
Essential Package of Health Services for Primary Health Care Facilities in Sindh

Technical Component

June , 2014



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APPROVAL OF EPHS SINDH



**Health Sector Reforms Support Unit
Health Department
Government of Sindh**

NO. HD (HSRU) 1-5 (7)/2014

Karachi, Dated: 17-07-2014

To,

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Team Leader,
Technical Resource Facility (TRF),
Islamabad.

**SUBJECT: APPROVAL OF ESSENTIAL PACKAGE OF HEALTH SERVICES (EPHS)
FOR PRIMARY HEALTH CARE FACILITIES IN SINDH**

I am directed to convey the concurrence and final approval of the Health Department, Government of Sindh through the competent authority, of the Essential Package of Health Services for Primary Health Care Facilities in Sindh document (with technical and financial components) received on July 17, 2014.

You are kindly requested to make sufficient copies of the final version of the Documents for further dissemination.


(Dr. Ahsanullah Khan Wazeer)
Chief Health Sector Reforms Unit, Sindh

Document attached for reference:

- Approval from Secretary Health
- EPHS Technical and Financial Component

Copy for:

- P.S. to Secretary Health

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ACRONYMS

BHU	Basic Health Unit
CMAM	Community Management of Acute Malnutrition
CMW	Community Mid Wife
CPR	Cardio Pulmonary Resuscitation
DCD	District Council Dispensary
DoH	Department of Health
DHIS	District Health Information System
EDL	Essential Drug List
EPHS	Essential Package for Health Services
GD	Government Dispensary
GoS	Government of Sindh
EPHS	Essential Health Services Package
HSRU	Health Sector Reform Unit
LHW	Lady Health Worker
LMICs	Low and Middle Income Countries
MSDS	Minimum Services Delivery Standards
MSDP	Minimum Services Delivery Packages
MNCH	Maternal & Neonatal Child Health
NCD	Non-Communicable Diseases
PHC	Primary Health Care
PPHI	People's Primary Healthcare Initiative
PPE'	Personal Protective Equipment
RHC	Rural Health Centre
UHC	Urban Health Centre
UHU	Urban Health Unit
SHC	Sub Health Centre
TRF	Technical Resource Facility
WHO	World Health Organization
WDR	World Development Report

1. BACKGROUND

1.1 Demography and Health Status of Sindh Province

Sindh is second largest and populous province of Pakistan with an estimated 43 million population and the highest growth rate of 2.8% in the country. The province of Sindh forms the lower Indus basin and is about 579 kms in length from north to south and nearly 442 kms in its extreme breadth (281 kms average). It covers 140915 square kms and is about as large as England. It has an agrarian economy. The composition of Sindh is unusual with approximately 53% of population residing in rural areas and 47% residing in urban areas. Social indicators are particularly poor in rural population falling below the average for rural Pakistan. Total Fertility Rate is high at 4.5, female literacy level is only 12%, and proper sanitation is available for only 24% of population, safe water for 64% and electricity for only 52% of the households. Rural households face issues of livelihood due to decreasing agricultural productivity, lack of civic facilities and devastation due to frequent floods.

Urban population as expected has better social indicators than rural areas but there are increasing inequities due to thinning out of existing infrastructure and increasing rural migration. Like other provinces of Pakistan, the urban areas in Sindh also suffered from high level of un-employment resulting in increase in crime and terrorism. In Sindh, Thatta, Tharparkar, Jacobabad, Badin, Mirpurkhas, Kambar and Kashmore are the lowest developed districts in terms of socio economic and health status. The districts of Karachi, Hyderabad and Sukkur are comparatively more developed being largely urban localities. The table below lists the key health indicators for the province of Sindh, which has very high infant and maternal mortality rates. Similarly, other health and social indicators are also not very promising.

Table 1: The status of key health indicators of Sindh

STATUS OF HEALTH INDICATORS					
Selected Health Indicators	Sindh	Pakistan	Selected Social Indicators	Sindh	Pakistan
IMR	81	78			
NMR	53	54	Population Growth	2.8	2.69
MMR	314	276	Sex Ratio	112.2	108.5
Undernourished Children	40.5	31.5	Female Education	46	46
Child Anemia	73	62	Safe water	89	87
Maternal Anemia	62	51	Food Insecurity	72	58

HIV/AIDS Cases	3936	7547	Flush Toilet Facility	62	66
TB Case Detection	59	70	Public Sector Utilization	22	29
Malaria cases/1000	1.5		Total Public Sector Expenditure	37.7	32
Prevalence of Hepatitis B and C	7.5	7.6	Total out of pocket Expenditure	66	64
Institutional Delivery	42	41			
Polio 3	70	79			
Measles	77%	82			
Adult Hypertension	40				
Adult Depression	32				
LHW Coverage	45%				

Source: Health Sector Strategy (2012-2020)

1.2 Primary Health Care in Sindh

The Primary health care system is mainly concerned with outpatients who come for a variety of curative and preventive health services. The health facilities provide basic health care including maternal and child health care, emergency services and have some observation beds. PHC is usually the first contact of a sick person with the health care system. The health care staff assesses the patient by history and examination, diagnose the problem, and if possible manage the case at the health facility. This includes curative and preventive services such as cure for common illnesses, vaccination, family planning and the provision of antenatal, intra-natal/delivery and the postnatal care. Depending upon the category and level a well equipped health facility is designed to have a small laboratory for on-site investigations such as basic biochemistry, urinalysis and microscopy of malaria slides and TB sputum smears, X-ray, ultrasound services. If the staff at a PHC facility are unable to manage a patient then they refer the patient to the next level of care—the secondary level health care facility i.e. Taluka/ District HQ hospital.

