 NB	28	BHU Hariyanwala
5	BHU 30 NB	29	BHU Saroki
6	BHU Asianwala	30	BHU Saman Pindi
7	BHU 104 SB	31	BHU Chakori
8	BHU 12 SB	32	BHU Paswal
9	RHC Bhagtanwala	33	RHC Lalamusa
10	RHC 104 NB	34	RHC Kunjah,
11	RHC Miani	35	RHC Shadiwal,
12	RHC Mozzamabad	36	RHC Pindi Sultan Pur
	<b>Health Facilities, Rahim Yar Khan</b>		<b>Health Facilities, Sialkot</b>
13	BHU Gulmerg	37	BHU Chitti Sheikhan
14	BHU 116 P	38	BHU Murad Pur
15	BHU 125 P	39	BHU Vario
16	BHU 100 P	40	BHU Chowuni Sulerian
17	BHU KACHA	41	BHU Ugoki
18	BHU 107 P	42	BHU Sahowala
19	BHU 92 P	43	BHU Bonkan
20	BHU 137 P	44	BHU Badiana
21	RHC Trandasway	45	RHC Sambrial
22	RHC Zaheer Peer	46	RHC Chowinda
23	RHC Kot Samra	47	RHC Kotli Loharan
24	RHC Sehja	48	RHC Begowala

**Focus Group Discussions**

<b>S. No</b>	<b>FGD</b>	<b>Participants</b>
1	<b>FGD RHC Miani, Sargodha</b>	Mohammad Younis (UC Nazim), Ms. Kanwal Firdous (LHV), Ms. Kalsoom (LHW), Faiz (Community member), Mohd. Shakoor (MT)
2	<b>FGD, Office of NCHD in Gujrat</b>	Dr. Mohd. Ali (RHC Kunjah), Ms. Saira (NCHD), Shoukat Ch (Member Local Health Committee, BHU Gorala), Dr. Zulifqar Ahmad (LHW Coordinator), M&E Coordinator (NCHD)

**Annex D.****List of Key Informants**

<b>S. No.</b>	<b>Name and designation</b>	<b>Organization</b>
1	Dr. Mohammad Aslam Ch	DG Health, Punjab, Lahore
2	M Javaid	PD, PRSP, Punjab Lahore
3	DHO PH	DHO Public Health, MCL, City Government, Lahore
4	Dr. Arshad Usmani	Ex CPO, Provincial Coordinator/Director RBM, Punjab
5	Dr. Syed Firdous	EDO Health Sargodha
6	Dr. Amjad Sian	MS DHQ Hospital Sargodha
7	Dr. Irfan Fareed	LHW Program District Coordinator, Sargodha
8	Dr. Farooq Sabir	EPI Program District Coordinator, Sargodha
9	Dr. Iftikhar Ahmad	Medical Officer, BHU 30 NB, Sargodha
10	Dr. Israr Shah	District Program Manager, NCHD Sargodha
11	LHW	Attached to BHU, 84 SB
12	LHV	RHC Miani, Sargodha
13	Azhar Awan	Manager, Al-Kidmat Dispensary, Sargodha
14	Arshad Ali Hanjra	Nazim Union Council Moazamabad, Sargodha
15	Dr. Munir Ahmad	EDO Health Gujrat
16	Dr. Kazmi	District Health Officer Gujrat
17	Dr. Zulifqar Ahmad	LHW Program District Coordinator, Gujrat
18	Doctor Incharge	EPI Program District Coordinator, Gujrat
19	Sarfraz Ahmad	General Manager, NCHD Gujrat
20	Dr. Jamil Ahmad	Senior Medical Officer, RHC Pindi Sultan Pur Gujrat
21	WMO	BHU Chakori Sher Ghazi, Gujrat
22	LHV	BHU Paswal, Gujrat
23	Mohammad Akmal Cheema	District Nazim, Sialkot
24	Dr. Talat Iqbal	EDO Health Sialkot
25	Dr. Shakeel Ahmad Butt	District Health Officer, Sialkot
26	Dr. Hassan	MS, AIMH Sialkot
27	Dr. Tajamal Hussain	LHW and EPI Programs District Coordinator, Sialkot
28	Dr. Zahid Kaleem Butt	Medical Officer, BHU Vario, Sialkot
29	Dr. Amjad Toor	Deputy DHO, Sialkot
30	LHW	BHU, Chouni Sulerrian, Sialkot
31	LHV	BHU, Vario, Sialkot
32	Dr. David Sohail	Director MCH, Sialkot (left for an urgent meeting)
33	Dr. Mohammad Sadiq	EDO Health, Rahim Yar Khan
34	Dr. Mushtaq Chaudary	MS, Sheikh Zayed DHQ Hospital, Rahim Yar Khan
35	Mohammad Khalid Masood Farooka	District Support Unit Manager, PRSP RYK
36	Dr. Athar Nazir	BHU, Gulmerg Rahim Yar Khan
37	Iftikhar Mamdoot	Nazim Union Council, Rahim Yar Khan
38	Ms. Sajida Afzal	LHW, Rahim Yar Khan
39	Dr. Zaheer	EPI, Program Manager, Rahim Yar Khan
40	Dr. Ahmad Farooq	LHW Program Manager, Rahim Yar Khan
41	Sardar Rafiq Haider Khan Laghari	District Nazim, Rahim Yar Khan (Not available even after appointment)
42	Dr. Mushtaq A Khan	Chief NHPU, Islamabad
43	Dr. Qayyum Norani	Manager Health, AKHF Islamabad
44	Dr. Saadia Shabir	Program Officer Health, AKHF, Islamabad
45	Dr. Werner Wheeler	Medical Officer, PHC WHO, Islamabad
46	Arafat Ahmad	Director Outreach Health Programs, NRSP Islamabad
47	Dr. Moazzam Khalil	Director Health, NCHD, Islamabad

## Annex E.

## Comparison of Various Primary Health Care (PHC) Models

Public Sector DHD PHC Model	PRSP PHC Models—RYK and CMIPHC Models	NCHD PHC Model
<b>Organizational Structure and Management Functions</b>		
<p><b>District Level:</b> Health System Management – EDOH EDOH is the overall in-charge of District Health System</p> <p><b>The key management functions of EDOH are:</b></p> <ol style="list-style-type: none"> <li>Supervision, monitoring, coordination and evaluation of activities of various health programs (LHW, Malaria, EPI, TB-DOTS) and PHC services within the district</li> <li>Coordination and monitoring of health care services from DHQ and THQ hospitals</li> <li>Annual planning and budgeting for management of regular PHC activities</li> <li>Identification, preparation, and implementation of annual development proposals</li> <li>Implementation of service standards, quality assurance in the district</li> <li>Promote collaboration with NGOs, other government departments, private sector</li> <li>Management of HMIS in the district</li> <li>Control and prevention of communicable diseases; respond to epidemics and other disasters</li> <li>Health Unit Management (management of DHQ hospital) by DHQ hospital medical superintendents (MS)</li> </ol> <p><b>Tehsil Level:</b> Health System Management – Deputy District Health Officer (DDHO) at Tehsil</p> <ol style="list-style-type: none"> <li>Monitor activities of various health programs (LHW, Malaria, EPI, TB-DOTS) and PHC services within the Tehsil</li> <li>Health Unit Management (management of THQ hospital) – by THQ hospital MS</li> <li>Service delivery</li> <li>Resource management</li> </ol> <p><b>Union Council Level:</b></p> <ol style="list-style-type: none"> <li>Health System Management – BHU/FLCF in-charges</li> <li>Coordinate, supervise, and monitor activities of various health programs (LHW, Malaria, EPI, TB-DOTS) within the union council</li> <li>Health Unit Management – Management of RHC by in-</li> </ol>	<p><b>District Level:</b> District Support Unit (DSU) headed by District Support Manager (DSM) with following staff: -Executive Finance &amp; Admin. -Executive M&amp;E -Social organizers (1 for 20 HFs) -Medical store manager</p> <p><b>DSU is responsible for:</b></p> <ol style="list-style-type: none"> <li>Clustering of BHUs (three BHUs/cluster) ensuring that the distance within a cluster is manageable and should not be more than 15-20 Kms.</li> <li>The doctor is the administrative head of a cluster rather than a single BHU.</li> <li>Spirited and comprehensive facilitation of the BHU staff.</li> <li>Medical officer in-charge (MO I/C) is provided with salary incentive and reside at focal BHU.</li> <li>The doctor is not allowed to conduct any private practice and to ensure that no staff member indulges in such a practice within a BHU.</li> <li>Paramedical staff is also given a reward on their best performance.</li> <li>Ensuring staff presence at BHUs.</li> <li>The mobility of the doctor is ensured.</li> <li>Doctors are allowed to get an interest-free loan of Rs100,000 to buy a vehicle.</li> <li>The MO I/C covers all BHUs according to a timetable.</li> <li>The doctor is responsible for the overall discipline, records and betterment of his cluster.</li> <li>The doctor resides at the focal BHU and is also responsible for looking after emergencies even after office timings.</li> <li>The focal point is chosen on the basis of better residential facilities for the doctor along with availability of electricity and water.</li> </ol> <p><b>Project Management Unit (PMU) at Provincial Level:</b></p> <ol style="list-style-type: none"> <li>The PMU is responsible for the maintenance of stock and budget, which have been handed over by the district government.</li> <li>Under no circumstances is it permissible to use the funds</li> </ol>	<p><b>District Level</b> DSU headed by District Program Manager (DPM) with the following staff: -District Program Supervisors (each for 8-10 BHUs)     a) For PHC     b) For School Health Program -Social mobilizers placed at BHU to work with communities Establishment support staff</p> <p><b>Regional Level</b> General Manager (for cluster of three districts) Program Managers (each for Health and/or Education—each for health/education in a cluster of three districts etc.) Finance Manager Establishment support staff</p> <p><b>Federal Level</b> Director Health Programs Senior Program Managers Director of Finance Director M&amp;E Establishment support staff</p>

<p>charge</p> <p>d) Service delivery</p> <p>e) Resource management</p> <p><b>Prevention and control of infectious and contagious diseases:</b></p> <p>a) Preventive services</p> <p>b) Tuberculosis/TB DOTS</p> <p>c) Eradication/control of malaria</p> <p>d) Lepers Act 1898</p> <p>e) Treatment of patients bitten by rabid animals</p> <p>f) Adulteration of foodstuff</p> <p>g) Government public analyst</p> <p>h) Nutrition surveys</p> <p>i) Nutrition and publicity in regard to food</p> <p>j) Health education</p> <p>k) Vaccination and inoculation</p> <p>l) Maternity and child welfare</p> <p>m) Port quarantine.</p> <p><b>Curative Services:</b></p> <p>n) OPD curative services</p> <p>o) Inpatient curative services</p> <p>p) Diagnostic services</p>	<p>from the district government for the PMU.</p> <p>c) The PMU expenditure will be minimal and remain within a limit of 5 percent of total BHUs budget in RYK, which is incurred from the funds provided by the PRSP.</p> <p>d) The PMU has taken over the overall administration of the BHUs from the district government. The PMU is also responsible for support as well as guidance to the doctors.</p> <p>RYK PHC model was scaled up under the <b>The Chief Minister's Initiative for Primary Health Care (CMIPHC)</b> to proclaim the earnestness of ownership. Its extension was approved to such other districts as opted for it.</p> <p>-Government of Punjab undertook to bear the cost of a PSU at Lahore and DSUs in each intervention district.</p> <p>-Government of Punjab agreed to provide the services of handpicked personnel to the PRSP for leadership roles in the operations.</p>	
<b>Planning and Implementation of Service Delivery</b>		
<p><b>No formal district health planning by DHD</b></p> <p><b>Operational Planning and Management</b></p> <p>a) Management of health care facilities and provision of health care services in the district including DHQ and THQ hospitals, RHCs, and BHUs but excluding any hospital/health facility affiliated with the Medical College.</p> <p>b) Monitoring and inspection of all health care facilities in the respective district.</p> <p>c) Planning and development of health care service delivery for improving the health status of the population in accordance with community's perceived and locally ascertained health care needs through PHC approach.</p> <p>d) District Quality Control Board (DQCB) under the overall technical support from the Provincial Quality Control Board (PQCB) for ensuring supply and availability of quality medicines in line with the National Health Policy.</p> <p>e) Ensuring implementation of federally run national</p>	<p><b>Formal annual planning and strategic project planning</b></p> <p>a) Every district support unit prepares its operational plans with budget forecast.</p> <p>b) Operational plans are made and implementation is ensured.</p> <p>c) M&amp;E plans are made for monthly activities.</p> <p>d) Budget plans are also prepared by all levels.</p>	<p>a) No formal planning but operational plans are prepared by DSU.</p> <p>b) District Program Supervisors prepare M&amp;E plan.</p> <p>c) Various management tiers also prepare M&amp;E plans.</p> <p>d) Plans for recruitment and selection of LHWs and LHSs.</p>

<p>vertical programs such as National Program for PHC, Roll Back Malaria, Tuberculosis, AIDS, and Nutrition.</p> <p><b>Capital Development Schemes</b></p> <p>a) Preparation of development schemes, budget, schedule of new expenditures and ADP proposals up to Rs 5 million.</p>		
<b>Resource Management – Financial, Budgets, Human, Equipment, Assets</b>		
<p><b>Financial Management</b></p> <p>a) EDOH is a Category I officer having maximum authority in certain heads of budgetary accounts, except re-appropriation of funds, the authority of which lies with EDOH (Finance &amp; Planning).</p> <p>b) Ensuring transparent operational financial management according to financial rules.</p> <p>c) Audit Cell to undertake financial, managerial, and clinical audit of health facilities in districts.</p> <p><b>Human Resource Management</b></p> <p>a) Service matters except those entrusted to Health Department /Services and General Administration Department in case of regular employees of the provincial government including BS-17, recruitment of officers and officials in the district on contract basis from time to time under the District Government Rules of Business.</p> <p>b) All administrative and related matters of nursing cadres up to BS-17.</p> <p><b>Logistics Management</b></p> <p>a) Health equipment maintenance for ensuring availability of state of the art and functional biomedical technology</p> <p>b) Transport maintenance as an essential component of speedy provision of outreach health care services.</p> <p><b>Procurement and Supplies Management</b></p> <p>a) Technical scrutiny, standardization, and purchase of stores and capital goods and biomedical equipment for each health facility in respective districts.</p> <p>b) Government Medical Stores Depot in each district for ensuring availability of appropriate quantity of reserves and timely distribution of routine and incidental drugs to all health care facilities.</p>	<p>District government provides budget earmarked for BHUs to run each facility, which include:</p> <p>a) Salaries and benefits of BHU staff and the cost of medicines, supplies, furniture and equipment, building maintenance, and utilities</p> <p>b) BHUs cluster under the charge of MO, who is provided a new contract at enhanced compensatory package</p> <p>c) Provincial government provides additional budget for operational cost of PRSP functions</p> <p>d) Financial provisions placed with the PRSP are in the form of a grant in aid</p> <p>e) The PRSP renders accounts of the management operation to the district government within a period of three months after the end of financial year.</p>	<p>NCHD is mainly funded by federal government and funds its operational cost through federal grants. However, through PC-I approved by Punjab government, further financial support is available for operation in 12 districts.</p> <p>a) Support and assist DHD for salary support for LHWs, LHSs, and social mobilizers</p> <p>b) Mobilize community to generate funds for local use</p> <p>c) Provide incentives to BHU staff</p> <p>d) Purchase equipment and ambulances through community support.</p>

<b>Monitoring and Evaluation Systems</b>		
<p>The supervisory levels have been reduced after devolution and following are supervisory and monitoring levels:</p> <ul style="list-style-type: none"> <li>• The first level is the community level where LHSs of LHW program in responsible for supervision of LHW activities.</li> <li>• The next level is the BHU/RHC; unfortunately, MO I/C does not participate in supervision and monitoring of health care activities in his/her catchment area.</li> <li>• The Tehsil is the next tier. The DDHO responsible for supervision and monitoring of health facility activities in tehsil or sub-district. The DDHO has no role in M&amp;E of national programs.</li> <li>• The fourth level is the DOH, who is responsible for the overall supervision of rural health services, including other public health programs.</li> <li>• The final level is the EDOH, who is overall supervisor and in-charge of the District Health System. The DOH and MSs of DHQ/THQ hospitals are under control of the EDOH.</li> <li>• The national programs have their own supervisors and M&amp;E mechanisms.</li> <li>• District governments have also established various monitoring committees, but somehow these are ineffective.</li> <li>• DGHS and Secretary Health/MOH are the provincial supervisory tier. While tall and in-built, the M&amp;E system is probably the most ineffective M&amp;E system and responsible for health sector's inefficiencies.</li> </ul>	<p>A monitoring system independent of the DHD is the essence of the project.</p> <p>a) The PMU is responsible for monitoring and supervision as well as the collection of data. The District Program Manager (DPM) visits at least 60 BHUs in a month.</p> <p>b) The assistant project director makes a similar number of visits to BHUs. During a visit the doctor and the staff are motivated, the patients are asked about the working of the BHU, all records and stocks are inspected.</p>	<p>NCHD ensures M&amp;E activities through DHD and its own staff as follow:</p> <ul style="list-style-type: none"> <li>• Each LHS monitors activities of each LHW twice every month. LHS visits 10 households to assess the status of health education activities and to verify LHW record. She submits her monitoring report to.</li> <li>• Each LHV visits 10 households per month. Visiting at least 10 households to asses LHS activities. She submits her monitoring report to HO.</li> <li>• Each HO visits field area at least five times per month. He/she also visits 10 households to assess LHV and LHS performance and report to EDOH.</li> <li>• EDOH monitors at least 20% of BHU every month.</li> <li>• DPM monitors at least 10 BHUs and 10 households per month.</li> <li>• District Project Supervisor visits at least 10 BHUs and 10 households every month. Submits monitoring report to the DPM who then forwards these reports to EDOH and PMU.</li> <li>• PMU Senior Program Manager visits at least three districts every month and interacts with district health authorities, monitors activities in the field, interacts with male community members and members of community forum. Submits monitoring report to the PMU, which then forwards the reports to respective EDOH, DPM, and Director Health Program NCHD.</li> <li>• PMU program coordinators monitor at least four districts every month.</li> <li>• Director Health Program NCHD monitors at least one district every month. Submits report to all for comments.</li> </ul>
<b>Quality of Care</b>		
<b>District Health Planning</b>		
<p>DHD does not prepare formal district health plans, either annual or long term.</p> <p>a) Activity-based operational plans are developed</p> <p>b) National programs prepare quarterly and sometimes monthly operational plans</p>	<p>No formal district health planning</p> <p>a) Only operational plans are made by provincial and district support units</p>	<p>No formal District Health Planning or preparation of District Health Plan</p>

<b>Resource Allocation-Sources and Yardsticks</b>		
Budget is provided by district government, received as grant in aid from provincial government  a) Allocations are on historical basis b) No of beds, staff strength, and health facilities used as yardstick c) Budget for capital development schemes is also provided by the district and provincial governments	Budget is provided by the district and provincial government: a) Earmarked budget pertaining to contracted BHUs, which also includes filled or unfilled vacancies b) Additional budget from provincial government for PRSP program units	Budget is provided by federal and provincial governments.
<b>Service Packages – Preventive vs. Curative</b>		
DHD is responsible for provision of both preventive and curatives services to the population of the district  a) Facility-based and outreach preventive services b) Referral services c) Primary and secondary-level curative services	PRSP PHC models only deliver curative services through contracted BHUs and have no responsibility for preventive outreach services.  PRSP provides selected curative services usually pertaining to treatment of minor ailments.	NCHD follows government routine service packages and no specific service package is prepared. School Health Program is an integral part of NCHD PHC model.
<b>Coordination Mechanisms with other PHC Providers</b>		
DHD has strong coordination mechanism with NCHD PHC model—a very good example can be seen in Gujrat, while in other NCHD districts, the mechanism is still evolving.	There is no established coordination mechanism with other PHC models except with DHD through district governments.	Coordinate through DCO/district government and district health department Respective EDOHs (health and education) attends monthly meetings held in the office of DCO.
<b>Coordination and Linkages with National Programs</b>		
DHD is responsible for implementation of national programs, so  a) EDOH supervises national program staff b) EDOH has mandate to monitor their performance	PRSP PHC models have no linkages with national programs and a) These models do not participate in national preventive programs b) PRSP does not even participate in NID (National Immunization Day) polio eradication campaigns	NCHD supports LHW and EPI activities through EDOH. Recruit LHWs and provide salary support to fill the vacancies
<b>Coordination and Linkages with District Government</b>		
DHD is under the direct control of district government.  a) EDOH is responsible to ensure coordination among various functionaries of DHD b) DHD coordinates with other district departments through DCO, who chairs monthly review and coordination meetings c) DCO initiates Annual Confidential Report (ACR) of EDOH, which is countersigned by District Nazim	Agreement with district governments for management contracts. Main features:  a) Protection of the terms of employment of BHU staff/ security b) Continued implementation of “National” and “Provincial” programs thru the BHUs c) Fullest discipline, responsibility, and transparency in the use of public resources, regular flow of financial information and statutory audit of funds d) Observance of budgetary limits of the DGH. Additional budgetary allocations to be considered where justified	This is the <b>STRONGEST</b> link and the main vehicle for NCHD’s PHC model success. In districts where this coordination is weak, NCHD is struggling. The coordination among NCHD-EDOH-district government is the strength of this model.