In province of Sindh, the PHC is a combination of static health facilities and outreach services. Currently there are two main authorities managing the PHC network in the province which are Department of Health (DoH) and Peoples Primary Health Care Initiative (PPHI). The DoH is managing Dispensaries, BHUs and MCH centers (in two districts only) and majority of RHCs in all 23 districts including all activities under vertical programs both at facility and community level. The PPHI is operating in 21 out of 23 districts in the province at

BHUs, MCH Centres and dispensaries level but not at the community level with LHWs or CMWs. Currently in all the 23 districts, following major type of PHC facilities and community health workers exist.

Table 2: List of PHC facilities and community health workers in 23 districts of Sindh

Type of Health Facility	PPHI	Health Department	Total
RHC/UHC	09	110+7	126
BHU/UHU	647	216+23	886
Dispensary	435	75	510
MCH Centre	34	08	42
Maternity Home	0	40	40
Other (Unani shafakhana, Homeopathic Clinic, etc)	21	71	92
LHWs		All	22576
CMWs		All	888

Source: Office of the Director General Health Services, Health Department Sindh

1.3 Reporting of PHC Coverage in Sindh

The utilization of services and other important data related to supplies, medicines in PHC is reported on monthly basis from the BHUs and RHCs on standard District Health Information System (DHIS) reporting format. The data from each of the PHC outlet is consolidated at the district level and a district DHIS report is sent to the provincial DHIS Cell on monthly basis. The provincial DHIS Cell consolidates the monthly district report and generates a provincial DHIS report. The consolidated DHIS report of BHUs and RHCs for the year 2012 Sindh reflects the number of cases managed, disease trends, HR status, medicine and supplies (out of stock) and services from LHWs. In 2012, a total of 13,080,931 outpatient attendance was reported from the BHUs, whereas from RHCs 3,345,095 outpatient attendance was reported. The majority of cases presented with respiratory diseases and Gastro Intestinal Tract (GIT) problems. The utilization of family planning services and first antenatal visits are also reported in the DHIS. At the PHC facilities 2,376 minor surgical procedures were also reported in the DHIS in 2012 whereas investigations X-ray, ultrasound, MP slides and AFB microscopy is also reported from PHC facilities although the number is not very high.

Whereas, the PPHI has not reported any surgeries from the BHUs in which they are implementing services.

1.4 Recent PHC Initiatives

In Sindh the dispensaries and BHUs or Urban Health Units (UHUs) have minor dissimilarities in functions and structures and mostly work 6 hours a day and, 6 days a week whereas, through PPHI initiative¹ some of the PHC facilities i.e. MCH (20) are working 24/7 whereas, MCH (14) are working 24/6. The capacity of RHC/UHC is although one stage up than BHU/UHU and the working is 24 hours and categorized to provide basic emergency obstetric care (Basic EmOC) services but ground realities are not promising² due to unavailability of female staff, lack of supplies, law and order situation, etc. PPHI has made available female staff at majority of Dispensaries and BHUs (on rotational basis) and MCH Centers⁴. They also have established a monitoring system for the staff to prevent absenteeism and there is regular supply of drugs at their health facilities. Almost all RHCs (except 9 which are operated by PPHI) in the province are under the administrative control of DoH. LHWs are although linked with PHC facilities reporting to NP for FP & PHC but are under DoH monitoring and supervision system. Immunization services are being provided through majority of health facilities but for proper coverage it requires better working coordination between PPHI and DoH.

LHWs are now regularized in province of Sindh. Through MNCH programme 1091 CMWs are trained among which 888 are deployed and additional 984 are under training³. Reducing maternal & child mortality and prevention of endemic communicable diseases (MDG 4, 5, and 6) require an increase immunization coverage and enhancement of MNCH & Child Health/FP services at PHC level. While developing EPHS may imply innovative approaches such as strengthening and up gradation of MNCH services in the community and at certain health facilities.

The urban first level of health care system exists in Karachi and Hyderabad. In Karachi it comprises of 39 maternity homes, 213 dispensaries and 50 assorted frontline centres (UHCs and UHUs)⁴. While in Hyderabad it is limited and consists of UHU is 01 and MCHC 04. As far as PHC is concerned, PPHI is a major implementing authority in PHC Sindh (71%⁵ PHC facilities). They are managing more than half of the PHC facilities in the province of Sindh. It is a fully public sector funded program. PPHI gets funds from multiple public sector levels including federal and provincial governments as well as development partners and they also

¹ Monthly Bulletin, PPHI Sindh, Oct 2012

² MNCH 3rd party Evaluation TRF Pakistan 2012

³ Status of CMWs in Sindh, MNCH program, 2013

⁴ Situation Analysis for Post Devolution Health Sector Strategy, Sindh, Nov 2011

⁵ Quarterly Bulletin PPHI Sindh, Jan-Mar 2013, Vol 2, issue 2.

have flexibility of utilization of funds. They can carry forward unspent budget in the next year for utilization, whereas in public sector unspent funds are mandatorily surrendered to government treasury.. They have made renovation of their health facilities from the additional budget they are provided with by the Government of Sindh and also up graded certain facilities to provide basic obstetric care at MCH Centres and BHUs⁶.

2. RATIONALE OF EPHS SINDH

The Government of Sindh (GoS) is committed to provide health care coverage to every member of the society in general and poor masses in particular for improving the overall health status of its population⁷. In this regard the Department of Health (DoH) Sindh is actively working towards health sector reforms and setting the future directions over the next eight years through the recent Sindh Health Sector Strategy (HSS) 2012-2020. The DoH Sindh, in post devolution scenario, is keen to address major issues related to health services under the umbrella of health sector strategy with the agenda to improve the health status of the people in the province. In this context, development of EPHS for PHC is significantly important as starting point for the result oriented implementation plans on Health Services Delivery System (HSDS) and budgetary processes based on the basic theme/concept of Medium Term Budget Framework (MTBF).