	<p>e) No liabilities to be left behind for the district government</p> <p>f) Due maintenance of buildings, equipment, furniture to be ensured</p> <p>g) Third-party evaluation of performance at the end of Year-I</p> <p>Continuance for the next four years to depend on the findings of the evaluation.</p>	
<b>Coordination and Linkages with Provincial Health Department</b>		
<p>Provincial Health Department (PHD) is the line manager for all the gazetted (Grade 17 and above) regular staff:</p> <p>a) EDOH is accountable to PHD for his/her performance</p> <p>b) EDOH reports DHD's performance to PHD during monthly or quarterly provincial meetings</p> <p>c) DHD refers to PHD for policy guidelines and other matters related to gazetted staff performance and disciplinary matters.</p>	<p>PRSP coordinates with PHD through quarterly and annual meetings.</p> <p>CMIPHC is fully supported by PHD and Health sector Reform Unit in Punjab.</p>	<p>NCHD has replicated its model in another 11 districts in Punjab through an approved PC-1.</p> <p>The coordination with PHD is ensured through DHD and federal-level coordination meetings.</p>
<b>Procurement and Supplies – Medicine, Equipment, Assets</b>		
<p>EDOH develops rate contract for district procurement or provincial rate contracts can be adopted.</p> <p>EDOH can purchase medicines up to Rs 0.6 million; any amount above this needs DCO approval.</p> <p>The DOH and MS purchase from their budget by following these rate contracts as follow;</p> <ul style="list-style-type: none"> <li>▪ Place order (for 75% of the total medicine budget) to the supplier based on the rate contract agreed by District Purchase Committee</li> <li>▪ Request sample testing by Drug Testing Laboratory (DRL) at provincial level</li> <li>▪ Payment to the supplier</li> </ul> <p>Purchase of 25% (10% in bulk and 15% on day-to-day requirement basis) of medicine through separate rate contract or utilizing EDOH rate contract.</p> <p><b>Equipment Procurement</b></p> <ul style="list-style-type: none"> <li>▪ PHD sets standard specification.</li> <li>▪ Equipment workshop provides "NO Objection Certificate" to district for purchase of equipment.</li> <li>▪ Prepare PC I and purchase of equipment, if provincial government decides to directly provide equipment to districts.</li> </ul>	<p>List of 93 essential medicines finalized in consultation with all MOs, the Resource Group, and the Health Department.</p> <p>a) Use of rate contracts of government of Punjab, DGHs, teaching hospitals.</p> <p>b) Rate contracts adopted by PSU communicated to the DSUs. Purchase by the DSUs. Use after DTL certification.</p> <p>c) 17 women-specific medicines provided to all WMOs.</p> <p>d) FP materials purchased from the Central Warehouse and provided free of cost.</p> <p><b>Classification of list of medicines</b></p> <p>a) List of 93 medicines/ items classified into three groups on the basis of their consumption/ utilization pattern:</p> <p><b>-Part-A</b> – most commonly used 25 medicines/ items</p> <ul style="list-style-type: none"> <li>-Procurement in bulk quantities</li> <li>-100% availability of these medicines to be ensured at all health facilities at all the times</li> </ul> <p><b>Part- B</b> – averagely used 49 medicines/ items</p> <ul style="list-style-type: none"> <li>-Procurement after careful examination of consumption pattern during the past 1-2 years</li> <li>-To be purchased in quantities that are likely to be consumed in one quarter</li> <li>-The consumption of these medicines will be strictly</li> </ul>	<p>No role in procurement and supplies for DHD.</p> <p>Purchases motorcycles and vehicles for program staff through its own federally provided budget.</p> <p>Mobilizes communities to meet the gaps at facility level. Ambulances, laboratory equipment have been provided by CCBs.</p>

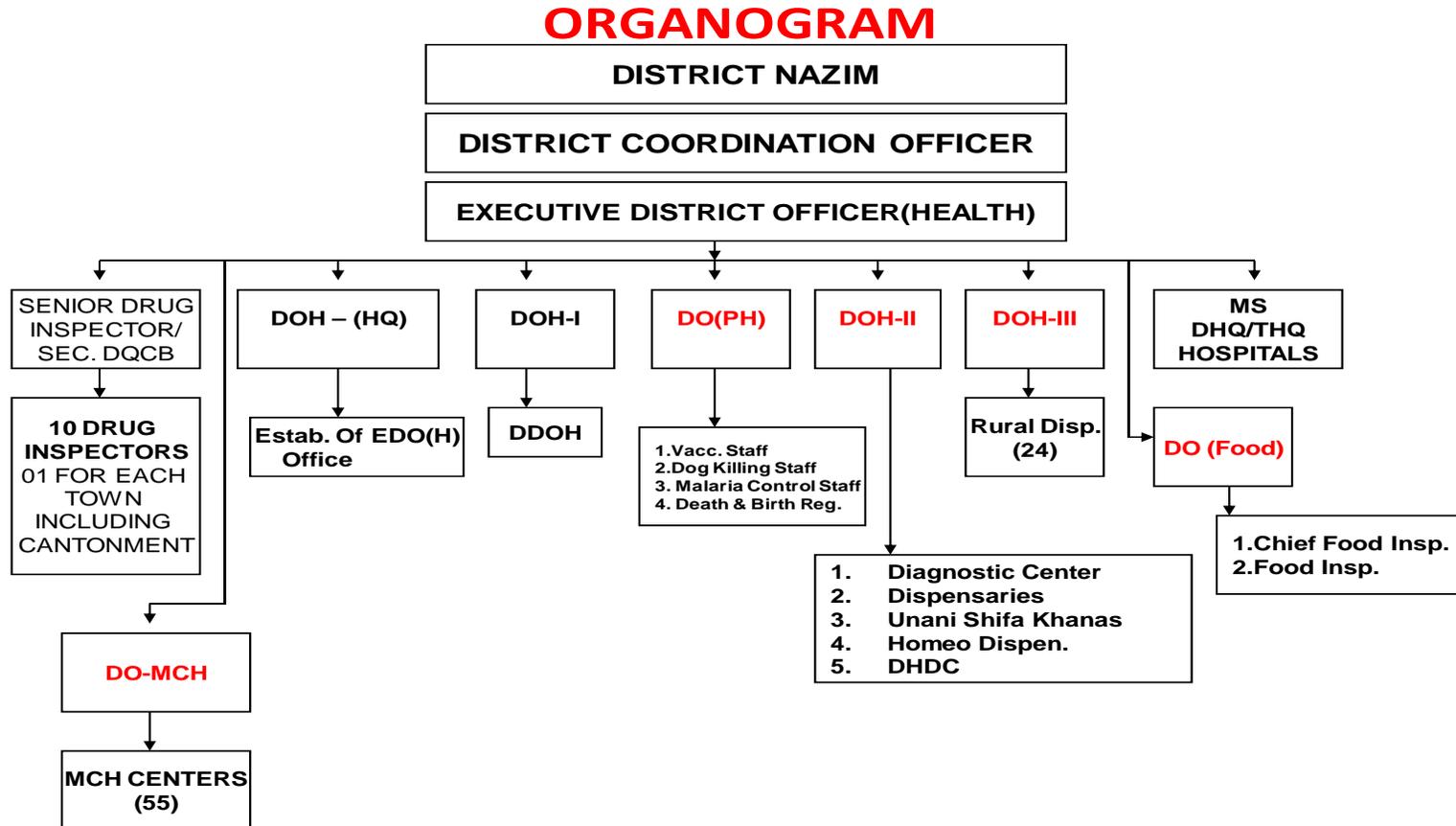
<ul style="list-style-type: none"> <li>▪ The DCO approves purchase of equipment worth more than Rs. 1 million.</li> <li>▪ The EDOH can purchase equipment worth Rs. 0.5-1 million through bids scrutinized by purchase committee. The DOH/MS can purchase minor equipment from their own budget.</li> </ul>	<p>monitored by DSUs.</p> <p><b>Part-C</b> – not commonly used 19 medicines/ items</p> <p>-DSUs will arrange these medicines/ items as per actual requirement.</p>	
<b>Performance Management and Accountability</b>		
<p>There is a cumbersome performance management and accountability system in public sector.</p> <p>a) Financial accountability is the most organized function</p> <p>b) ACRs are required for promotion but these are always considered as a formality to be fulfilled for promotion to higher grade.</p>	<p>a) In-built performance management system for medical officers I/C and other service providers</p> <p>b) Firing authority for poor performance</p> <p>c) Incentives for good performance</p>	<p>NCHD has their own internal organizational performance management and accountability system but for HOs and other staff performance, NCHD can only report to DHD for further necessary action</p>
<b>Referral Linkages with Hospitals</b>		
<p>There is a formal well-defined referral path, but it is very weak and ineffective.</p> <p>a) BHUs play a role as referral facility from community—LHW is responsible for referral of maternity and other patients.</p> <p>b) RHC is the second referral center and secondary hospitals are end referral centers in the district.</p> <p>c) In large urban cities, tertiary hospitals receive referrals from DHQ and THQ hospitals.</p> <p>d) Self-referral is quite a common phenomenon.</p>	<p>There are no referral linkages with secondary hospitals.</p> <p>a) Referral is not monitored or feedback received from referral facilities.</p> <p>b) Information is not collected on referrals.</p>	<p>There is a formal well-defined referral path, implemented with the support of communities, LHCS.</p> <p>a) BHUs play a role as referral facility from community—LHW is responsible for referral of maternity and other patients</p> <p>b) RHC is the second referral center and secondary hospitals are end referral centers in the district.</p> <p>c) Ambulances are available even at BHUs through CCBs and community manages the transport system.</p> <p>d) School Health Program has strong referral link with DHQ hospital</p> <p>e) Information is collected on referral from community to up to DHQ hospital</p>
<b>Community Participation, Mobilization, Mechanisms</b>		
<p>Though LGOs very clearly specify organization of CCBs and community-based monitoring committees, these are not functional and do not play any effective role in PHC services delivery</p> <p>a) No formal mechanism for participation in HF management.</p> <p>b) Community participation is usually taken as a threat by</p>	<p>Organize local communities as support groups that are the ultimate guarantor of long-term sustainability of services. The role of support groups is:</p> <p>-Provide community “ownership” of HF</p> <p>-Provide local feedback</p> <p>-Suggest improvements</p> <p>-Optimize access to prevention programs</p> <p>-Extend the appeal for promotive programs</p>	<p>Establishment of community governance structure and participation in decision making one of the core components of this PHC model.</p> <ul style="list-style-type: none"> <li>• One of the core interventions is sensitizing communities on actual health needs and mobilizing communities to support the public sector health initiatives</li> <li>• Bringing communities and health department together</li> <li>• Training communities in health service management</li> </ul>

<p>public sector managers.</p> <p>c) Very weak linkages/ coordination with village-based community organization.</p>	<p>-Organize community health sessions -Organize school camps at BHUs -Focus on hygiene/ sanitation/ nutrition</p> <p>a) Community mobilization and health education is an integral component of the project.</p> <p>b) To provide health education, all doctors focus on this activity on the second Monday, Tuesday, and Wednesday of each month. They talk to groups of patients, women, and children, giving them health tips.</p> <p>c) They visit schools to talk to children on the third Thursday, Friday, and Saturday of every month.</p>	<ul style="list-style-type: none"> <li>Establishment of representative community governance structure comprising communities (LHCs) and DHDs</li> <li>Mobilizing role of CCBs to participate in strengthening of health care services at community and BHU levels.</li> </ul>
<b>Human Resource Management and Development</b>		
<p>There are very good doctors in the country and they work wonders even under odd circumstances and in poor work conditions. Similarly, there is no dearth of good managers with excellent skills. However, there are organizational problems of placing the right persons in the right jobs. External influences mar the system and add to the lack of discipline.</p> <p>a) The appointments can be regular; ad hoc; contract; current charge basis; daily wages; or work charge. The selection for regular appointments to gazetted posts (i.e. BPS 16 and above), is made by the Punjab Public Service Commission, while the appointment is made by the Administrative Department i.e. the Secretary.</p> <p>b) DHD can make contract appointments up to grade 17.</p> <p>c) The promotion can be regular; officiating; current charge; and out-of-turn basis.</p> <p>d) The disciplinary action may take different shapes including: reporting; calling for explanation; holding preliminary or fact-finding inquiry; initiating departmental proceedings; announcing the penalty; acting as appellant authority; etc.</p> <p>e) The transfers may be for promotion, completion of tenure, or on administrative grounds.</p> <p>f) The leaves in the public sector are of different nature. These include: casual leave; earned leave; study leave; maternity leave; leave not due; leave without pay; extraordinary leave; and ex-Pakistan leave.</p> <p>g) Regarding training, the actions by the authority are: assessing and recommending the need for training in a particular area; decision for granting permission and upon</p>	<p>The PRSP has been given the authority that has been desired by the DSD since devolution. The PRSP can:</p> <p>a) Relocate staff from one BHU to another in the interest of improved service delivery</p> <p>b) Allocate and reallocate functions and responsibilities of the staff at the BHUs</p> <p>c) Offer additional benefits to the BHU staff based on assigned functions and performance</p> <p>d) Hire additional staff to work at the BHU under a contract with PRSP and without financial claims on the district and provincial government</p> <p>e) Arrange in-service training of staff at their own or through district government</p> <p>f) Introduce performance-based management and rewards</p>	<p>NCHD does not directly manage staff of DHD and thus exercises no hire-and-fire authority. The organization supports the DHD for:</p> <p>a) Filling vacancies of LHWs and LHSs in the district</p> <p>b) Providing salary/ stipend support for the appointed staff</p> <p>c) Contract appointment of LHV, at selected BHUs</p> <p>d) Mobility allowance for HOs for field activities (Rs 500/visit, total of 5 visits/month), plus Rs 400 for motorcycle petrol</p> <p>e) Incentives for HOs (Rs 2,500/month) and other staff for field visits</p> <p>f) Training needs assessment and arranging trainings for staff, community and district health managers</p>

<p>the length of period of training; and order for payment against the expenditure incurred in training.</p> <p>h) The ACR is an important administrative function. This involves initiation of report; countersigning of report; communication of adverse remarks; and appeal or authority for expunction of adverse remarks.</p> <p>i) The civil servants are remunerated for their services. These include the monthly salary traveling allowance daily allowance reimbursement of medical expenditures, etc. It is to be determined who, in the chain of command, will recommend and who will order payment for the services rendered or expenditure incurred by the incumbent.</p> <p>j) The reward for an extra-ordinary performance has been as a cash honorarium; out-of-turn promotion; or gifts, etc. The cash honorarium has been suspended for some time, on account of the economy measures imposed by the Finance Department. Similar is the case for out-of-turn promotion since this has an adverse effect over other incumbents.</p>		
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**Annex F.**

**Organizational linkages of City District Government with District Health Department**



## Annex G.

**Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of PHC Models**

	<b>PRSP PHC Models-RYK and CMIPHC Models</b>	<b>NCHD PHC Model-PIPHCMP Model</b>	<b>District Health Department/EDOH PHC Model</b>
<b>Strengths</b>	<ul style="list-style-type: none"> <li>a) PRSP is an autonomous government sponsored NGO with systematic organizational structure and governance</li> <li>b) Management contract for public-private partnerships formed under a legal agreement duly vetted by the concerned departments in the government of Punjab</li> <li>c) Good performance in providing curative health care to the population visiting BHUs</li> <li>d) Contract continuity dependent upon performance evaluation against indices to be agreed between PRSP and the Health Department</li> <li>e) Autonomy to allocate and re-allocate functions and responsibilities of the staff at the BHUs</li> <li>f) Offer additional benefits to the BHU staff based on assigned functions and performance</li> <li>g) Hire additional staff to work at the BHU under a contract with PRSP and without financial claims on the district and provincial government</li> <li>h) Propose to the district government increases, adjustments, or re-arrangements of the budgetary provisions for medicines, maintenance, salaries, utilities, and equipment</li> <li>i) Charge the actual cost (without making profit) associated with the performance of management functions at the BHUs</li> <li>j) Development of methodology for service delivery, staff capacity building, and financial incentives for the medical officer in-charge.</li> <li>k) Reporting, supervision, and monitoring,</li> </ul>	<ul style="list-style-type: none"> <li>a) NCHD is an autonomous government-sponsored body with systematic organizational structure and governance promulgated through an ordinance of the federal government.</li> <li>b) Community participation is the strongest component of this PHC model.</li> <li>c) School health services are the second most important component, which is currently missing both in PRSP and DHD PHC models.</li> <li>d) No role in public health facility management, so there is minimal resistance by DHD authorities.</li> <li>e) NCHD PHC model focuses both on curative and preventive service through community involvement.</li> <li>f) Establishment of Local Health Councils (LHCs) at each union council level attached with their area BHUs is one of the key strength to improve BHU management and service delivery.</li> <li>g) EDOH is the team leader and all interventions are delivered through DHD.</li> <li>h) NCHD has no provision or access to DHD budget and their program units are supported by federal allocations.</li> <li>i) NCHD provides salary support to national PHC program to hire LHWs and LHSs to fill the vacancies in the district.</li> <li>j) MO I/C has been designated as Health Officer (HO), who is responsible for catchment population in a union council</li> <li>k) Development of methodology for base line</li> </ul>	<ul style="list-style-type: none"> <li>a) DHD is a public sector organization working under the district government as specified in LGO 2001 with well-defined organizational structure, hierarchy, and governance</li> <li>b) DHD has legal mandate to provide primary and secondary health care services to the district population without any discrimination.</li> <li>c) EDOH Office is also responsible for management and delivery of hospital services through medical superintendents of DHQ/THQ hospitals</li> <li>d) DHD is responsible for implementation, supervision, and monitoring of national programs</li> <li>e) Availability of trained and experienced professional staff in all cadres to cater to the health care needs of the communities.</li> <li>f) Responsible for implementation of all vertical programs in the district</li> <li>g) Responsible for implementation of national and provincial health policies.</li> <li>h) DHD is the line department having legal support from district government and coordination with other line departments.</li> </ul>

	<p>supporting the requirements of district government HMIS and the requirements of private partner</p> <p>l) Timely availability of financial resources and flexibility in reorganizing the budgetary allocations</p>	<p>census, community health needs assessment, strengthening and re-structuring of BHUs, service delivery, staff capacity building and financial incentives for the HOs in-charge</p> <p>l) Provision of motor cycles to HO for regular supervision and M&amp;E activities.</p> <p>m) Coordination with education, water and sanitation departments through DCO and respective EDOHs is mean to deliver their interventions.</p>	
<b>Weaknesses</b>	<p>a) Services to be performed under the contract not specified in detail but covered by an overriding clause</p> <p>b) Performance indicators not spelled upfront but to be determined at the time of first evaluation after one year of working.</p> <p>c) No financial incentives available for the junior staff (LHVs, dispensers, medical technicians) at the BHUs.</p> <p>d) QOC standards have not been spelled out and therefore no mechanism to access knowledge and skills of service providers and ensuring basic QOC standards.</p>	<p>a) In districts, where DCO, EDOH and NCHD program unit has weak coordination, NCHD is not very effective.</p> <p>b) Except in Gujrat, NCHD lacks political and administrative support, and therefore struggling to reduce resistance from DHD.</p> <p>c) No financial incentives available for the junior staff (LHVs, dispensers, medical technicians) at the BHUs.</p> <p>d) QOC standards have not been spelled out and therefore no mechanism to access knowledge and skills of service providers and ensuring basic QOC standards.</p>	<p>a) DHD is still a large management unit with blurred lines of authority and accountability.</p> <p>b) Performance management systems are almost non-existent</p> <p>c) Lack of clarity of roles, responsibilities, and authority linkages of devolved district health system</p> <p>d) Poor managerial capacity and incentives for managing for results</p> <p>e) Non-meritocratic postings and transfers hinder performance of DHD</p> <p>f) Resource allocation on historical basis (number of beds, staff, facilities), which has no incentives for performance improvement and need-based resource allocation (population health status).</p> <p>g) DCO has checked and retained managerial powers and authority originally delegated to EDOH</p> <p>h) No formal DHMTs, because EDOH is not willing to delegate his/her decision-making authority to lower-level managers.</p> <p>i) Lack of culture of district health planning and use of information for evidence-based decision making</p> <p>j) DHD has no direct control over national programs in terms of resource allocation, performance accountability of vertical program staff, and program planning</p>

<b>Opportunities</b>	<ul style="list-style-type: none"> <li>a) Support from the highest tiers of the Punjab Government helps in quick decision making for the likewise contracts</li> </ul>	<ul style="list-style-type: none"> <li>a) Revitalization of community participation and recognizing the effective role of CCBs in strengthening health care service delivery and management</li> <li>b) Ownership of health facilities by the communities</li> <li>c) Addressing health needs and therefore need-based resource allocation</li> <li>d) Reducing long-term morbidity in school children through school health services</li> <li>e) Strengthening of referral systems through provision and management of community-based ambulances provided at BHUs</li> </ul>	<ul style="list-style-type: none"> <li>a) Devolution of district health care system through LGO 2001 has clearly mandated that health is a district subject and province is only responsible for policy, strategic planning, M&amp;E, and provision of budgets as grant in aid</li> <li>b) Spirited implementation of LGO 2001 legal mandate can address the existing inefficiencies of district health system</li> <li>c) Coordination among various devolved departments was never so easy as it is now under district governments</li> <li>d) Enhancing inter-sectoral collaboration through district government provides another opportunity to strengthen one of the eight pillars of PHC.</li> <li>e) Mobilization of communities under CCBs to revitalize and seek community support to improve health care delivery and management</li> <li>f) Lessons learned and evidence of good practices by other PHC models could help to address management inefficiencies in public health sector</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>a) More focus on curative services and little on preventive health may hinder the achievement of objectives of PHC in the catchment population.</li> <li>b) Financial support from the provincial government budget for the district and provincial support units of PRSP is additional burden on the resources.</li> <li>c) Beyond the project tenure, the district governments may not be able to exercise the budget re-appropriation flexibility, which is being exercised by the PRSP</li> <li>d) Lack of clear exit strategy by PRSP has questioned the sustainability of intervention.</li> </ul>	<ul style="list-style-type: none"> <li>a) Continuous financial support from federal government budget for NCHD program staff and units</li> <li>b) Provincial ownership of NCHD program is weak and therefore threaten its sustainability</li> </ul>	<ul style="list-style-type: none"> <li>a) DHDs are demotivated by out-sourcing of BHUs management to PRSP, which only cater to curative services and leaving the most challenging component of preventive services to DHD—skimmed milk effect has created resistance and non-acceptance of PRSP intervention.</li> <li>b) EDOH are only left with implementation of national programs in PRSP PHC model districts and supervision of remaining rural and urban health facilities, which has further fragmented the system in the district</li> </ul>

## Annex H.

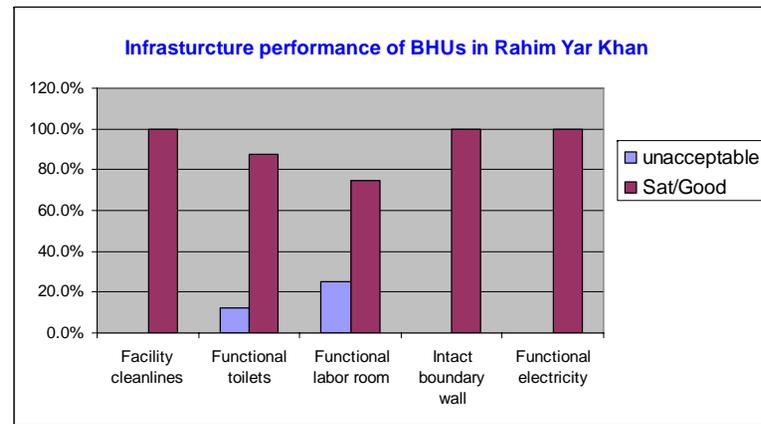
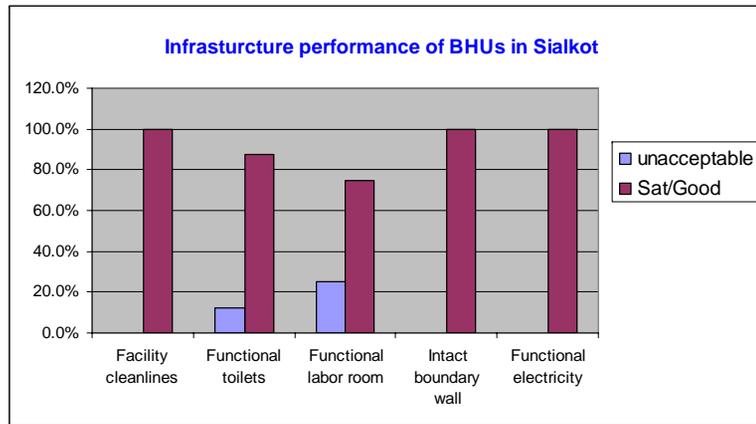
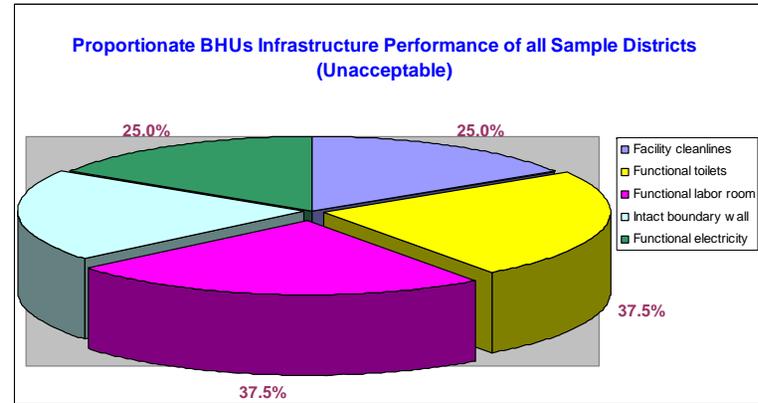
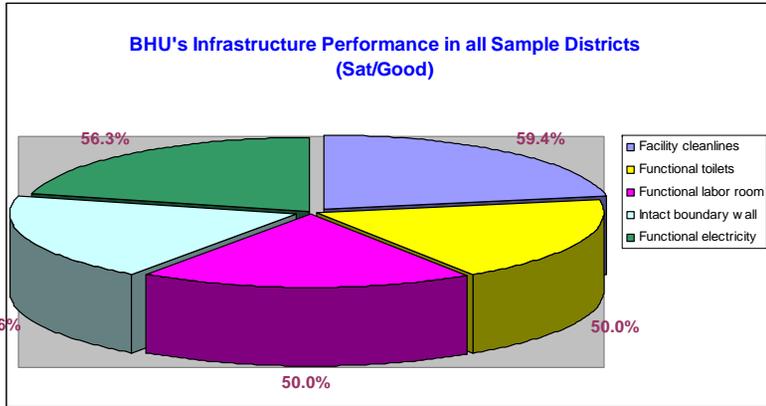
## Quality of BHUs Infrastructure Performance in Study Districts

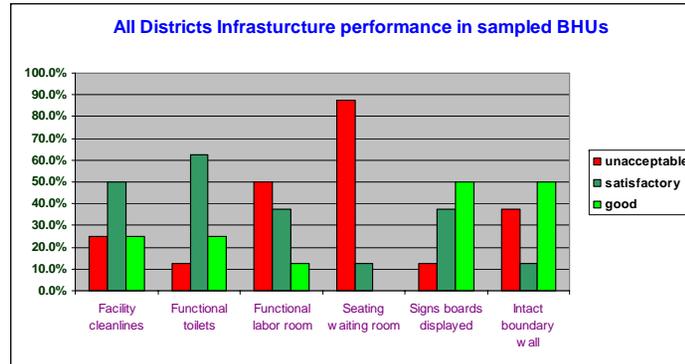
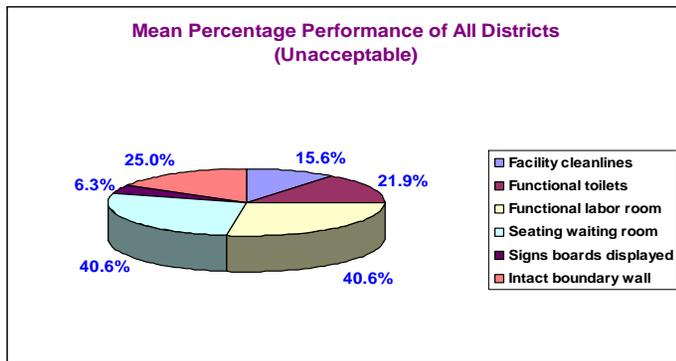
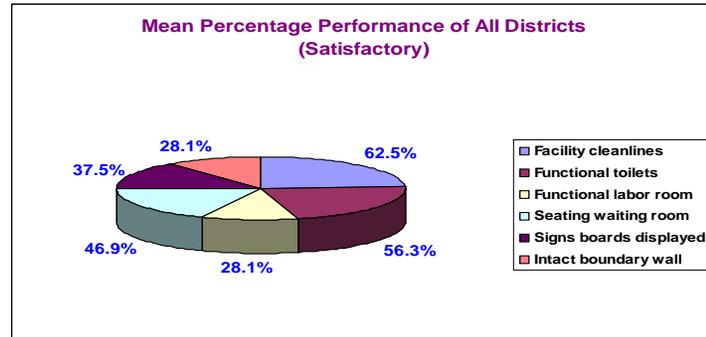
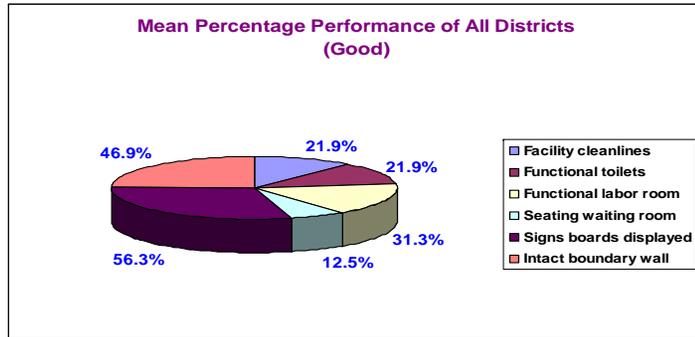
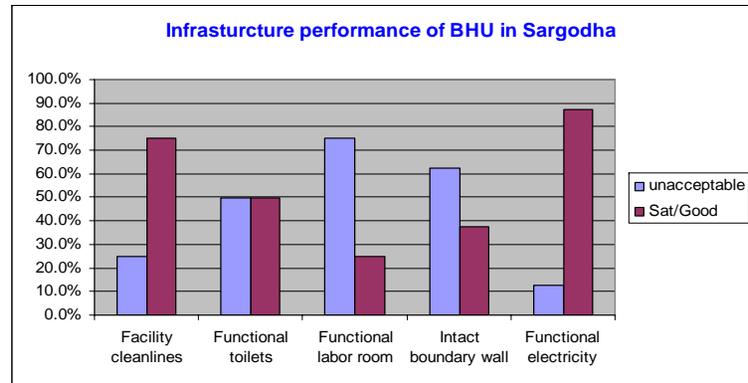
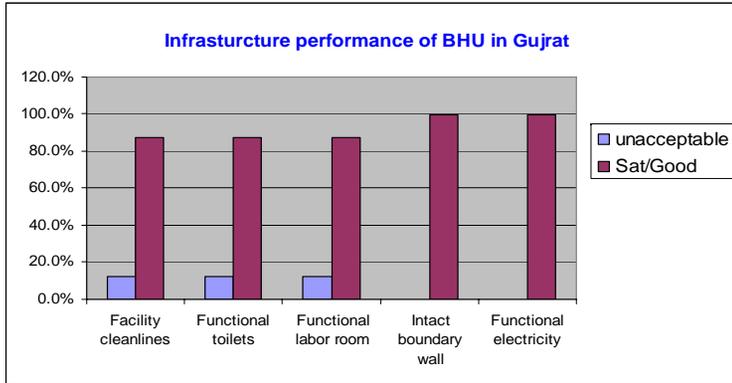
## Dichotomized Percentage Performance of BHUs—Unacceptable and Satisfactory/Good

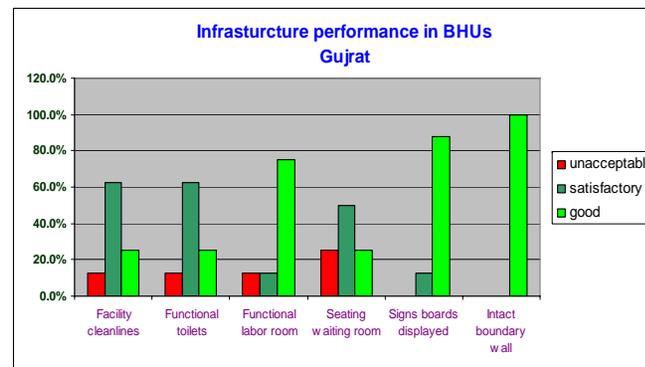
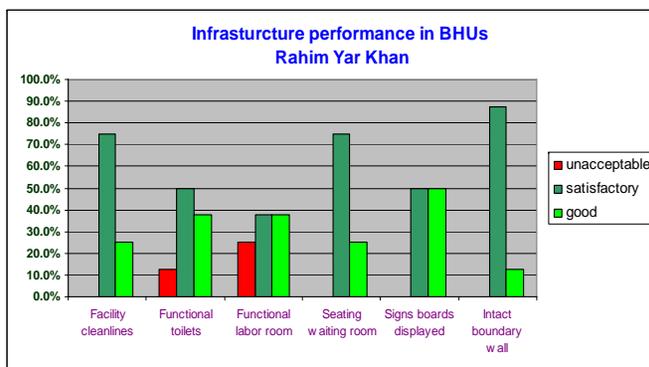
## Percentage Performance of BHUs—Unacceptable, Satisfactory and Good

INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
Facility cleanliness	25.0%	75.0%	12.5%	87.5%	0.0%	100.0%	25.0%	75.0%	25.0%	59.4%
Functional toilets	50.0%	50.0%	12.5%	87.5%	12.5%	87.5%	12.5%	87.5%	37.5%	50.0%
Functional labor room	75.0%	25.0%	12.5%	87.5%	25.0%	75.0%	50.0%	50.0%	37.5%	50.0%
Seating waiting room	50.0%	50.0%	25.0%	75.0%	0.0%	100.0%	87.5%	12.5%	15.6%	69.5%
Signs boards displayed	12.5%	87.5%	0.0%	100.0%	0.0%	100.0%	12.5%	87.5%	25.0%	56.3%
Intact boundary wall	62.5%	37.5%	0.0%	100.0%	0.0%	100.0%	37.5%	62.5%	31.3%	51.6%
Water supply	87.5%	12.5%	12.5%	87.5%	12.5%	87.5%	25.0%	75.0%	43.8%	45.3%
Functional telephone	100.0%	0.0%	12.5%	87.5%	50.0%	50.0%	12.5%	87.5%	59.4%	33.6%
Functional electricity	12.5%	87.5%	0.0%	100.0%	0.0%	100.0%	12.5%	87.5%	25.0%	56.3%
Water supply OPD	62.5%	37.5%	50.0%	50.0%	12.5%	87.5%	12.5%	87.5%	40.6%	57.0%

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Mean Performance of All Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
Facility cleanliness	25.0%	62.5%	12.5%	12.5%	62.5%	25.0%	0.0%	75.0%	25.0%	25.0%	50.0%	25.0%	15.6%	62.5%	21.9%
Functional toilets	50.0%	50.0%	0.0%	12.5%	62.5%	25.0%	12.5%	50.0%	37.5%	12.5%	62.5%	25.0%	21.9%	56.3%	21.9%
Functional labor room	75.0%	25.0%	0.0%	12.5%	12.5%	75.0%	25.0%	37.5%	37.5%	50.0%	37.5%	12.5%	40.6%	28.1%	31.3%
Seating waiting room	50.0%	50.0%	0.0%	25.0%	50.0%	25.0%	0.0%	75.0%	25.0%	87.5%	12.5%	0.0%	40.6%	46.9%	12.5%
Signs boards displayed	12.5%	50.0%	37.5%	0.0%	12.5%	87.5%	0.0%	50.0%	50.0%	12.5%	37.5%	50.0%	6.3%	37.5%	56.3%
Intact boundary wall	62.5%	12.5%	25.0%	0.0%	0.0%	100.0%	0.0%	87.5%	12.5%	37.5%	12.5%	50.0%	25.0%	28.1%	46.9%
Water supply	87.5%	0.0%	12.5%	12.5%	0.0%	87.5%	12.5%	12.5%	75.0%	25.0%	12.5%	62.5%	34.4%	6.3%	59.4%
Functional telephone	100.0%	0.0%	0.0%	12.5%	0.0%	87.5%	50.0%	50.0%	0.0%	12.5%	50.0%	37.5%	43.8%	25.0%	31.3%
Functional electricity	12.5%	12.5%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	12.5%	25.0%	62.5%	6.3%	9.4%	84.4%
Water supply OPD	62.5%	12.5%	25.0%	50.0%	12.5%	37.5%	12.5%	0.0%	87.5%	12.5%	12.5%	75.0%	34.4%	9.4%	56.3%





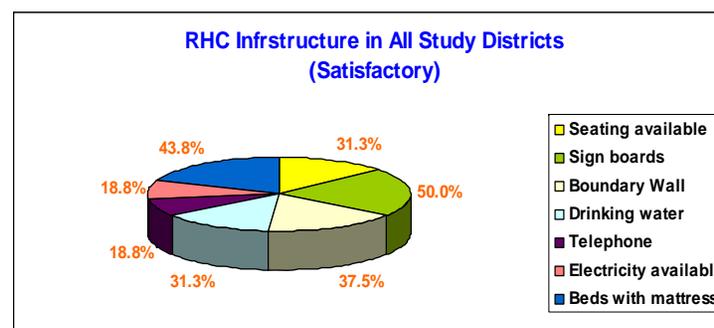
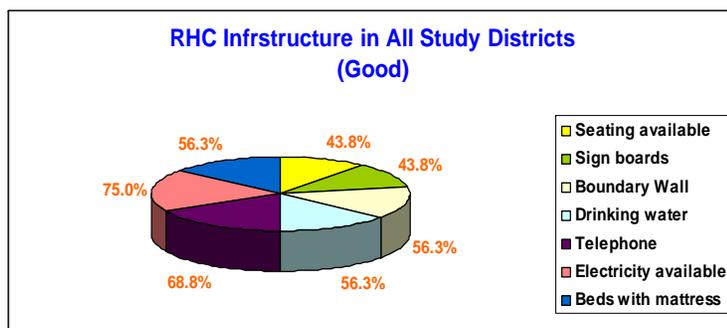