The Health Sector Strategy document 2012-2020 for the province of Sindh under the section “Strengthen district health systems” the strategic action is about formulation of a package at the first level health care facility with required resources for needs of rural disadvantaged districts inclusive of the key priority needs. This includes: MNCH, family planning, nutrition, screening of key communicable diseases (CD) and resource identification in terms of minimum staffing levels, diagnostic requirements, drug formulary, equipment requirements and costing. The HSS has also pointed out formulation of health package for need of low income urban population which requires key priority needs such as: a) MNCH, nutrition and family planning, b) screening and treatment of non-communicable diseases (NCD) such as hypertension, diabetes, breast and cervical cancers, etc. and c) screening of communicable diseases (CD) such as tuberculosis, malaria, hepatitis, STIs, HIV and prevention such as immunization.

It is therefore imperative to develop Essential Health Service Delivery Package at PHC level, including infrastructure, human resources, other supplies and financing (costing) required for implementing the package. The costed EPHS will guide the DoH for not only making appropriate resource allocation but track the utilization efficiency and standardizing the health services. In addition, the package will serve as planning and management tool for

⁶ Third Party Evaluation of the PPHI in Pakistan, 2010

⁷ Health Sector Strategy, GoS, 2012-2020

DoH, assessing the progress for improvement and in situation such as out sourcing of services.

3. OBJECTIVE

The overall objective is to develop a costed Essential Health Services Package for primary level of health care in Sindh, which includes community health workers.

4. PROCESS OF DEVELOPMENT OF EPHS

4.1 Detail Desk Review

The desk review of documents helped to understand the PHC setup, services, and recent initiatives in the context of health service delivery package. The documents included policy documents, studies, monitoring and progress reports, evaluation reports, budget and financial reports, etc. The national and the international evidence showed that the development and successful implementation of various types of services delivery packages either minimum or essential in context of developing countries is not very new. List of key documents consulted and experience reviewed is annexed.

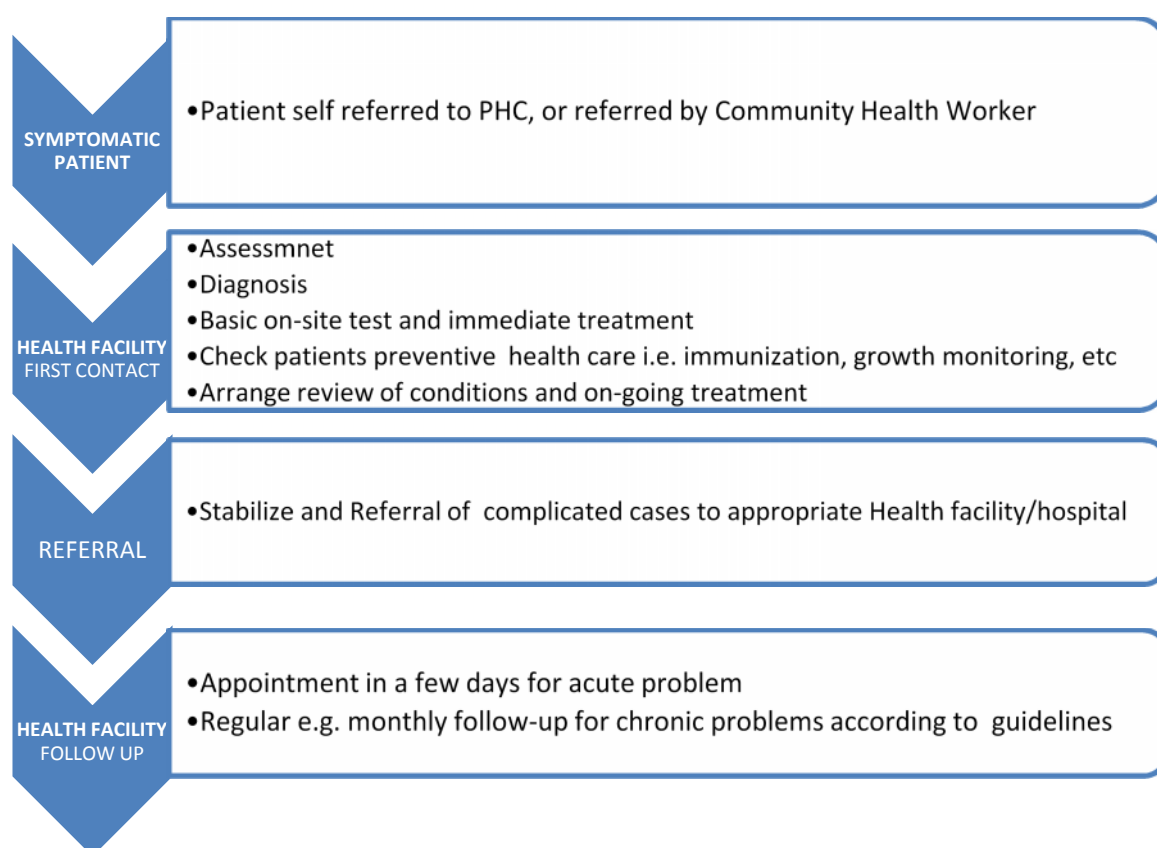
4.2 Meetings/Consultative Workshops

A series of pre inception consultative meetings with senior and mid-level management of Health Department on “Essential Health Services Package (EPHS)” were organized and held. The TRF team on EPHS briefed the participants on background of assignment, mandate of team and discussed the important aspects of the package. The team sought the inputs from the participants on different components of PHC including infrastructure, HRH, equipment and supplies, services, access, equity, quality, coverage and new initiatives in the light of MSDS, 2010 and HSS 2012-2020. The list of participants with whom pre-inception meeting and consultative workshop during development process was carried out is annexed.

4.3 Care delivery Pathway in PHC

The development of the EPHS will follow the basic pathway of care delivery at the level of primary health care facilities and community level.

Figure 1: PHC: Care Delivery Pathway



5. First level of care: PHC facilities

The care providers in the PHC facility and at the community level will primarily focus on identification and prompt treatment of illnesses, preventative care such as immunization and appropriate referral of the cases to the appropriate health facility for further care. Any potential limitation in function that could aggravate in the future can also be identified by the CMWs and LHWs at the community level.

It has been suggested that few categories of PHC outlets (limited number), could be elevated for service delivery with minimal addition of human and material inputs. One such example is the services being offered at MCH centres. The MCH centre is supposed to perform functions such as antenatal care, natal and postnatal care, basic EmONC, child health care, immunization, family planning, treatment of minor illnesses and first aid services. With the addition of some qualified human resource such as gynecologist, pediatrician, and LHV at the MCH centre, equipment and supplies with additional operational cost, the performance and quality of services at MCH centres could be enhanced.

The functions and resources available/ proposed also make RHC/UHC and Maternity home comparable as far as service provision is concern. Both of these facilities can address,

comprehensive EmONC and manage child health issues, nutrition, and management of communicable and non-communicable diseases, emergency and ambulance services.

5.1 Primary Health Care Arrangement

5.1.1 Dispensary

A dispensary is among the first care level facility as part of health care delivery system offering the services to outpatients in both rural and urban settings. On average a dispensary covers a catchment population of around 2000-3000 providing a range of primary health care services along with working as filtering point for referral to more appropriate Health Facility for major health problems. Services offered include antenatal, postpartum care, family planning; growth monitoring; treatment of malaria and other common ailments and accessibility of essential drugs. A Medical Officer, Dispenser, Dresser, Midwife, a Sanitation Worker and other supportive non-technical staff such as Attendant, Chowkidar and Naib Qasid include in staff of a Dispensary. The dispensary; mostly in urban areas can also provide logistical and managerial support to the LHWs if designated reporting centre of NP for FP & PHC program.

Physical Standard: Dispensary

The dispensary is the smallest possible structure to provide primary health care in context of province of Sindh. In such a dispensary is mainly a department for "Out Patients" facilities. It has usually the following structure used for the following purposes:

Room 1 : Doctors Consultation

Room 2 : Procedure room (for minor procedure such as first aid for injuries, stitching, etc) and sterilization of instruments

-Waiting area

-Toilet

Table 3: Details of services and activities (Dispensary)

Services at Dispensary	Activities
Maternal & New born Health	
Antenatal care	Regular antenatal care with focus on identification of high risk pregnancies, Advanced Antenatal distribution of misoprostol and chlorhexidine Recognition, stabilization and referral of obstetric, neonatal and other emergencies to the higher level
Natal care	Obstetric first aid including maintaining I/V line, I/V fluids and antibiotics and referral
Post natal care	Breast examination, counseling and provision of family planning supplies and nutritional counseling including breast feeding

New-born care	Establish exclusive breast feeding Eye care in newborn, Counselling for complimentary infant feeding (preterm/Low birth weight)
Child Health	
	NIDs and SNIDs Early diagnosis and referral of major childhood diseases Integrated management of neonatal & child illnesses (IMNCI), referral for complicated cases Establishment of ORT corner and training of mothers on use of ORS Prevention, assessment and management of diarrheal diseases (Oral rehydration and administration of IV fluids), referral for complicated cases Health Education
Nutrition Services	
	Counselling Infant/child feeding assessment/ breast feeding support Infant/child growth monitoring Micro-nutrient supplementation (child and pregnant women) Identification of malnutrition, Identification of severe and moderate malnutrition in children with referral of cases of severe malnutrition Deworming
Family Planning	
	Counselling on family planning Provision and availability of contraceptive services (condoms, oral contraceptives, injectable) Health Education
Control and Management of Communicable Diseases	
	Symptomatic screening of cases of fever, suspected TB, malaria and hepatitis and referral to RHC. Early detection of skin infections including scabies, etc
Non-Communicable Diseases (NCDs)	
	Referral of following suspected cases to RHC/THQ/DHQ(H) which may include case of hypertension, diabetes, COPD and mental disorders, etc Hypertension Diabetes Chronic respiratory diseases Mental disorders
Basic Emergency / First Aid Coverage	
	Management of minor cuts and injuries under local anaesthesia and stabilisation of cases of trauma, injuries, accidents etc First aid for insect / snake/ dog bite, etc and referral First aid and referral of cases of poisoning (insecticide and pesticide) First aid and referral of cases of shock Provision of basic life support
Basic Diagnostic/Investigations	
	Pregnancy test, blood sugar
Health Education	

	Conduct counselling sessions with individuals and the various community groups regarding health education on the topics: Maternal and new-born health Child health and development Family planning Breast feeding Communicable and non-communicable diseases
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Table 4: Staff for Dispensary

STAFF FOR DISPENSARY				
SR. NO.	NAME OF THE POST	BPS	STANDARD STAFF	CONSIDER THE MINIMUM FOLLOWING STAFF
1.	Medical Officer	17	1	1
2.	LHV			1
3.	Dispenser/Health Technician	6	1	1
4.	Dresser	6	1	1
5.	Midwife	6	1	1
6.	Attendant	2	1	1
7.	Aya			1
8.	Chowkidar	1	1	1
9.	Naib Qasid	1	1	1
10.	Sanitation Worker	1	1	1

Data Source: DoH GoS

5.1.2 Maternal and Child Centre (MCH)

A MCH Centre is first care level facilities mostly located in towns and cities. The prime focus of these facilities is to offer mother and child health care services as outpatient/indoor care(2 beds)and outreach/ community based services. On an average a MCH Centre covers a catchment population of around 5000-10,000 of its own and about 15,000-20,000 population of adjacent areas. It provides range of MCH services include antenatal, natal and postnatal care, family planning, growth monitoring along with referral support.