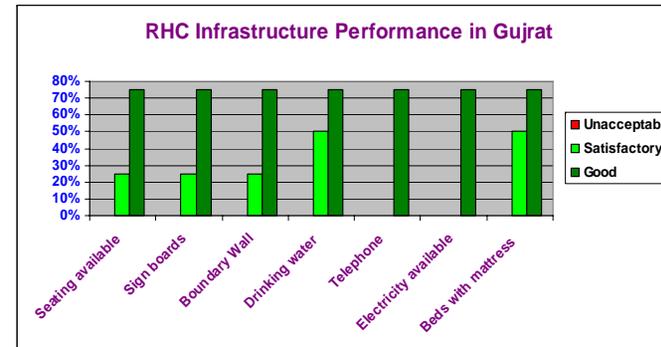
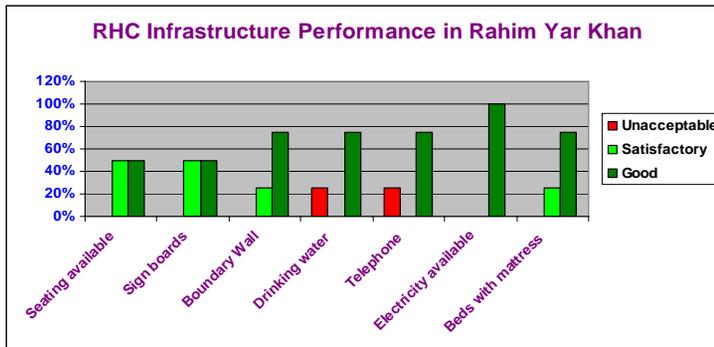
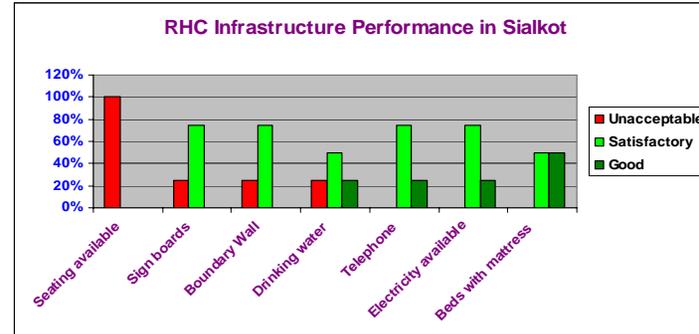
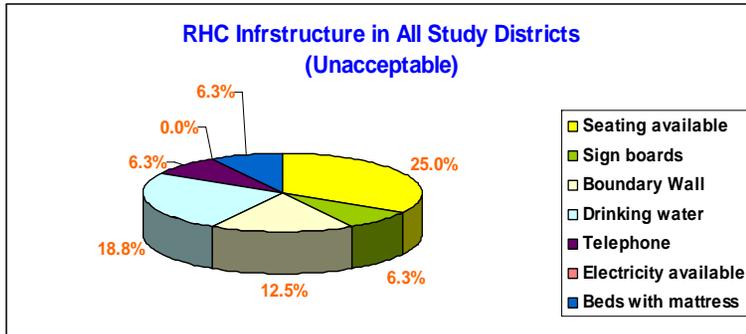
### Quality of RHCs Infrastrcture Performance in Study Districts

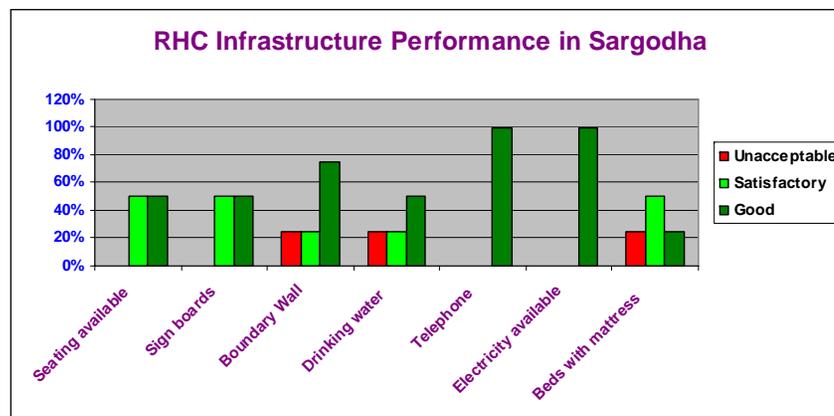
#### Percentage Performance of RHCs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha			Gujrat			Rahim Yar Khan			Sialkot			All Districts		
	Unacceptable	Satisfactory	Good	Unacceptable	Satisfactory	Good	Unacceptable	Satisfactory	Good	Unacceptable	Satisfactory	Good	Unacceptable	Satisfactory	Good
Facility cleanliness	25%	75%	0%	0%	75%	25%	25%	75%	0%	25%	75%	0%	18.8%	75.0%	6.3%
Functional toilets	50%	50%	0%	25%	25%	50%	0%	100%	0%	25%	75%	0%	25.0%	62.5%	12.5%
Functional labor room	25%	25%	50%	0%	50%	50%	0%	75%	25%	75%	50%	0%	25.0%	50.0%	31.3%
Seating available	0%	50%	50%	0%	25%	75%	0%	50%	50%	100%	0%	0%	25.0%	31.3%	43.8%
Sign boards	0%	50%	50%	0%	25%	75%	0%	50%	50%	25%	75%	0%	6.3%	50.0%	43.8%
Boundary wall	25%	25%	75%	0%	25%	75%	0%	25%	75%	25%	75%	0%	12.5%	37.5%	56.3%
Drinking water	25%	25%	50%	0%	50%	75%	25%	0%	75%	25%	50%	25%	18.8%	31.3%	56.3%
Telephone	0%	0%	100%	0%	0%	75%	25%	0%	75%	0%	75%	25%	6.3%	18.8%	68.8%
Electricity available	0%	0%	100%	0%	0%	75%	0%	0%	100%	0%	75%	25%	0.0%	18.8%	75.0%
Beds with mattress	25%	50%	25%	0%	50%	75%	0%	25%	75%	0%	50%	50%	6.3%	43.8%	56.3%
Functional nursery	75%	25%	0%	75%	0%	75%	75%	0%	25%	0%	0%	100%	56.3%	6.3%	50.0%
Functional ambulance	0%	25%	75%	0%	50%	75%	25%	25%	50%	0%	50%	50%	6.3%	37.5%	62.5%
Eclampsia room	100%	0%	0%	100%	0%	75%	50%	0%	50%	100%	0%	0%	87.5%	0.0%	31.3%

Generator	0%	75%	25%	25%	50%	75%	0%	0%	100%	75%	25%	0%	25.0%	37.5%	50.0%
24-hour water supply	0%	50%	50%	0%	0%	75%	0%	0%	100%	50%	25%	25%	12.5%	18.8%	62.5%
Heating facilities	50%	50%	0%	25%	75%	75%	25%	25%	50%	75%	25%	0%	43.8%	43.8%	31.3%
Labor room privacy	0%	0%	100%	0%	50%	75%	0%	25%	75%	25%	50%	25%	6.3%	31.3%	68.8%
Clean dustbins	25%	75%	0%	25%	75%	75%	25%	75%	0%	75%	25%	0%	37.5%	62.5%	18.8%
Geyser facility	100%	0%	0%	75%	25%	75%	100%	0%	0%	100%	0%	0%	93.8%	6.3%	18.8%
Enough lighting	0%	25%	75%	25%	0%	75%	0%	0%	100%	75%	0%	25%	25.0%	6.3%	68.8%







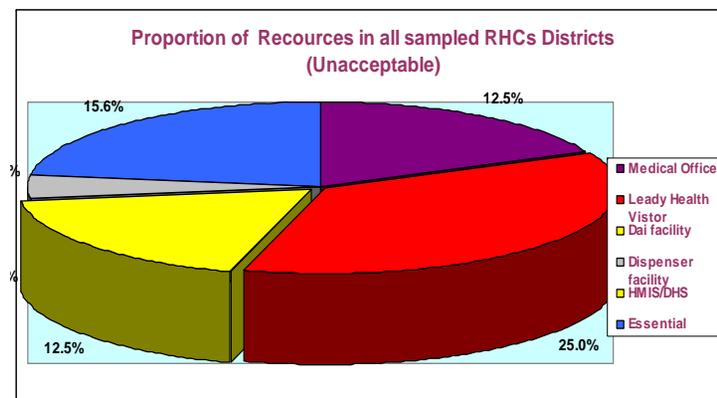
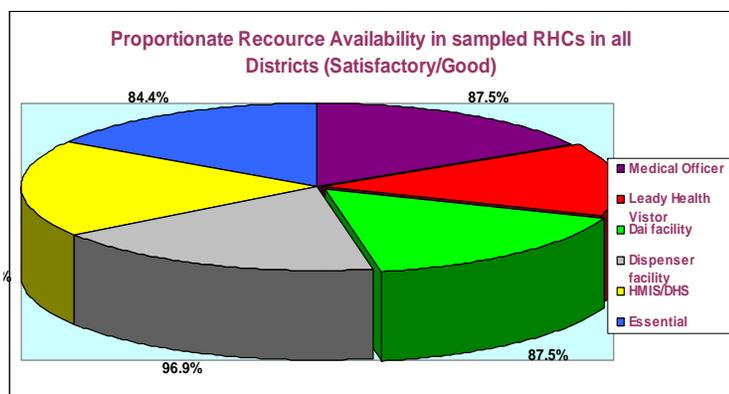
### Resource availability performance of BHUs In Study Districts

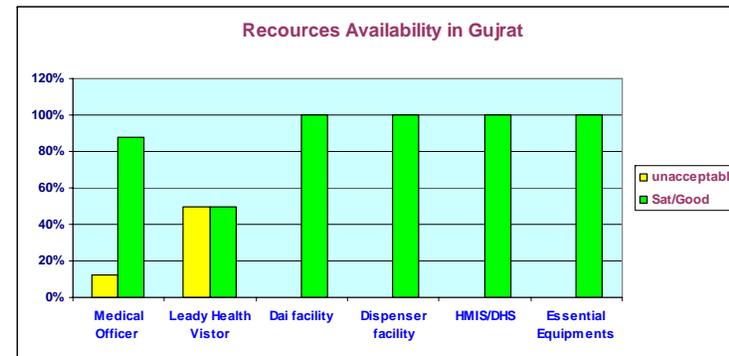
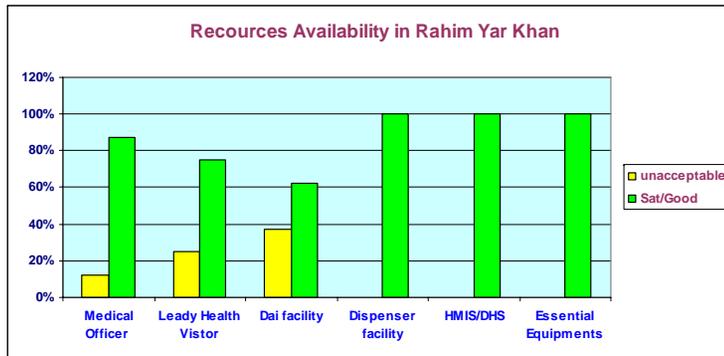
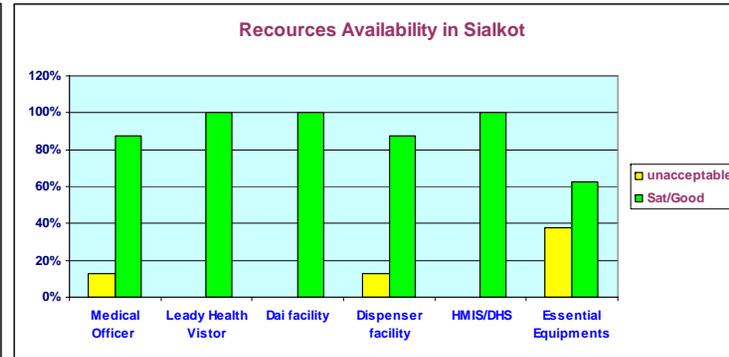
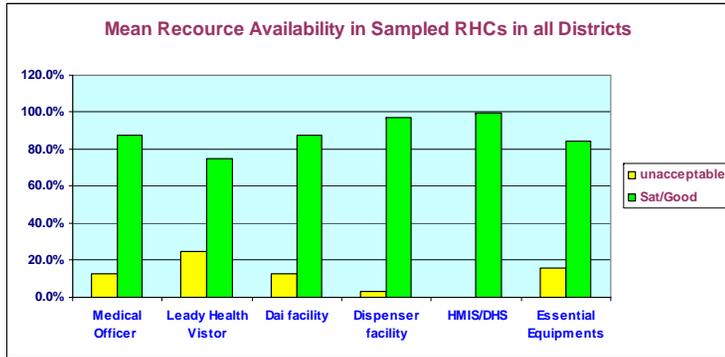
#### Dichotomized Percentage Performance of BHUs—Unacceptable and Satisfactory/Good

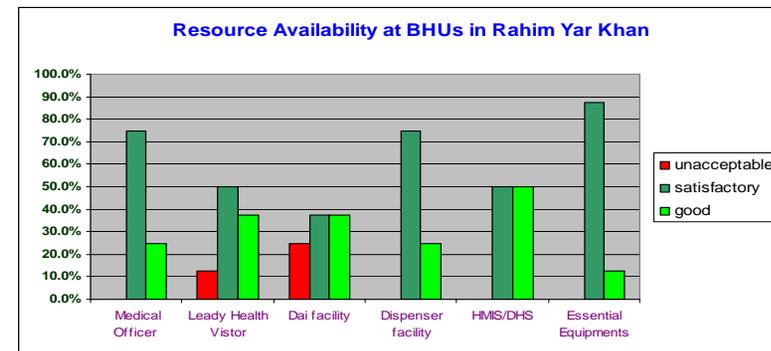
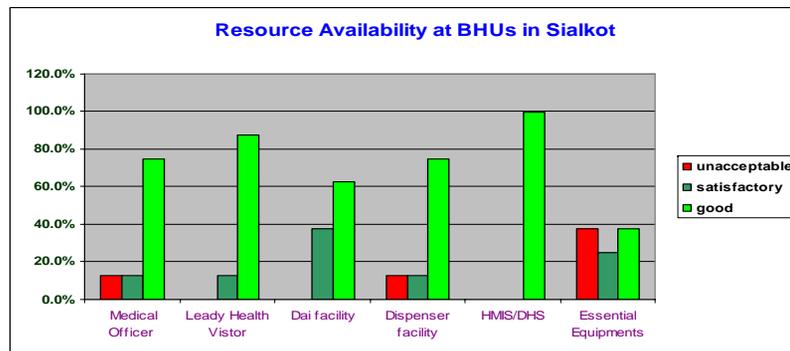
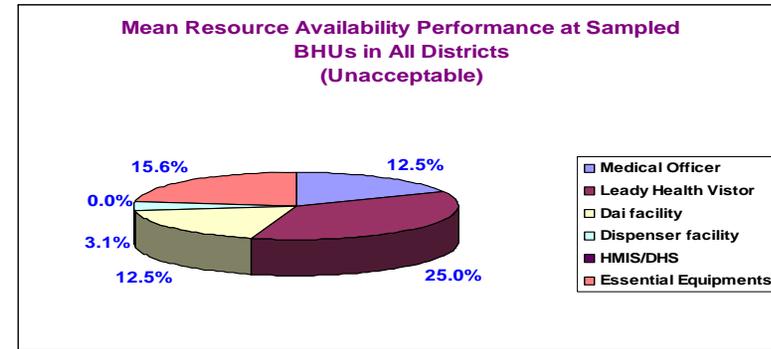
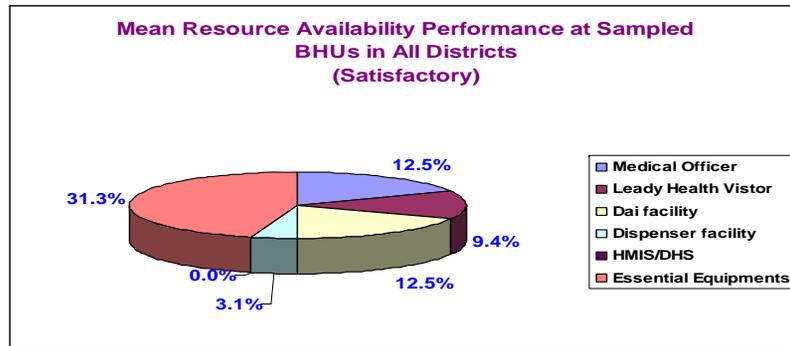
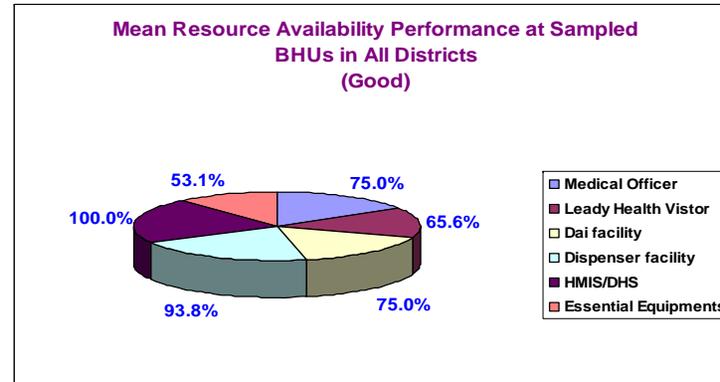
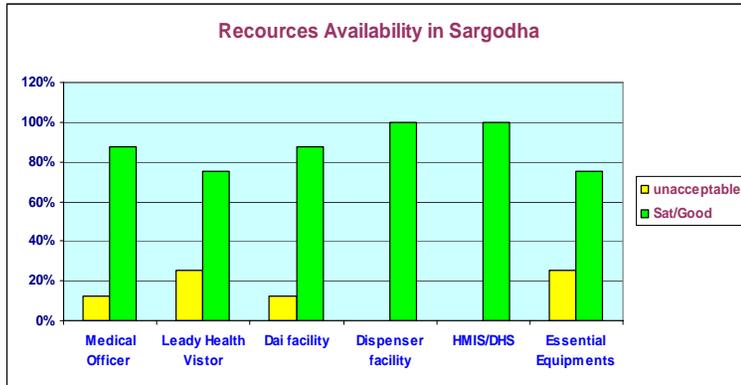
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Mean Resource Availability in all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
Medical officer	13%	88%	13%	88%	13%	88%	13%	88%	12.5%	87.5%
Lady health visitor	25%	75%	50%	50%	25%	75%	0%	100%	25.0%	75.0%
Dai in facility	13%	88%	0%	100%	38%	63%	0%	100%	12.5%	87.5%
Dispenser in facility	0%	100%	0%	100%	0%	100%	13%	88%	3.1%	96.9%
HMIS/DHS	0%	100%	0%	100%	0%	100%	0%	100%	0.0%	100.0%
Essential equipment	25%	75%	0%	100%	0%	100%	38%	63%	15.6%	84.4%
Essential equipment	25%	75%	0%	100%	0%	100%	50%	50%	18.8%	81.3%
Essential drugs stock	25%	75%	0%	100%	0%	100%	0%	100%	6.3%	93.8%
FP material	25%	75%	0%	100%	0%	100%	0%	100%	6.3%	93.8%
TT/EPI functional	13%	88%	0%	100%	0%	100%	0%	100%	3.1%	96.9%