Physical Standard: MCH

Service area: It consists of OPD room for women medical officer, a room for LHV, waiting area, dispensary, labor room, small laboratory, two observational beds, vaccine storage room and stock room.

Prerequisites:

Approachable by road, boundary wall and basic amenities of living, which include water supply, sewerage facility, electricity, telephone and gas provision.

Table 5: Details of services and activities (MCH Centre)

Services at MCH centre	Activities
Maternal & New born Health	
Antenatal care	<p>Pregnancy diagnosis, antenatal care visits including tetanus immunization, identification and management of high risk pregnancy, management of anemia and supply of iron/folate supplementation, management of inter-current illnesses including intestinal worms, Advanced Antenatal distribution of misoprostol and chlorhexidine, malaria, urinary tract infection</p> <p>Stabilization and referral of cases of APH, pre-eclampsia and eclampsia, incomplete abortion, ectopic pregnancy</p>
Natal care /Basic EmONC	<p>Conducting normal and assisted vaginal deliveries, parenteral oxytocin, bimanual compression of uterus, controlled cord traction for retained placenta, suturing tears, MVA , MVA, Use of MgSO₄, manual removal of placenta, I/V fluid administration, manual removal of placenta and curettage.</p> <p>Stabilize and referral complicated cases such as convulsions due to eclampsia (by loading dose of MgSO₄) , obstructive labour (use of Partograph) and other cases which require caesarean section.</p>
Post natal care	Breast examination, counseling and provision of family planning supplies and nutritional counseling including breast feeding
New-born care: resuscitation	<p>Early new born care: clean airway, cord clamp/cutting, avoid hypothermia and recognizing danger signs, breast feeding promotion, new-born immunization</p> <p>Stabilize and referral cases of sepsis, tetanus, jaundice, newborn resuscitation (Helping babies breathe) and also at community level. Kangaroo mother care for managing LBW etc</p>
Child Health	
	<p>Routine EPI services including outreach EPI services and support to NIDs</p> <p>Integrated management of neonatal & Child illnesses (IMNCI) and referral of complicated cases</p>

	<p>Establishment of ORT corner and training of mothers to prepare and use of ORS</p> <p>Prevention, assessment and management of diarrheal diseases (oral rehydration and administration of IV fluids (oxygen inhalation and nebulization)</p> <p>Management of diarrhea and pneumonia, community case management of diarrhea and pneumonia</p>
Nutrition Services	
	<p>Counselling</p> <p>Infant feeding assessment/breast feeding support</p> <p>Infant growth monitoring</p> <p>Micro-nutrient supplementation</p> <p>Identification and management of malnutrition, identification of severe and moderate malnutrition in children with referral of cases of severe malnutrition</p> <p>De-worming</p>
Family Planning including IUCD Insertion and removal	
	<p>Counselling on family planning</p> <p>Provision and availability of contraceptive services (condoms, oral contraceptives, injectable, implants and IUCDs (interval and PPIUCDs)</p>
Communicable Diseases	
	<p>Symptomatic screening of cases of TB, malaria, hepatitis, etc</p> <p>Treatment of clinical malaria</p> <p>Early detection of skin infections including scabies etc</p> <p>Clinical screening and syndromic based management of STDs</p>
Non-Communicable Diseases (NCDs)	
	<p>Referral of cases to RHC/THQH/DHQH to be managed for;</p> <p>Hypertension</p> <p>Diabetes</p> <p>Chronic respiratory diseases</p> <p>Mental disorders</p>
Basic Emergency / First Aid Coverage	
	<p>Treatment of minor injuries by minor surgical operations under local anaesthesia and stabilisation of cases appropriately concerned to women</p>

	<p>and children. Like minor trauma/injuries, accidents etc First aid and referral</p> <p>First aid and referral of cases of poisoning (insecticide and pesticide)</p> <p>Provision of basic life support and referral</p>
Basic Diagnostic /Investigations	
	<p>Basic laboratory services including routine lab tests, haematological/Hb, urine analysis, pregnancy test, blood grouping, blood smear for malaria</p> <p>ultra sound</p>
Health Education	
	<p>Conduct counselling sessions with individuals and various community support groups regarding health education on the topics:</p> <p>Maternal and new-born health</p> <p>Child health and development</p> <p>Family planning</p> <p>Breast feeding</p> <p>Communicable and non-communicable diseases</p>
Ambulance Services	Referral of emergencies (transport/ life saving)

Table 6: Staff of MCH Center

STAFF FOR MCH Centre				
Sr.No	NAME OF THE POST	BPS	STANDARD STAFF	Consider the minimum following staff
1.	Women medical Officer	17	1	1
2.	Lady Health Visitor	9	1	1
3.	Midwife	6	1	1
4.	Lab Technician			1
5.	Dispenser			1
6.	Driver			-
7.	Naib Qasid	1	1	1
8.	Aya/Dai		1	1
9.	Chowkidar	1	1	1
10.	Bhishti / Malhi	1		-
11.	Sanitation Worker	1	1	1
12.	Vaccinator	1		1

Data Source: DoH, GoS

5.1.3 Maternity Home

Maternity homes are located in towns and cities. The prime focus of these facilities is to offer mother and child health care services as outpatient/indoor care. The catchment population is not well defined as they are usually located in semi-urban localities and are supposed to offer a range of MCH services include antenatal, natal and post natal care, family planning; growth monitoring along with referral support.

Physical Standard: Maternity Home

Service area: It consists of

- OPD room for Gynaecologist
- OPD room for women medical officer
- OPD rooms for LHV
- Room for health education

- Waiting area
- Dispensary
- Labour room
- Laboratory
- Small operation theatre
- 15 bed ward
- Vaccine storage and stock room.

Approachable by road, boundary wall and basic amenities of living, which include water supply, sewerage facility, electricity, telephone and gas provision

Table 7: Details of services and activities (Maternity Home)

Services at Maternity Home	Activities
Maternal & New born Health	
Antenatal care	<p>Pregnancy diagnosis, antenatal care visits including tetanus immunization, identification and management of high risk pregnancy, management of anemia and supply of iron/folate supplementation, management of inter-current illnesses including intestinal worms, Advanced Antenatal distribution of misoprostol and chlorhexidine, malaria, urinary tract infection</p> <p>Stabilization and referral of cases of APH, pre-eclampsia and eclampsia, incomplete abortion, ectopic pregnancy</p>
Intra-natal care Basic/ Comprehensive Emergency EmONC	<p>Conducting normal deliveries, conducting assisted vaginal delivery, parenteral oxytocin, bimanual compression of uterus, controlled cord traction for retained placenta, suturing tears, I/V fluid administration, manual removal of placenta, curettage.</p> <p>Stabilize and referral of complicated cases</p>
Post natal care	<p>Management of PPH by blood transfusion, I/V fluids, AMTSL (Oxytocin/Misoprostol), treatment/management/referral of puerperal sepsis, breast examination</p>
New-born care: resuscitation	<p>Early new born care: clean airway, cord clamp/cutting, avoid hypothermia and recognizing danger signs, breast feeding promotion, new-born immunization, treatment/management/referral of puerperal sepsis, and , neonatal jaundice, Kangaroo mother care, etc</p>
Child Health	
	<p>Routine EPI services including routine & outreach EPI services and support to NIDs</p> <p>Integrated management of neonatal & child illnesses (IMNCI) and referral of complicated cases</p> <p>Establishment of ORT corner and training of mothers to prepare and use of ORS</p> <p>Prevention, assessment and management of diarrheal diseases, oral rehydration and administration of IV fluids, oxygen inhalation and nebulization</p>

Nutrition Services	
	<ul style="list-style-type: none"> Counselling Infant feeding assessment/breast feeding support Infant growth monitoring Micro-nutrient supplementation Identification and management of malnutrition, identification of severe and moderate malnutrition in children with referral of cases of severe malnutrition Deworming
Family Planning including IUD Insertion and removal	
	<ul style="list-style-type: none"> Counselling on family planning Provision and availability of contraceptive services (condoms, oral, injectable, implants and IUDs) Health Education
Communicable Diseases	
	<ul style="list-style-type: none"> Clinical screening and referral of clinical malaria, TB Early detection of skin infections including scabies etc Clinical screening and referral of STDs
Non-Communicable Diseases (NCDs)	
	<ul style="list-style-type: none"> Referral of cases to RHC/THQH/DHQH Hypertension Diabetes Chronic respiratory diseases Mental disorders
Basic Emergency / First Aid Coverage	
	<ul style="list-style-type: none"> Management of minor injuries by minor surgical procedures under local anaesthesia, stabilisation of cases and referring cases of trauma, injuries, accidents etc Detection and referring cases of poisoning due to insecticides/ pesticides along with maintaining IV line for referring patient of shock
Basic Diagnostic /Investigations	
	<ul style="list-style-type: none"> Basic laboratory services including routine lab tests, haematological, urine analysis, pregnancy test, blood smear for malaria Blood typing, matching and donor identification with application of appropriate blood safety measures including screening for HIV/AIDS and Hepatitis B & C, etc. Lab and X-ray facility availability including ultra sound
Health Education	

	<p>Conduct counselling sessions with individuals and the various community groups regarding health education on the topics:</p> <p>Maternal and new-born health</p> <p>Child health and development</p> <p>Family planning</p> <p>Breast feeding</p> <p>Communicable and non-communicable diseases</p> <p>Training and refresher training of LHWs on designated PHC topics like prenatal, post natal and new born care and infant feeding practices etc.</p> <p>Training of traditional birth attendants and family attendants on clean home delivery and recognition, stabilization and referral of obstetric and neonatal emergencies</p>
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Table 8: Staff of Maternity Home

STAFF FOR MATERNITY HOME				
Sr.No	NAME OF THE POST	BPS	STANDARD STAFF	CONSIDER THE MINIMUM FOLLOWING STAFF
1.	Women medical Officer (trained on C.Section)	17	1	3
2.	Lady Health Visitor	9	1	2
3.	Midwife	6	1	2
4.	Sister Nurse			1
5.	Staff Nurse			2
6.	Lab Technician			1
7.	OT Technician	9		3
8.	OT Assistant	5		3
9.	Dispenser			1
10.	Clerk			1
11.	Driver			1
12.	Storekeeper			1
13.	Naib Qasid	1	1	2
14.	Aya			3
15.	Attendant			2
16.	Chowkidar	1	1	2
17.	Bhishti / Malhi	1	1	1

18.	Sanitation Worker	1	1	3
19.	Vaccinator		2	

Data Source: DoH, GoS

5.1.4 Basic Health Unit (BHU)

The BHU is located in Union Council (, mostly one in a UC, but there are UCs having more than 2-3 BHUs) and serves usually a catchment population of up to 4,000-5,000. Services provided at BHU are promotive, preventive, curative and referral. Outreach EPI is one of the components of BHU. The facility provides all PHC services that include basic medical and surgical care, CDD, CDC, ARI, malaria and TB control. BHUs are equipped with a basic Laboratory facilities and a 02 beds inpatient facility. MCH services are also part of the services package being provided at BHU. BHU provides first level referral to patients referred by LHWs or who present at their own. BHU refers patients to higher level facilities (RHC/ THQH/DHQH) as and when necessary. The BHU also provides certain level of logistic and managerial support to the LHWs where they come on monthly basis and CMW shall receive technical support from health facility team as per CMW deployment guidelines.