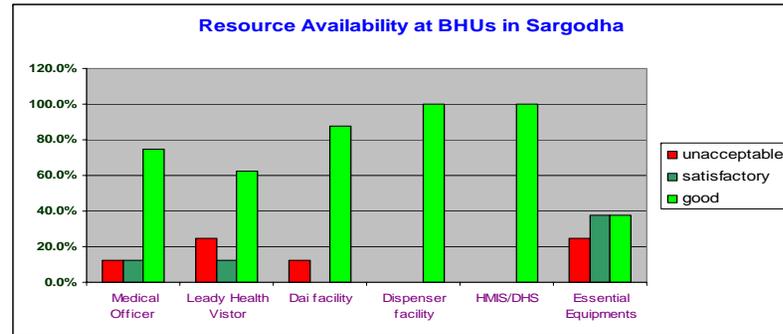
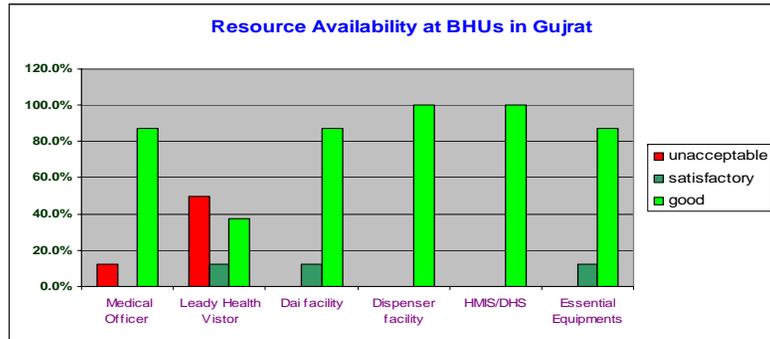
### Percentage Performance of BHUs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Mean Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
Medical officer	12.5%	12.5%	75.0%	12.5%	0.0%	87.5%	12.5%	25.0%	62.5%	12.5%	12.5%	75.0%	12.5%	12.5%	75.0%
Lady health visitor	25.0%	12.5%	62.5%	50.0%	12.5%	37.5%	25.0%	0.0%	75.0%	0.0%	12.5%	87.5%	25.0%	9.4%	65.6%
Dai facility	12.5%	0.0%	87.5%	0.0%	12.5%	87.5%	37.5%	0.0%	62.5%	0.0%	37.5%	62.5%	12.5%	12.5%	75.0%
Dispenser facility	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	12.5%	12.5%	75.0%	3.1%	3.1%	93.8%
HMIS/DHS	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Essential equipment	25.0%	37.5%	37.5%	0.0%	12.5%	87.5%	0.0%	50.0%	50.0%	37.5%	25.0%	37.5%	15.6%	31.3%	53.1%
Essential equipment	25.0%	62.5%	12.5%	0.0%	25.0%	75.0%	0.0%	50.0%	50.0%	50.0%	0.0%	50.0%	18.8%	34.4%	46.9%
Essential drugs stock	25.0%	0.0%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	12.5%	87.5%	6.3%	3.1%	90.6%
FP material	25.0%	25.0%	50.0%	0.0%	37.5%	62.5%	0.0%	25.0%	75.0%	0.0%	25.0%	75.0%	6.3%	28.1%	65.6%
TT/EPI functional	12.5%	50.0%	37.5%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	12.5%	87.5%	3.1%	15.6%	81.3%









### Resource availability performance of RHCs In Study Districts

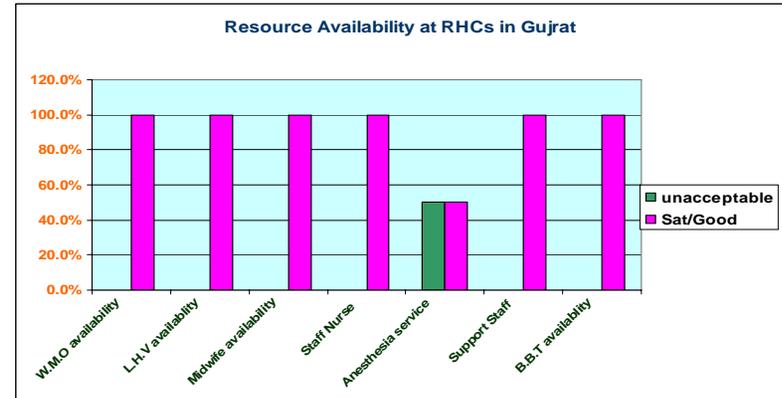
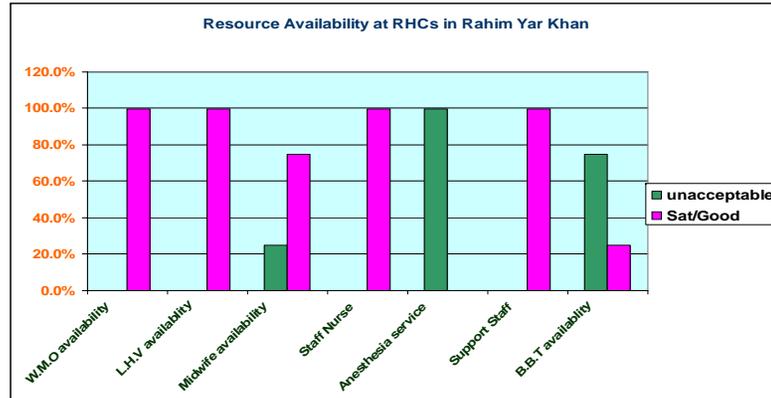
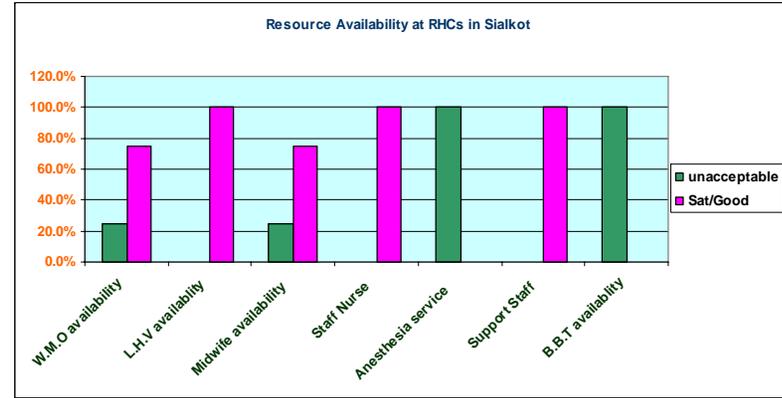
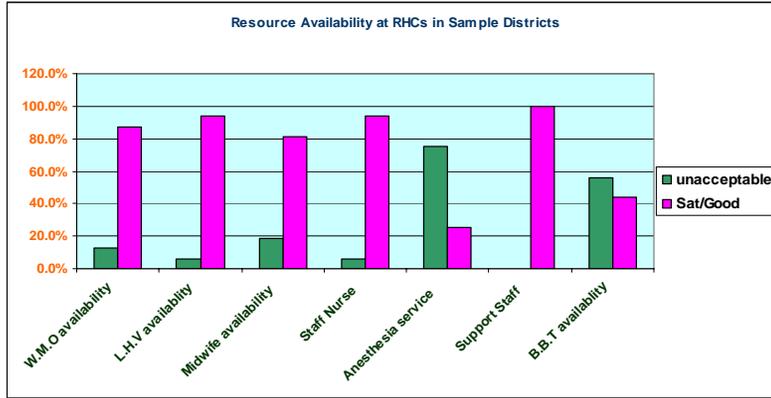
#### Dichotomized Percentage Performance of RHCs—Unacceptable and Satisfactory/Good

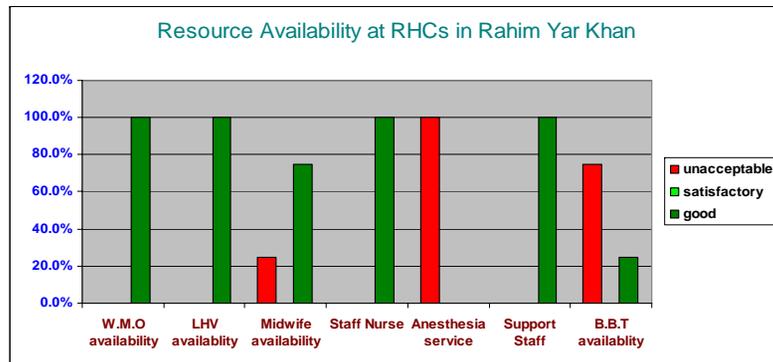
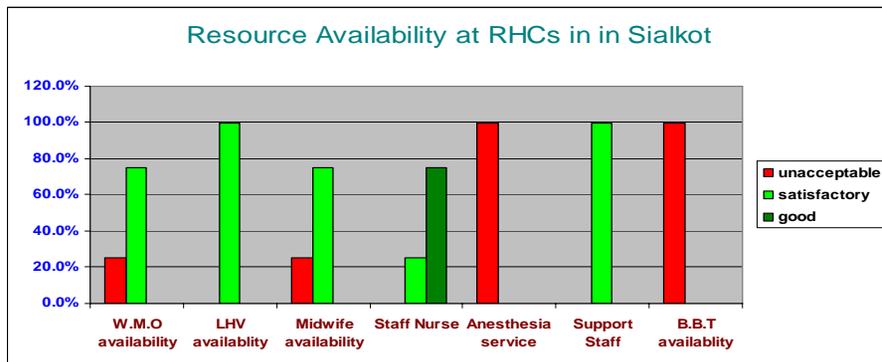
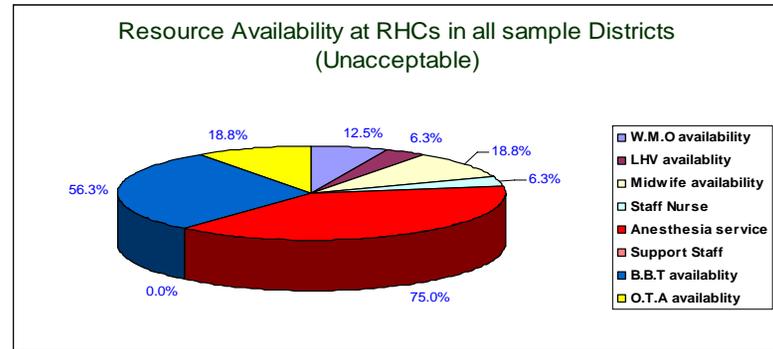
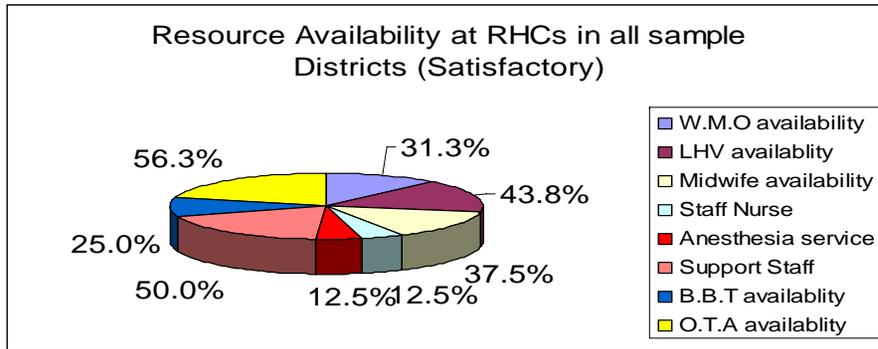
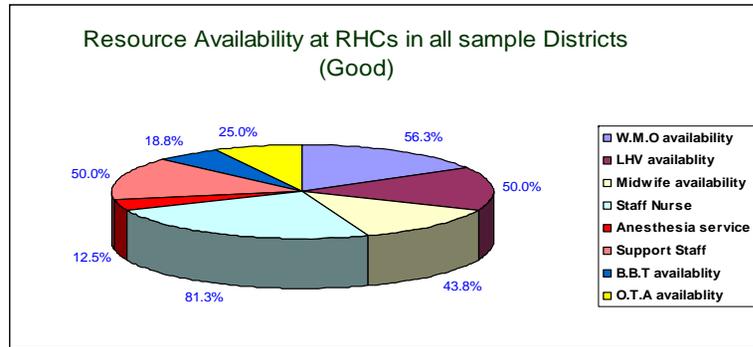
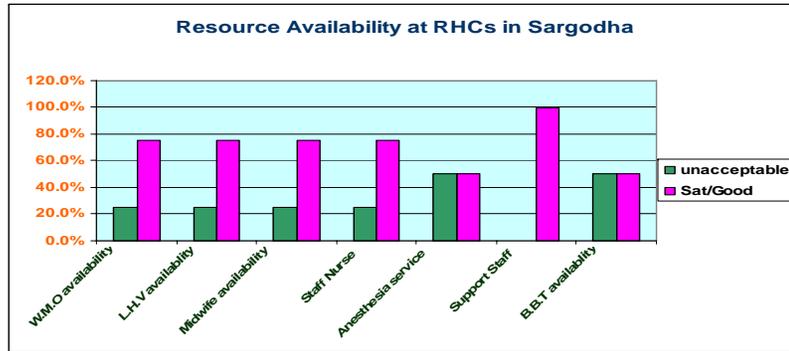
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
WMO availability	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	25.0%	75.0%	12.5%	87.5%
LHV availability	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	6.3%	93.8%
Midwife availability	25.0%	75.0%	0.0%	100.0%	25.0%	75.0%	25.0%	75.0%	18.8%	81.3%
Staff nurse	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	6.3%	93.8%
Anesthesia service	50.0%	50.0%	50.0%	50.0%	100.0%	0.0%	100.0%	0.0%	75.0%	25.0%
Support staff	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Blood Bank availability	50.0%	50.0%	0.0%	100.0%	75.0%	25.0%	100.0%	0.0%	56.3%	43.8%
OTA availability	25.0%	75.0%	0.0%	100.0%	50.0%	50.0%	0.0%	100.0%	18.8%	81.3%
Ambulance driver	0.0%	100.0%	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	6.3%	93.8%
Emergency medicine	25.0%	75.0%	25.0%	75.0%	0.0%	100.0%	75.0%	25.0%	31.3%	68.8%
Stretcher trolley	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	50.0%	50.0%	18.8%	81.3%
Oxygen availability	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Five essentials	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Ambu bag available	75.0%	25.0%	0.0%	100.0%	25.0%	75.0%	75.0%	25.0%	43.8%	56.3%
Baby cot availability	100.0%	0.0%	25.0%	75.0%	25.0%	75.0%	50.0%	50.0%	50.0%	50.0%
HMS/DHIS stationary	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Five essentials	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Essential drugs	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
FP material	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	6.3%	93.8%
TT/EPI functional	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%

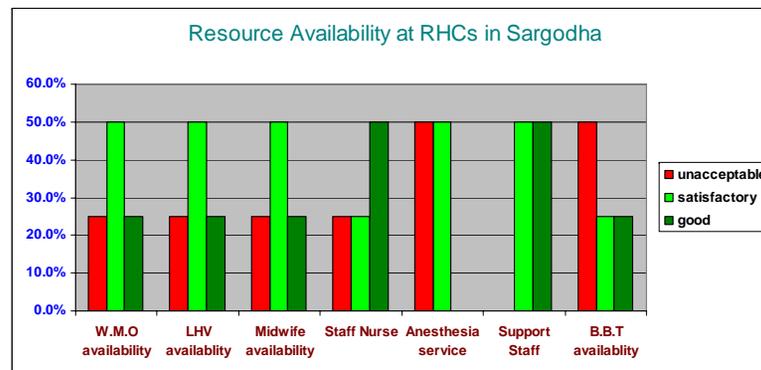
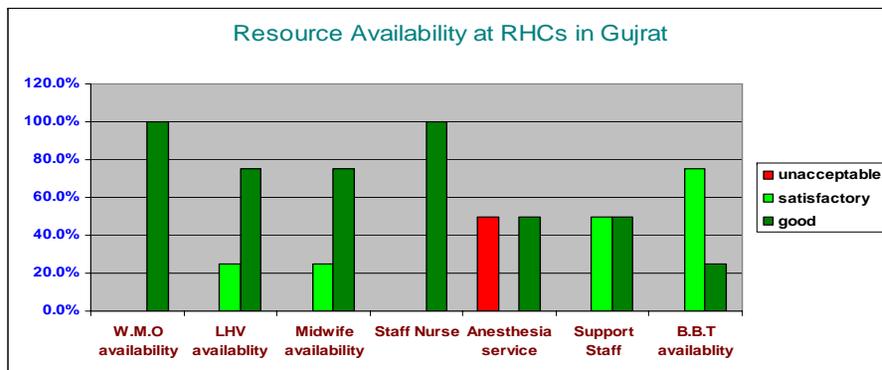
### Resource availability performance of RHCs In Study Districts

#### Percentage Performance of RHCs—Unacceptable, Satisfactory and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
WMO availability	25.0%	50.0%	25.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	25.0%	75.0%	0.0%	12.5%	31.3%	56.3%
LHV availability	25.0%	50.0%	25.0%	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	6.3%	43.8%	50.0%
Midwife availability	25.0%	50.0%	25.0%	0.0%	25.0%	75.0%	25.0%	0.0%	75.0%	25.0%	75.0%	0.0%	18.8%	37.5%	43.8%
Staff nurse	25.0%	25.0%	50.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	25.0%	75.0%	6.3%	12.5%	81.3%
Anesthesia service	50.0%	50.0%	0.0%	50.0%	0.0%	50.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	75.0%	12.5%	12.5%
Support staff	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	50.0%	50.0%
Blood Bank availability	50.0%	25.0%	25.0%	0.0%	75.0%	25.0%	75.0%	0.0%	25.0%	100.0%	0.0%	0.0%	56.3%	25.0%	18.8%
OTA availability	25.0%	75.0%	0.0%	0.0%	75.0%	25.0%	50.0%	0.0%	50.0%	0.0%	75.0%	25.0%	18.8%	56.3%	25.0%
Ambulance driver	0.0%	0.0%	100.0%	25.0%	0.0%	75.0%	0.0%	50.0%	50.0%	0.0%	75.0%	25.0%	6.3%	31.3%	62.5%
Emergency medicine	25.0%	25.0%	50.0%	25.0%	25.0%	50.0%	0.0%	0.0%	100.0%	75.0%	25.0%	0.0%	31.3%	18.8%	50.0%
Stretcher trolley	25.0%	25.0%	50.0%	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	50.0%	25.0%	25.0%	18.8%	18.8%	62.5%
Oxygen availability	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	75.0%	25.0%	0.0%	25.0%	75.0%
Five essential equipment available	0.0%	75.0%	25.0%	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	75.0%	25.0%	0.0%	43.8%	56.3%
Ambu bag availability	75.0%	25.0%	0.0%	0.0%	0.0%	100.0%	25.0%	0.0%	75.0%	75.0%	0.0%	25.0%	43.8%	6.3%	50.0%
Baby cot availability	100.0%	0.0%	0.0%	25.0%	25.0%	50.0%	25.0%	0.0%	75.0%	50.0%	50.0%	0.0%	50.0%	18.8%	31.3%
HMS/DHIS Stationery	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	25.0%	75.0%	0.0%	12.5%	87.5%
Five essential equipment functional	0.0%	75.0%	25.0%	0.0%	75.0%	25.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	87.5%	12.5%
Essential drugs	0.0%	75.0%	25.0%	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	50.0%	50.0%	0.0%	37.5%	62.5%
FP material	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	50.0%	50.0%	6.3%	56.3%	37.5%
Cold chain functional	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	50.0%	50.0%	0.0%	18.8%	81.3%