Physical Standard: BHU

Building comprises service area and residential blocks.

Service area: It consists of OPD room for medics, a room for LHV, a room for health education, waiting area, dispensary, labor room (in some), small laboratory, two observational beds, vaccine storage room and stock room.

Residential block: comprises of residences for medics , paramedics and support staff.

Prerequisites:

Approachable by road, boundary wall and basic amenities of living, which include water supply, sewerage facility, electricity, telephone and gas provision.

Drugs and equipment:

A standard list of drugs and equipment for BHU has been prepared and given in the end of document.

Table 9: Details of services and activities BHU/UHU

Services at Basic Health Unit/ Urban Health Unit	Activities
Maternal & New born Health	
Antenatal care	<p>Pregnancy diagnosis, antenatal care visits including tetanus immunization, identification and management of high risk pregnancy, management of anemia and supply of iron/folate supplementation, management of inter-current illnesses including intestinal worms, Advanced Antenatal distribution of misoprostol and chlorhexidine, malaria, urinary tract infection</p> <p>Stabilization and referral of cases of APH, pre-eclampsia and eclampsia, incomplete abortion, ectopic pregnancy</p>
Natal care/Basic EmONC	<p>Conducting normal and assisted vaginal deliveries, parenteral oxytocin, bimanual compression of uterus, suturing tears, DNC, I/V fluid administration, manual removal of placenta and curettage.</p> <p>Stabilize and referral complicated cases such as convulsions due to eclampsia, obstructive labour and other cases which require caesarean section.</p>
Post natal care	<p>Identification, stabilization and referral of obstetric complications such as PPH, purperal sepsis, and use of Oxytocin and misoprostol, etc</p>
New-born care: resuscitation	<p>Early new- born care: clean airway, cord clamp/cutting, avoid hypothermia and recognizing danger signs, breast feeding promotion, New-born immunization.</p> <p>Newborn resuscitation through bag and mask, Kangaroo mother care</p> <p>Health promotion and education on new -born care</p>
Child Health	
	<p>EPI services including routine & outreach and support to NIDs</p> <p>Integrated management of neonatal & child illnesses (IMNCI) and referral of complicated cases</p> <p>Establishment of ORT corner and training of mothers and use of ORS</p> <p>Prevention, assessment and management of diarrheal diseases,</p>

	oral rehydration and administration of IV fluids, oxygen inhalation and nebulization
Nutrition Services	
	Counselling Infant feeding assessment/breast feeding support Infant/child growth monitoring Micro-nutrient supplementation Identification and management of malnutrition, identification of severe and moderate malnutrition in children with referral of cases of severe malnutrition to appropriate hospital/institute Deworming
Family Planning including IUD Insertion and removal	
	Counselling on family planning Provision and availability of contraceptive services (condoms, oral contraceptive, injectable, implants, and IUDs)
Control and management of communicable Diseases and Non communicable disorders	
	Symptomatic screening of suspected cases of TB, malaria, hepatitis and follow-up, Early detection of skin infections including scabies etc Clinical screening and treatment of STDs Curative care for common illnesses including: acute respiratory illnesses, GIT disorders, etc
Basic Emergency / First Aid Coverage	
	Management of minor injuries by minor surgical operations under local anaesthesia and stabilisation of cases of trauma, injuries, accidents etc Management of insect / snake/ dog bite, etc First aid and referral of poisoning (insecticide and pesticide) First aid and referral of patient with shock Provision of basic life support
Basic laboratory services	
	Basic laboratory services including blood Hb, urine albumin and blood sugar, pregnancy test, MP slides
Health Education	
	Conduct counselling sessions with individuals and the various community groups regarding health education on the topics: Maternal and new-born health, child health and development, family planning

	Breast feeding
	Communicable and non-communicable diseases
	Water and sanitation

Table 10: Staff of BHU/UHU

STAFF FOR BASIC HEALTH CENTRE/URBAN HEALTH UNIT				
S.No	NAME OF THE POST	BPS	STANDARD STAFF	CONSIDER THE MINIMUM FOLLOWING STAFF
1.	Medical Officer	17	1	1
2.	Health Technician (Male/Female)	9	1	1
3.	LHV			-
4.	Vaccinator		1	1
5.	Midwife	6	1	1
6.	Malhi	1	1	1
7.	Naib Qasid	1	1	1
8.	Chowkidar	1	1	1
9.	Sanitation Worker	1	1	1
10.	Attendant	2	2	2

Source: MSDP DoH, GoS 2010

5.1.5 Rural Health Centre (RHC)

The RHC functions 24 hours and covers a catchment area population of about 20,000-25,000, and providing a range of primary health care services. RHCs are equipped with a Laboratory and X-Ray facilities and 10-20 bedded inpatient facility. In addition to assisting normal deliveries, treating minor ailments, cases of childhood illness, treatment of uncomplicated cases of malaria. TB management, also manage minor complications. The staff comprises of male and female medical officers (seniors), dental surgeon, LHV, a midwife, laboratory technician, OT technician, dispenser and vaccinators. The RHC provides promotive, preventive, curative, diagnostics and referral services along with inpatient services. The RHC also provides clinical, logistical and managerial support to the LHWs and referral support to BHU and below. RHC also provides medico-legal (in many Centres), basic surgical, dental and ambulance service, etc.