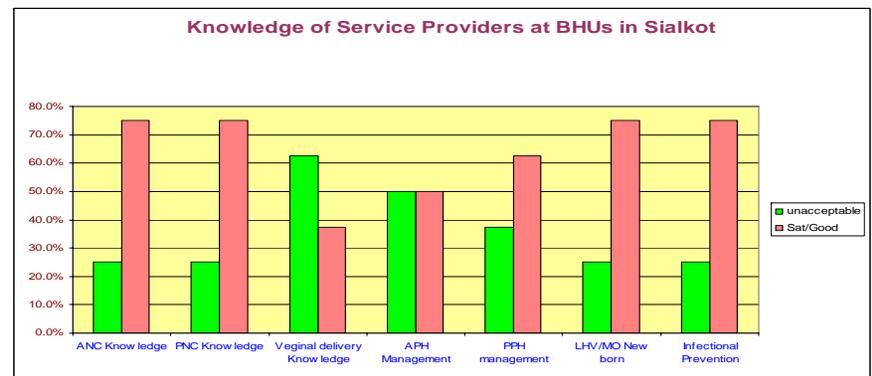
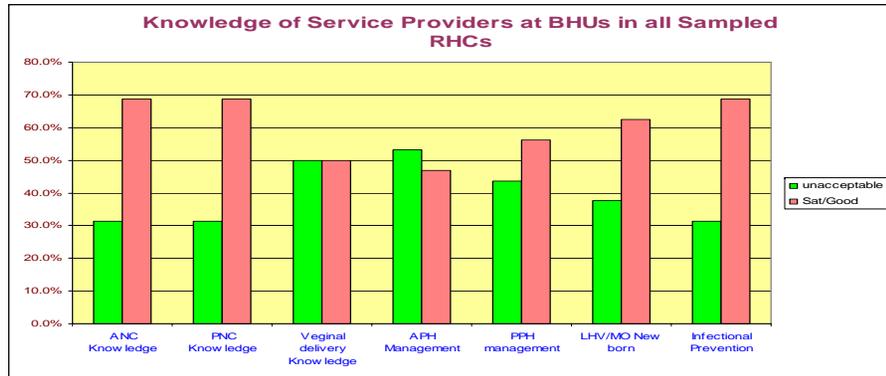
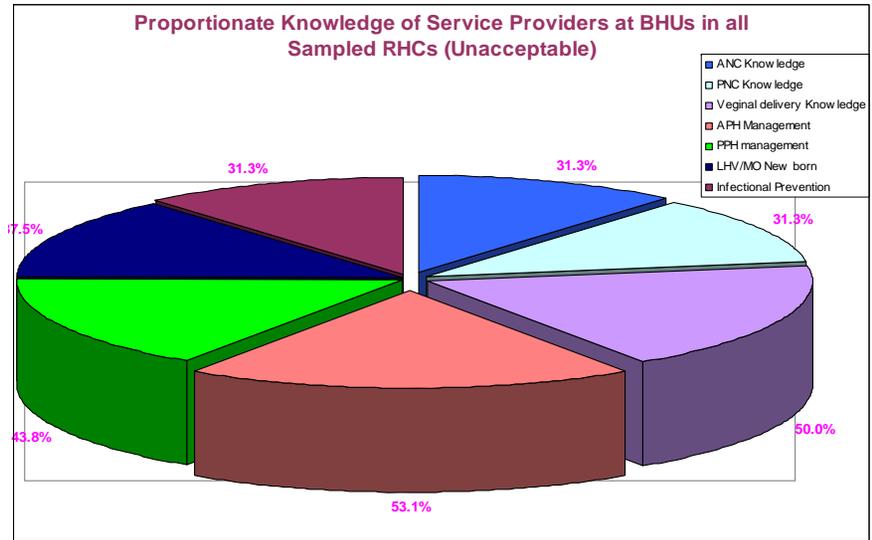
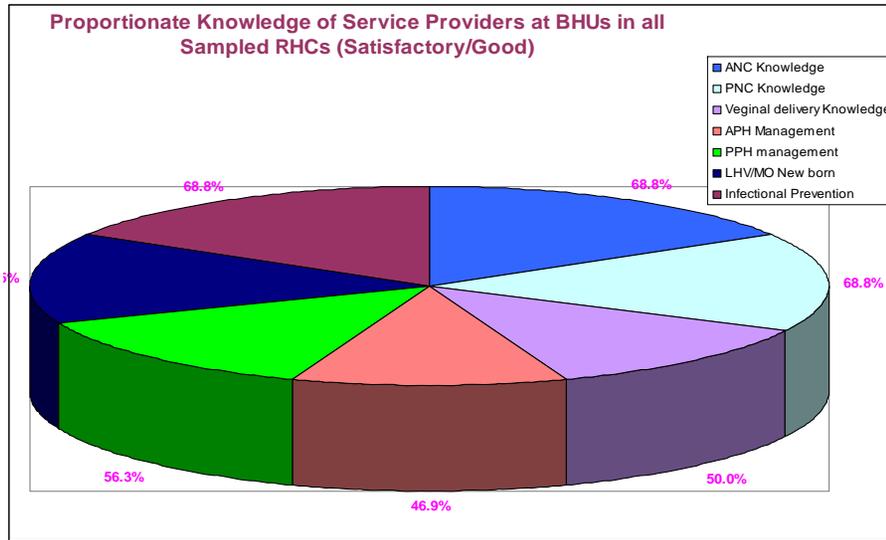
### Knowledge of service providers at BHUs In Study Districts

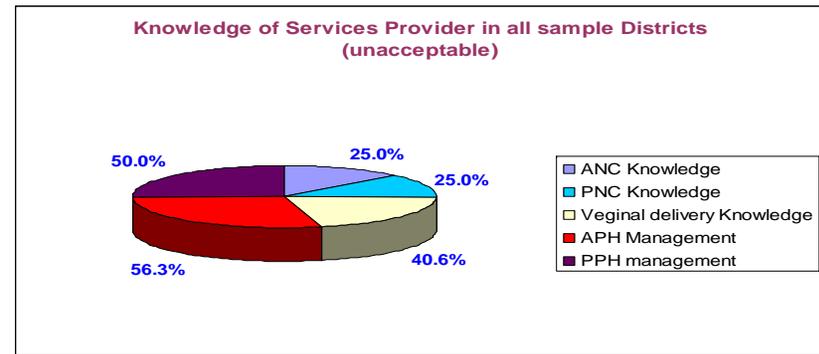
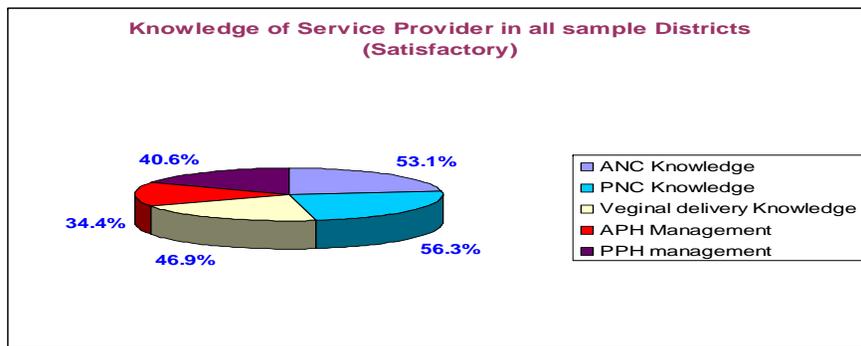
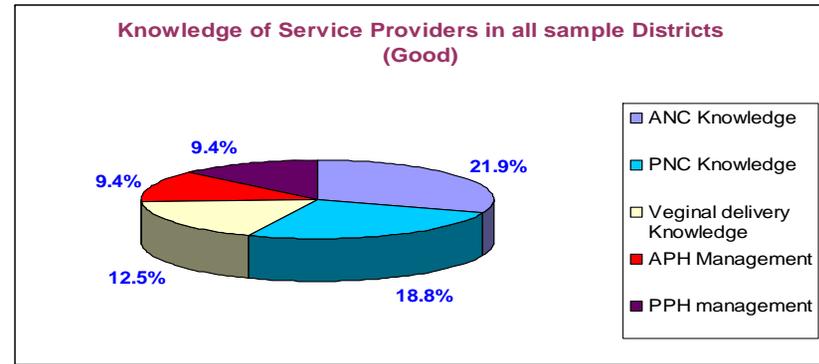
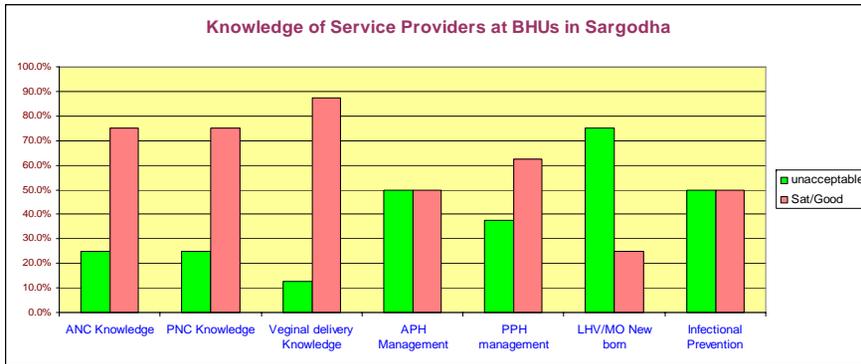
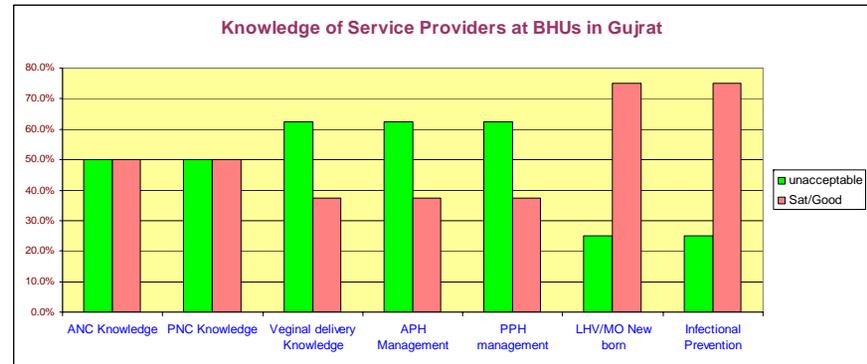
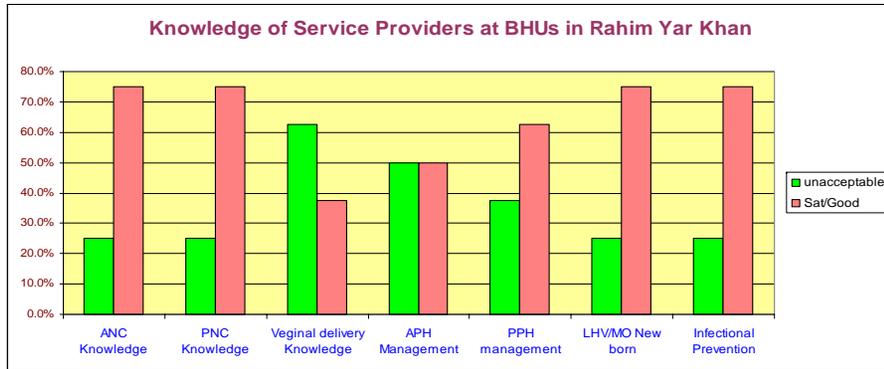
#### Dichotomized Percentage Performance of BHUs—Unacceptable and Satisfactory/Good

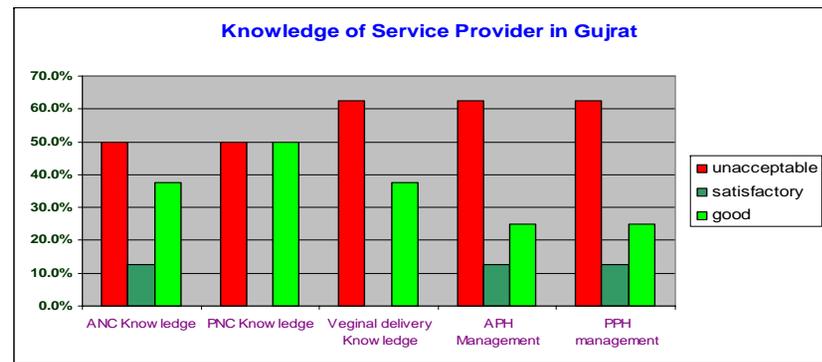
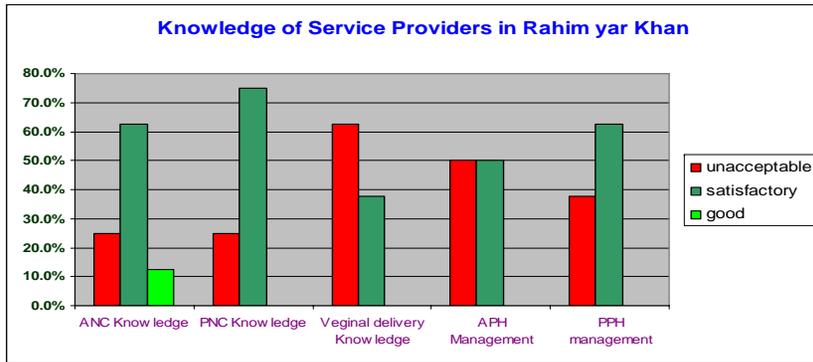
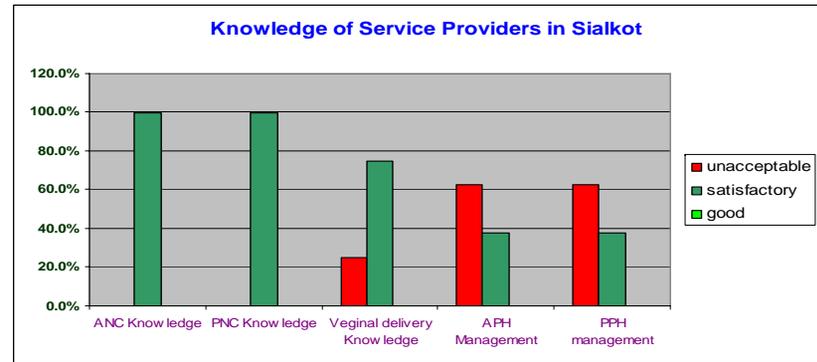
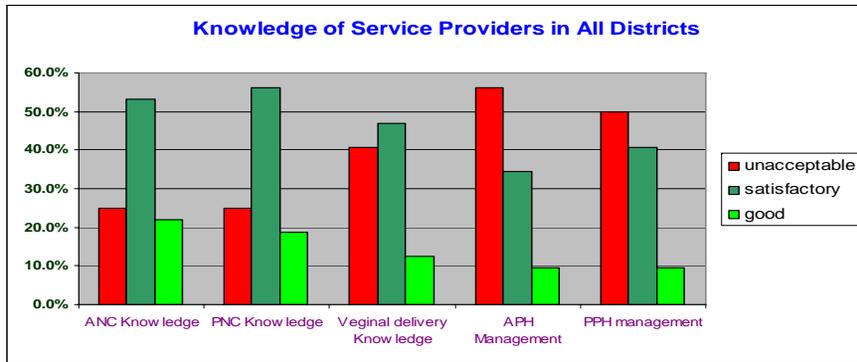
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
ANC knowledge	25.0%	75.0%	50.0%	50.0%	25.0%	75.0%	25.0%	75.0%	31.3%	68.8%
PNC knowledge	25.0%	75.0%	50.0%	50.0%	25.0%	75.0%	25.0%	75.0%	31.3%	68.8%
Vaginal delivery knowledge	12.5%	87.5%	62.5%	37.5%	62.5%	37.5%	62.5%	37.5%	50.0%	50.0%
APH management	50.0%	50.0%	62.5%	37.5%	50.0%	50.0%	50.0%	50.0%	53.1%	46.9%
PPH management	37.5%	62.5%	62.5%	37.5%	37.5%	62.5%	37.5%	62.5%	43.8%	56.3%
LHV/MO newborn	75.0%	25.0%	25.0%	75.0%	25.0%	75.0%	25.0%	75.0%	37.5%	62.5%
Infection prevention	50.0%	50.0%	25.0%	75.0%	25.0%	75.0%	25.0%	75.0%	31.3%	68.8%
Five complications of pregnancy	50.0%	50.0%	37.5%	62.5%	75.0%	25.0%	75.0%	25.0%	59.4%	40.6%
Drug store knowledge	50.0%	50.0%	12.5%	87.5%	25.0%	75.0%	25.0%	75.0%	28.1%	71.9%
IUD insertion	37.5%	62.5%	75.0%	25.0%	37.5%	62.5%	37.5%	62.5%	46.9%	53.1%

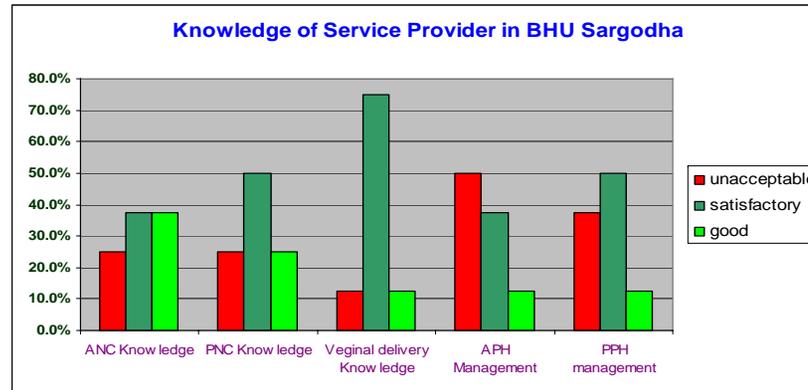
**Percentage Performance of BHUs—Unacceptable, Satisfactory, and Good**

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
ANC knowledge	25.0%	37.5%	37.5%	50.0%	12.5%	37.5%	25.0%	62.5%	12.5%	0.0%	100.0%	0.0%	25.0%	53.1%	21.9%
PNC knowledge	25.0%	50.0%	25.0%	50.0%	0.0%	50.0%	25.0%	75.0%	0.0%	0.0%	100.0%	0.0%	25.0%	56.3%	18.8%
Vaginal delivery knowledge	12.5%	75.0%	12.5%	62.5%	0.0%	37.5%	62.5%	37.5%	0.0%	25.0%	75.0%	0.0%	40.6%	46.9%	12.5%
APH management	50.0%	37.5%	12.5%	62.5%	12.5%	25.0%	50.0%	50.0%	0.0%	62.5%	37.5%	0.0%	56.3%	34.4%	9.4%
PPH management	37.5%	50.0%	12.5%	62.5%	12.5%	25.0%	37.5%	62.5%	0.0%	62.5%	37.5%	0.0%	50.0%	40.6%	9.4%
LHV/MO newborn	75.0%	25.0%	0.0%	25.0%	12.5%	62.5%	25.0%	62.5%	12.5%	50.0%	50.0%	0.0%	43.8%	37.5%	18.8%
Infection prevention	50.0%	50.0%	0.0%	25.0%	12.5%	62.5%	25.0%	62.5%	12.5%	25.0%	75.0%	0.0%	31.3%	50.0%	18.8%
Five complications of pregnancy	50.0%	37.5%	12.5%	37.5%	12.5%	50.0%	75.0%	12.5%	12.5%	50.0%	50.0%	0.0%	53.1%	28.1%	18.8%
Store keeper knowledge	50.0%	37.5%	12.5%	12.5%	25.0%	62.5%	25.0%	12.5%	62.5%	12.5%	50.0%	37.5%	25.0%	31.3%	43.8%
IUD insertion	37.5%	12.5%	50.0%	75.0%	0.0%	25.0%	37.5%	50.0%	12.5%	0.0%	87.5%	12.5%	37.5%	37.5%	25.0%









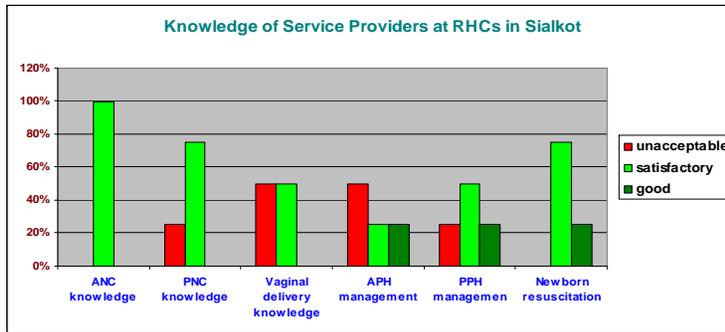
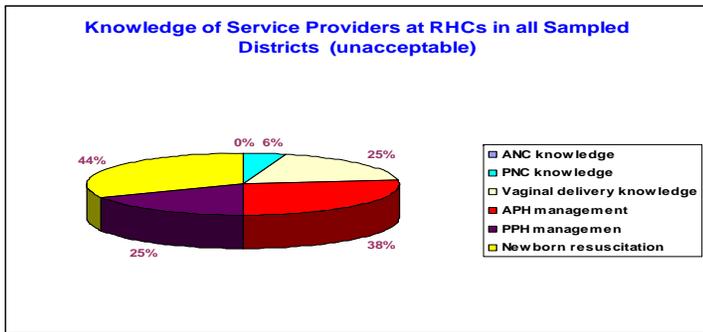
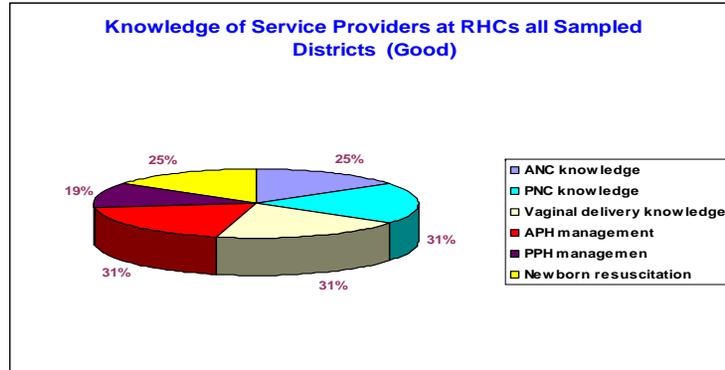
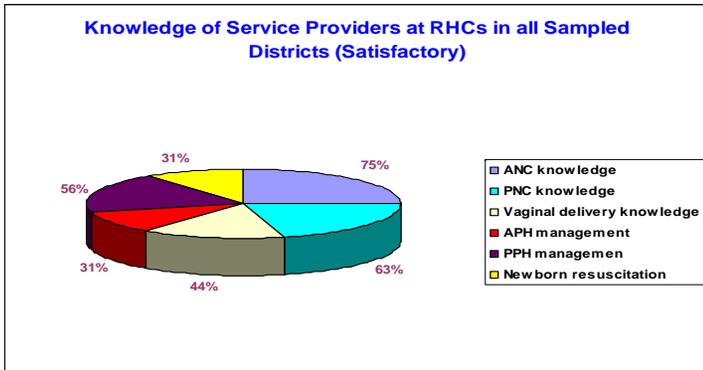
### Knowledge of service providers at RHCs in Study Districts

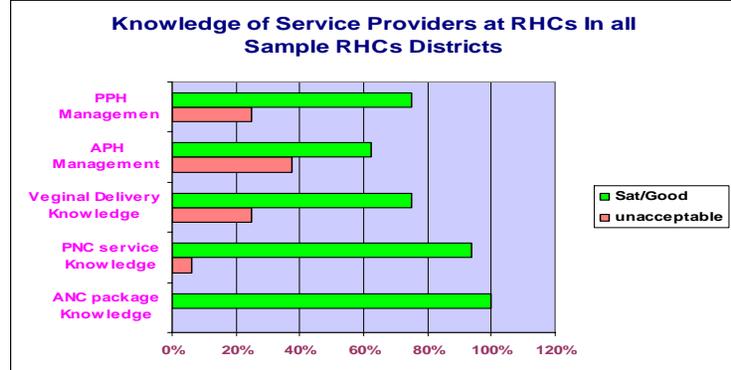
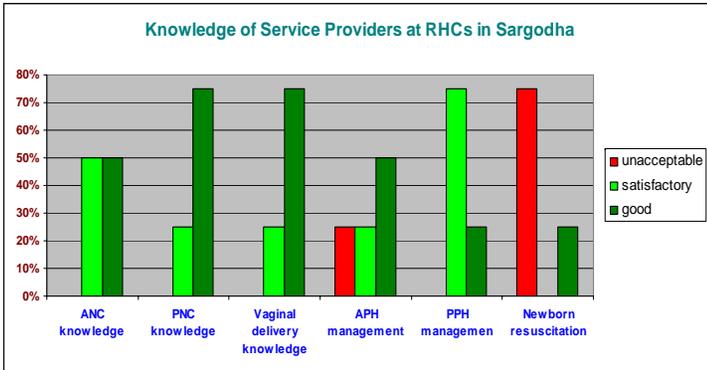
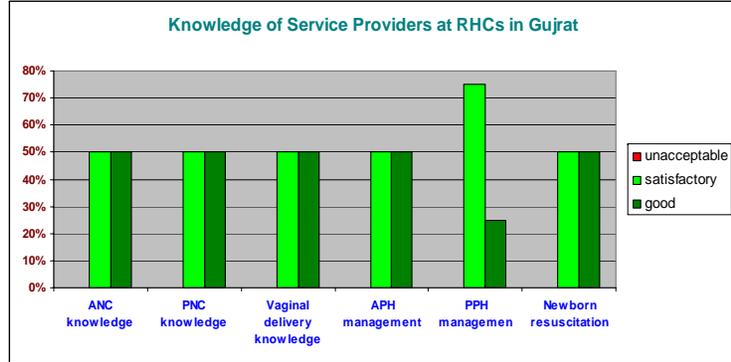
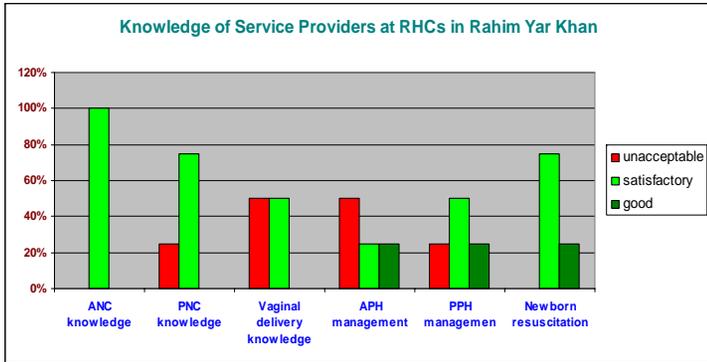
#### Dichotomized Percentage Performance of RHCs—Unacceptable and Satisfactory/Good

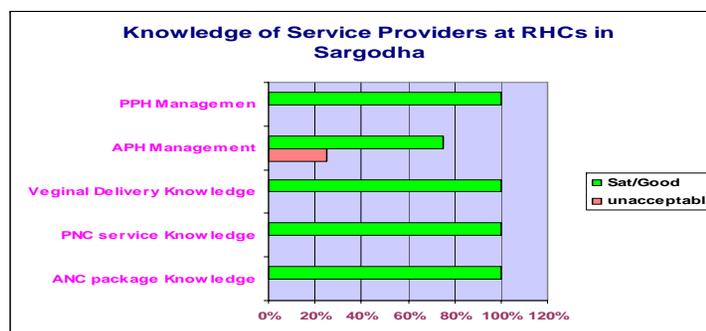
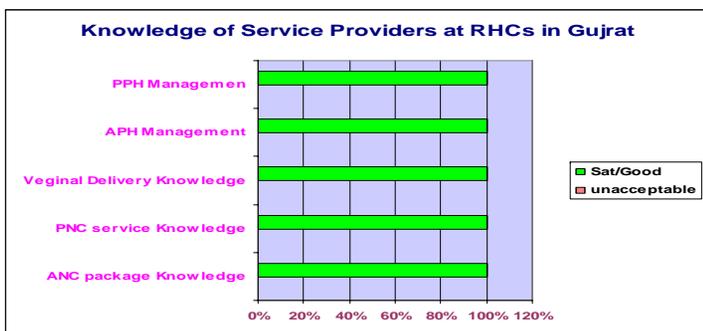
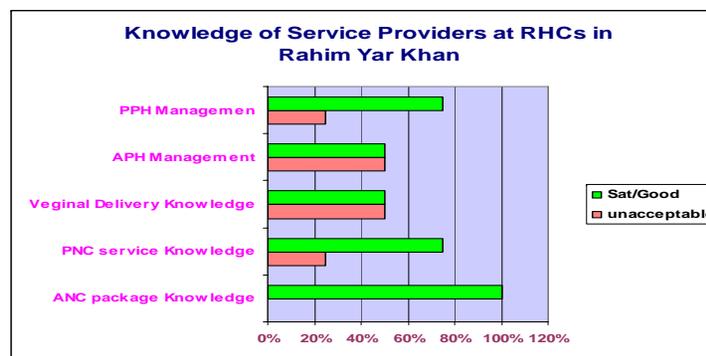
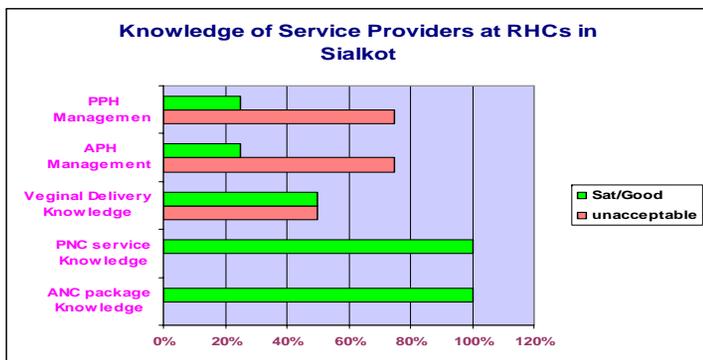
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
ANC package knowledge	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
PNC service knowledge	0%	100%	0%	100%	25%	75%	0%	100%	6%	94%
Vaginal delivery knowledge	0%	100%	0%	100%	50%	50%	50%	50%	25%	75%
APH management	25%	75%	0%	100%	50%	50%	75%	25%	38%	63%
PPH management	0%	100%	0%	100%	25%	75%	75%	25%	25%	75%
Newborn resuscitation	75%	25%	0%	100%	0%	100%	100%	0%	44%	56%
Recognition of septicemia signs	75%	25%	0%	100%	50%	50%	50%	50%	44%	56%
Infection prevention	50%	50%	0%	100%	25%	75%	50%	50%	31%	69%
Post abortion management	25%	75%	0%	100%	50%	50%	50%	50%	31%	69%
IUD insertion	25%	75%	0%	100%	0%	100%	0%	100%	6%	94%
Successful maternity	75%	25%	0%	100%	0%	100%	0%	100%	19%	81%
AMTSL management	50%	50%	0%	100%	50%	50%	0%	100%	25%	75%

#### Percentage Performance of RHCs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Mean Performance of all Districts		
	Unacceptabl e	satisfactory	good	Unaccept able	satisfactory	good	Unaccepta ble	satisfactory	good	Unaccept able	satisfactor y	good	Unaccepta ble	satisfactory	good
ANC knowledge	0%	50%	50%	0%	50%	50%	0%	100%	0%	0%	100%	0%	0%	75%	25%
PNC knowledge	0%	25%	75%	0%	50%	50%	25%	75%	0%	0%	100%	0%	6%	63%	31%
Vaginal delivery knowledge	0%	25%	75%	0%	50%	50%	50%	50%	0%	50%	50%	0%	25%	44%	31%
APH management	25%	25%	50%	0%	50%	50%	50%	25%	25%	75%	25%	0%	38%	31%	31%
PPH management	0%	75%	25%	0%	75%	25%	25%	50%	25%	75%	25%	0%	25%	56%	19%
Newborn resuscitation	75%	0%	25%	0%	50%	50%	0%	75%	25%	100%	0%	0%	44%	31%	25%
Recognition of septicemia	75%	0%	25%	0%	75%	25%	50%	50%	0%	50%	50%	0%	44%	44%	13%
infection prevention	50%	25%	25%	0%	50%	50%	25%	75%	0%	50%	50%	0%	31%	50%	19%
Post-abortion management	25%	25%	50%	0%	50%	50%	50%	50%	0%	50%	50%	0%	31%	44%	25%
IUD insertion	25%	50%	25%	0%	50%	50%	0%	50%	50%	0%	100%	0%	6%	63%	31%
Successful maternity	75%	0%	25%	0%	50%	50%	0%	100%	0%	0%	100%	0%	19%	63%	19%
AMTSL management	50%	0%	50%	0%	50%	50%	50%	25%	25%	0%	100%	0%	25%	44%	31%







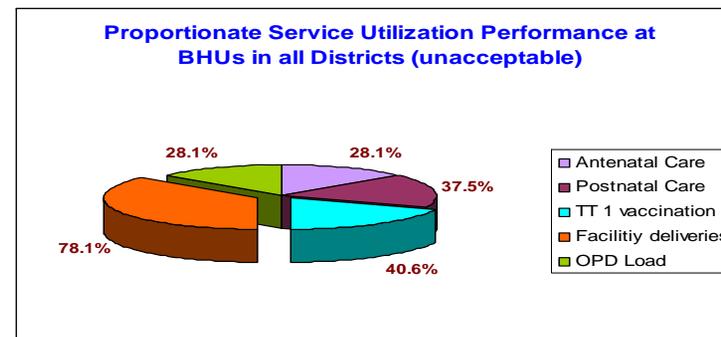
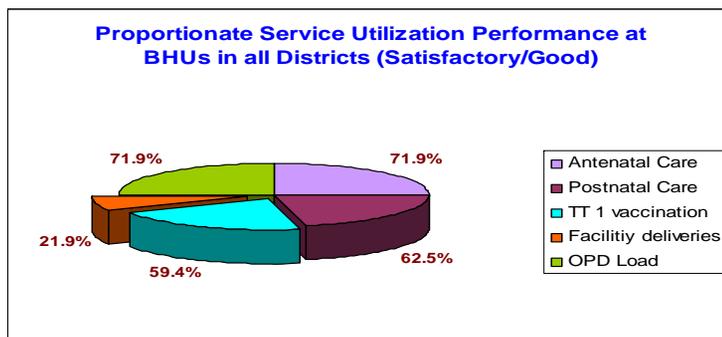
### Service Utilization Performance at BHUs in Study Districts

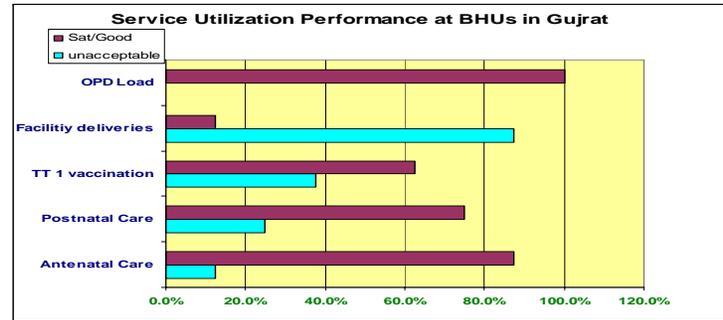
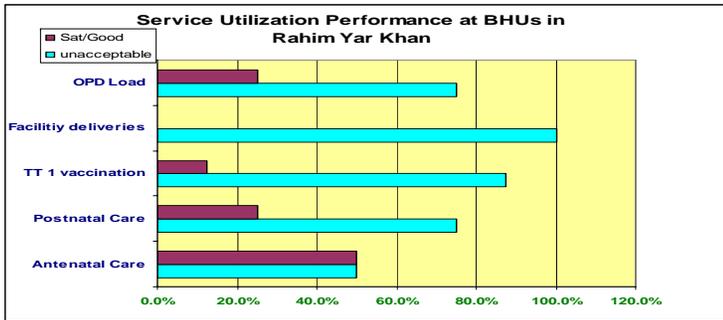
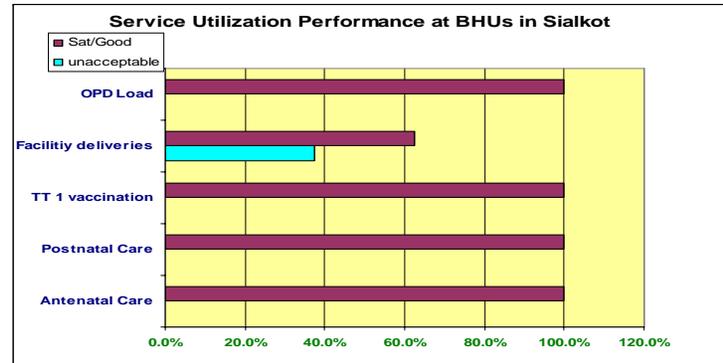
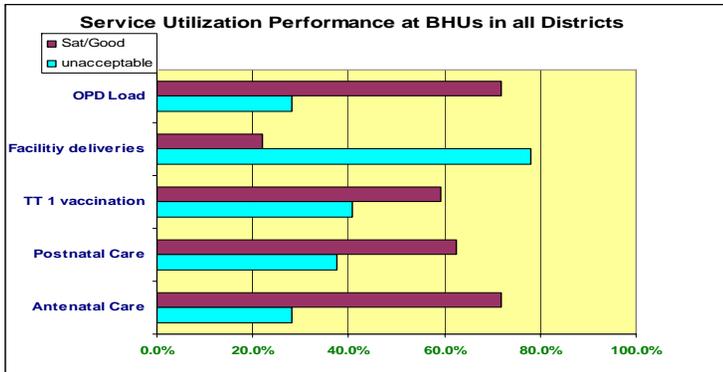
#### Dichotomized Percentage Performance of BHUs—Unacceptable and Satisfactory/Good

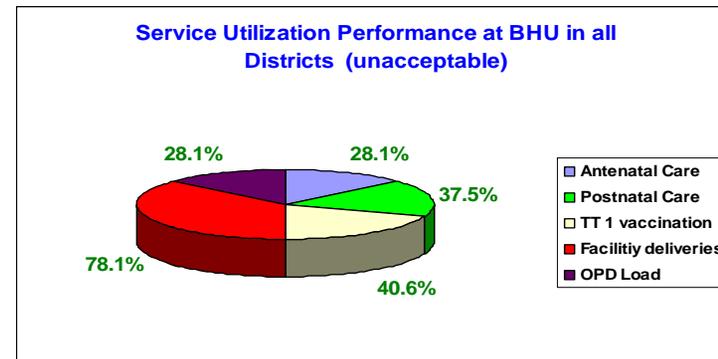
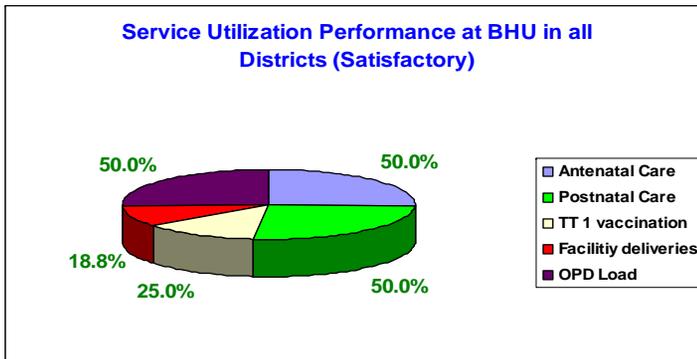
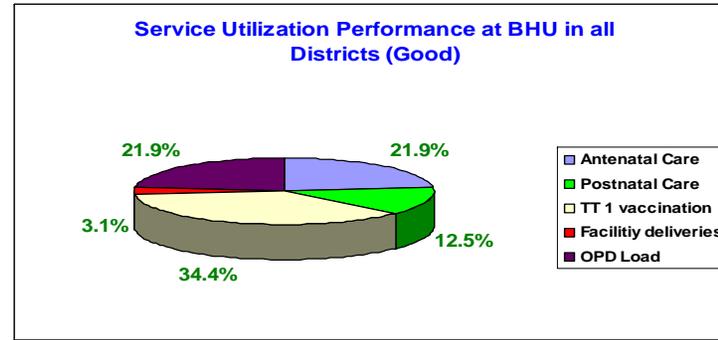
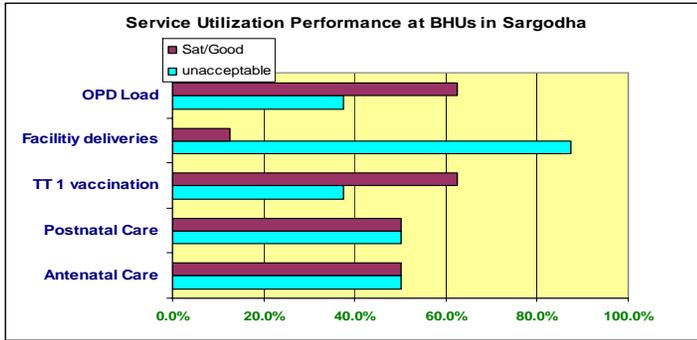
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
Antenatal care	50.0%	50.0%	12.5%	87.5%	50.0%	50.0%	0.0%	100.0%	28.1%	71.9%
Post-natal care	50.0%	50.0%	25.0%	75.0%	75.0%	25.0%	0.0%	100.0%	37.5%	62.5%
TT I vaccination	37.5%	62.5%	37.5%	62.5%	87.5%	12.5%	0.0%	100.0%	40.6%	59.4%
Facility deliveries	87.5%	12.5%	87.5%	12.5%	100.0%	0.0%	37.5%	62.5%	78.1%	21.9%
OPD load	37.5%	62.5%	0.0%	100.0%	75.0%	25.0%	0.0%	100.0%	28.1%	71.9%

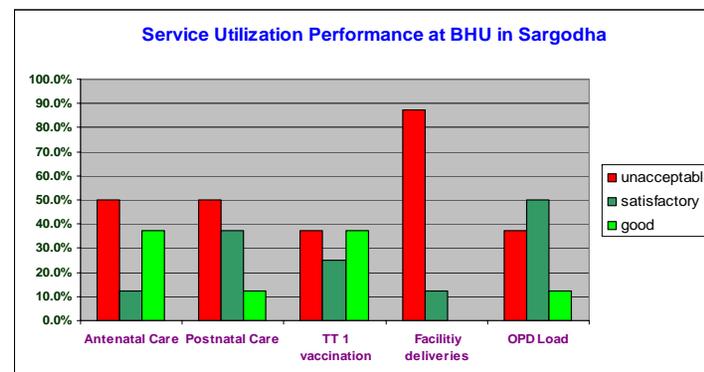
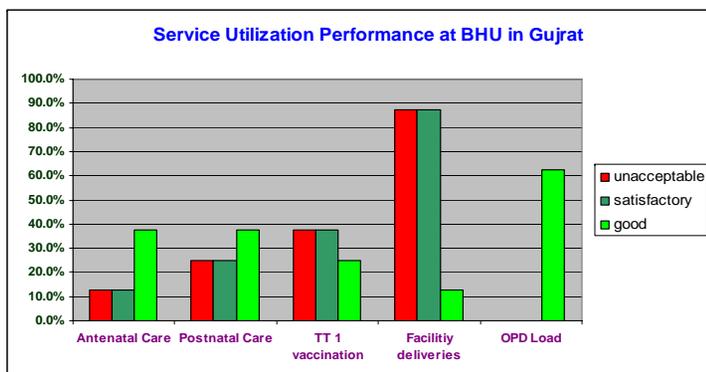
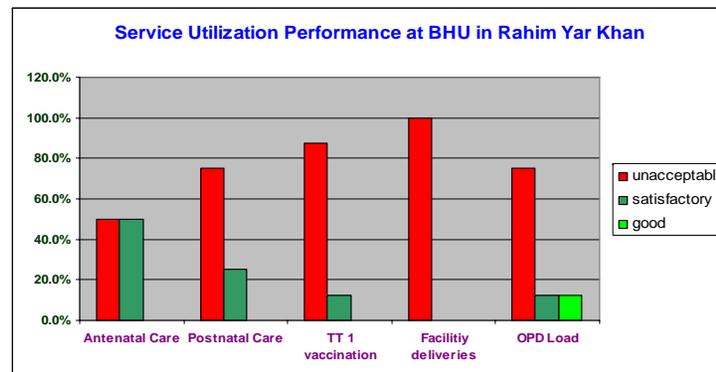
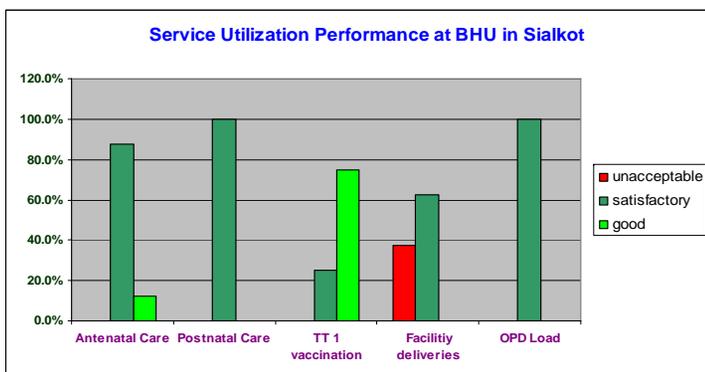
### Percentage Performance of BHUs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
Antenatal care	50.0%	12.5%	37.5%	12.5%	50.0%	37.5%	50.0%	50.0%	0.0%	0.0%	87.5%	12.5%	28.1%	50.0%	21.9%
Postnatal care	50.0%	37.5%	12.5%	25.0%	37.5%	37.5%	75.0%	25.0%	0.0%	0.0%	100.0%	0.0%	37.5%	50.0%	12.5%
TT I vaccination	37.5%	25.0%	37.5%	37.5%	37.5%	25.0%	87.5%	12.5%	0.0%	0.0%	25.0%	75.0%	40.6%	25.0%	34.4%
Facility-based deliveries	87.5%	12.5%	0.0%	87.5%	0.0%	12.5%	100.0%	0.0%	0.0%	37.5%	62.5%	0.0%	78.1%	18.8%	3.1%
OPD load	37.5%	50.0%	12.5%	0.0%	37.5%	62.5%	75.0%	12.5%	12.5%	0.0%	100.0%	0.0%	28.1%	50.0%	21.9%









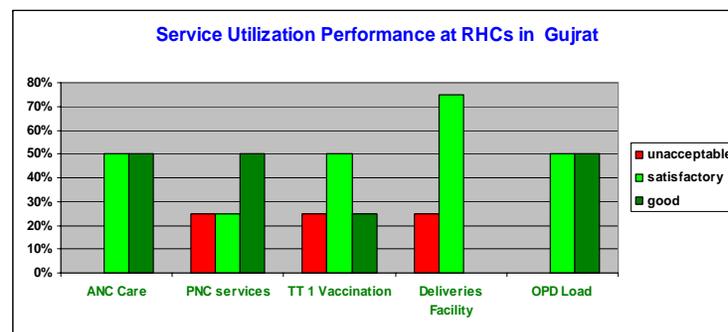
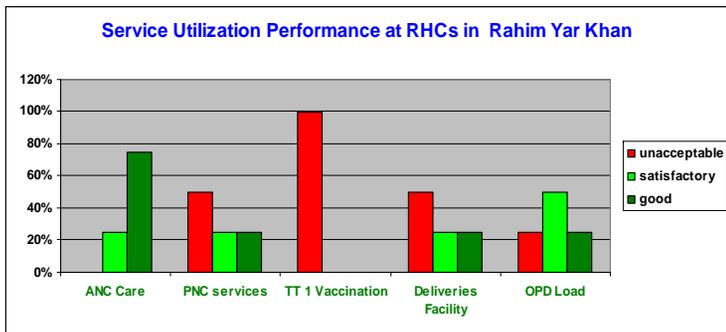
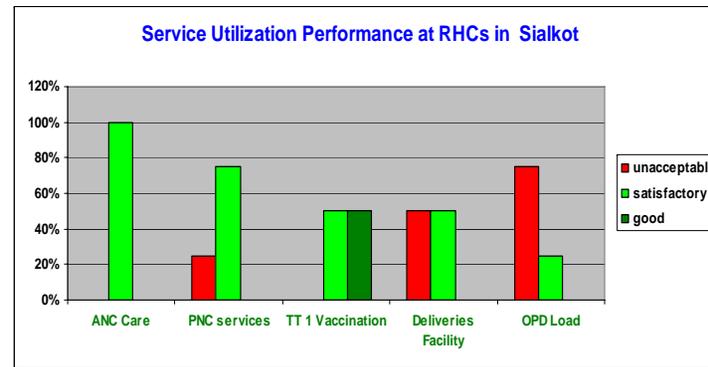
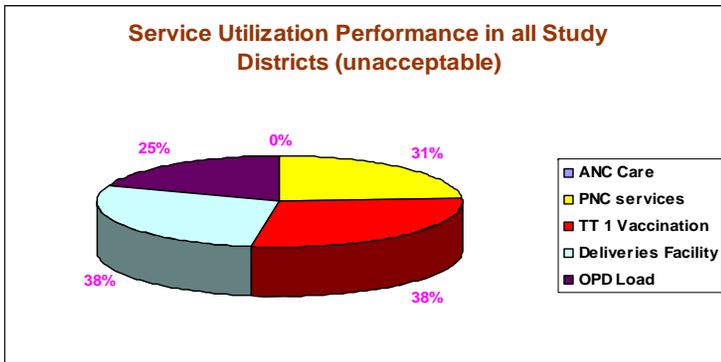
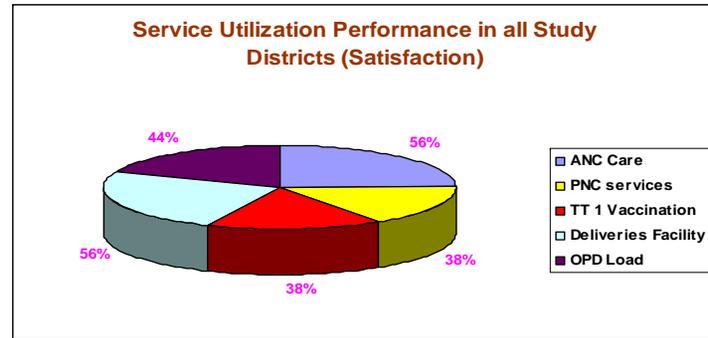
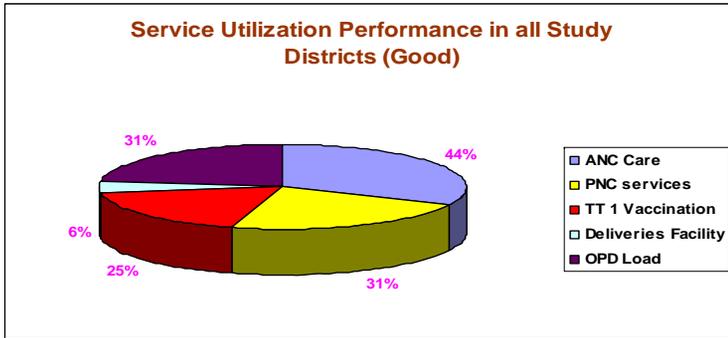
### Service Utilization Performance at RHCs in Study Districts

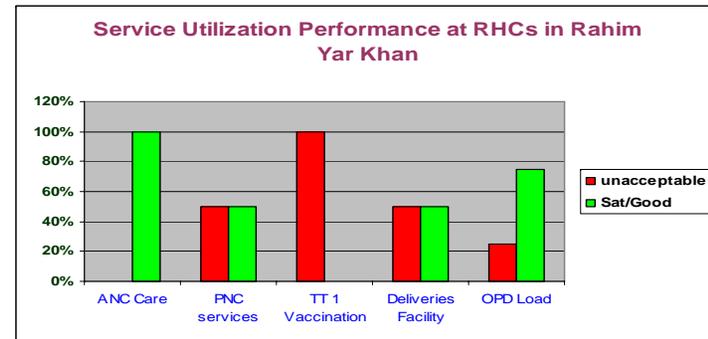
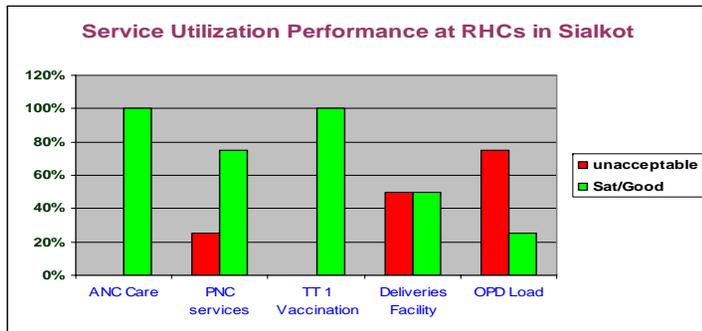
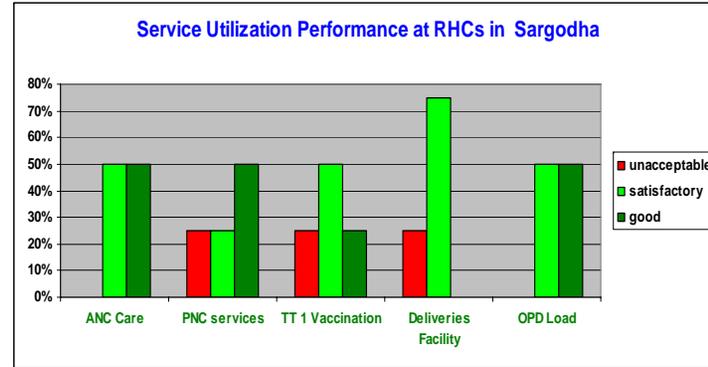
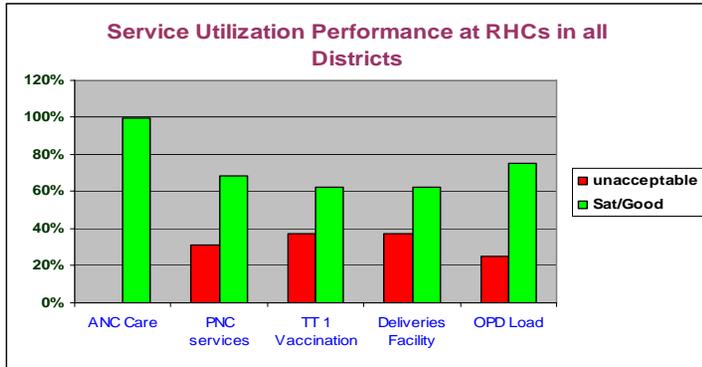
#### Dichotomized Percentage Performance of RHCs—Unacceptable and Satisfactory/Good

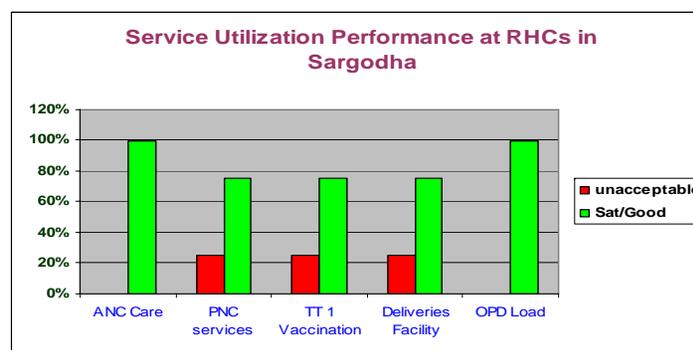
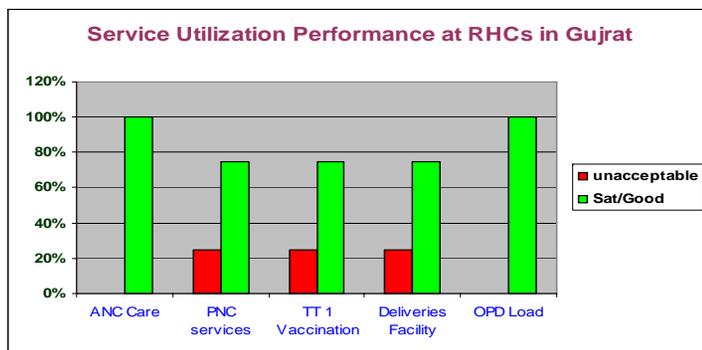
INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
ANC care	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
PNC services	25%	75%	25%	75%	50%	50%	25%	75%	31%	69%
TT I vaccination	25%	75%	25%	75%	100%	0%	0%	100%	38%	63%
Deliveries facility	25%	75%	25%	75%	50%	50%	50%	50%	38%	63%
OPD load	0%	100%	0%	100%	25%	75%	75%	25%	25%	75%

**Percentage Performance of RHCs—Unacceptable, Satisfactory, and Good**

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptabl e	Satisfactory	good
ANC care	0%	50%	50%	0%	50%	50%	0%	25%	75%	0%	100%	0%	0%	56%	44%
PNC services	25%	25%	50%	25%	25%	50%	50%	25%	25%	25%	75%	0%	31%	38%	31%
TT I vaccination	25%	50%	25%	25%	50%	25%	100%	0%	0%	0%	50%	50%	38%	38%	25%
Deliveries facility	25%	75%	0%	25%	75%	0%	50%	25%	25%	50%	50%	0%	38%	56%	6%
OPD load	0%	50%	50%	0%	50%	50%	25%	50%	25%	75%	25%	0%	25%	44%	31%







### Hmis Performance at BHUs in Study Districts

#### Dichotomized Percentage Performance of BHUs—Unacceptable and Satisfactory/Good

INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
Timeliness of report	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
Data quality	25%	75%	13%	88%	13%	88%	13%	88%	16%	84%
Performance reviews	25%	75%	0%	100%	0%	100%	13%	88%	9%	91%
Display performance	88%	13%	38%	63%	0%	100%	25%	75%	38%	63%

#### Percentage Performance of BHUs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
Timeliness of report	0.0%	0.0%	100.0%	0.0%	12.5%	87.5%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	3.1%	96.9%
Data quality	25.0%	62.5%	12.5%	12.5%	75.0%	12.5%	12.5%	75.0%	12.5%	12.5%	25.0%	62.5%	15.6%	59.4%	25.0%
Performance reviews	25.0%	50.0%	25.0%	0.0%	12.5%	87.5%	0.0%	12.5%	87.5%	12.5%	0.0%	87.5%	9.4%	18.8%	71.9%
Display performance	87.5%	0.0%	12.5%	37.5%	37.5%	25.0%	0.0%	37.5%	62.5%	25.0%	75.0%	0.0%	37.5%	37.5%	25.0%

### Hmis Performance at RHCs in Study Districts

#### Dichotomized Percentage Performance of RHCs—Unacceptable and Satisfactory/Good

INDICATORS	Sargodha(SG)		Gujrat (GT)		Rahim Yar Khan (RYK)		Sialkot (SKT)		Average Performance of all Districts	
	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good	Unacceptable	Sat/Good
Timeliness of report	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Data quality	25.0%	75.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	6.3%	93.8%
Performance review	50.0%	50.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	12.5%	87.5%
Display of performance	75.0%	25.0%	0.0%	100.0%	50.0%	50.0%	50.0%	50.0%	43.8%	56.3%

### Hmis Performance at RHCs in Study Districts

#### Percentage Performance of RHCs—Unacceptable, Satisfactory, and Good

INDICATORS	Sargodha(SG)			Gujrat (GT)			Rahim Yar Khan (RYK)			Sialkot (SKT)			Average Performance of all Districts		
	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good	Unacceptable	satisfactory	good
Timeliness of report	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Data quality	25.0%	75.0%	0.0%	0.0%	75.0%	25.0%	0.0%	75.0%	25.0%	0.0%	50.0%	50.0%	6.3%	68.8%	25.0%
Performance review	50.0%	25.0%	25.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	75.0%	50.0%	12.5%	50.0%	43.8%
Display of performance	75.0%	0.0%	25.0%	0.0%	75.0%	25.0%	50.0%	25.0%	25.0%	50.0%	50.0%	0.0%	43.8%	37.5%	18.8%