Physical Standard: RHC

Building comprises service area and residential blocks.

Service area: It consists of OPD rooms for medical superintendent, specialists, medics, rooms for LHVs, a room for health education, waiting area, dispensary, labour room, dental room, laboratory, operation theatre and ten bed wards, vaccine storage room, stock room and a generator room and X-ray room.

Residential block: comprises of residences for doctors, paramedics and support staff.

Prerequisites:

Approachable by road, boundary wall and basic amenities of living, which include water supply, sewerage facility, electricity, telephone and gas provision

Drugs and equipment:

A standard list of drugs and equipment for RHC has been prepared.

Table 11: Details of services and activities (RHC/UHC)

Services at RHC	Activities
Maternal & new born health	
Antenatal care	Pregnancy diagnosis, antenatal care visits including tetanus immunization, identification and management of high risk pregnancy, management of anemia and supply of iron/folate supplementation, management of inter-current illnesses including intestinal worms, Advanced Antenatal distribution of misoprostol and chlorhexidine, malaria, urinary tract infection Stabilization and referral of cases of APH, pre-eclampsia and eclampsia, incomplete abortion, ectopic pregnancy
Natal care Basic EmONC	Conducting normal and assisted vaginal deliveries, parenteral oxytocin, bimanual compression of uterus, suturing tears, I/V fluid administration, manual removal of placenta, curettage. Manual Vacuum Aspiration (MVA) of retained products of conception Stabilize and refer complicated cases such as convulsions due to eclampsia including caesarean section
Post natal care	Give antibiotics, etc, breast examination, use of misoprostol
New-born care: resuscitation	Early new born care: clean airway, cord clamp/cutting, avoid hypothermia and recognizing danger signs, breast feeding promotion, new-born immunization, management of sepsis, and tetanus, jaundice, etc.
Child Health	
	EPI services including routine & outreach services and support to NIDs Integrated management of neonatal & Child illnesses (IMNCI) and referral of complicated cases Establishment of ORT corner and training of mothers and use of ORS Prevention, assessment and management of diarrheal diseases, oral rehydration and administration of IV fluids, oxygen inhalation and nebulization

Nutrition Services	
	<p>Counselling</p> <p>Infant feeding assessment/breast feeding support</p> <p>Infant/child growth monitoring</p> <p>Micro-nutrient supplementation</p> <p>Identification and management of malnutrition, Identification of severe and moderate malnutrition in children with referral of cases of severe malnutrition</p> <p>Deworming</p>
Family Planning IUD insertion and removal	
	Provision and availability of contraceptive services (condoms, oral, injectable) and ,implants and IUDs(interval and PPIUCDs)
Control and management of communicable Diseases	
	<p>Screening of cases of fever, and suspected cases of TB and Malaria, hepatitis diagnoses and treatment and follow-up of diagnosed cases</p> <p>Early detection of skin infections including scabies etc</p> <p>Clinical screening and treatment of STDs</p>
Control and management of Non-Communicable Diseases (NCDs)	
	<p>Management of hypertension, cardiovascular disorders, diabetes, chronic respiratory diseases, mental disorders including identification, management and referral of common mental disorders (depressive illness, psychosis, substance abuse disorders, epilepsy, anxiety disorders and post-traumatic stress disorders, clinicalscreening and referral of cancers</p>
Basic Emergency / First Aid Coverage	
	<p>Emergency health care services 24/7 and referral</p> <p>Indoor patient facility for various ailments</p> <p>Management of minor injuries by minor surgical operations under local anaesthesia and stabilisation of cases of trauma, injuries, accidents etc</p> <p>Management of insect / snake/ dog bite, etc</p> <p>Detection and management of poisoning</p> <p>Management of case with shock</p> <p>Provision of basic life support</p>
Basic Diagnostic/Investigations	

	Basic laboratory services including routine lab tests, haematological, urine analysis, pregnancy testing, sputum smear examination for TB and blood smear for malaria, blood typing, screening for HIV/AIDS and Hepatitis B & C, etc. X-ray facility and ultra sound
Health Education	
	Conduct counselling sessions with individuals and the various community groups regarding health education on the topics: maternal and new-born health, child health and development, family planning, breast feeding, communicable and non-communicable diseases

Table 12: Staff at RHC

STANDARD STAFF FOR RURAL HEALTH CENTRE			
SR. NO.	NAME OF THE POST	BPS	CONSIDER THE MINIMUM FOLLOWING STAFF
1.	Medical Superintendent	19	1
2.	Senior Medical Officer	18	1
3.	Senior Incharge Woman Medical Officer	19	1
4.	Ophthalmologist	18	1
5.	Anesthetist	18	1
6.	Senior Woman Medical Officer	18	1
7.	Medical Officer	17	3
8.	Woman Medical Officer	17	1
9.	Medical Officer (TB Clinic)	17	1
10.	Dental Surgeon	17	1
11.	Staff Nurse	14	4
12.	Dental Technician	9	1
13.	Laboratory Technician	9	1
14.	Lady Health Visitor	9	1
15.	Dispenser / Dresser	6	4
16.	X-Ray Technician	9	1
17.	Health Technician (Male)	9	1
18.	Health Technician (Female)	9	1

19	Junior Clerk	5	1
20	Driver	4	2
21	Ward Servant (Male)	2	3
22	Ward Servant (Female)	2	2
23	Laboratory Attendant	2	1
24	Naib Qasid	1	2
25	Chowkidar	1	2
26	Dental Attendant	2	1
27	Attendant (for Ophthalmologist)	2	1
28	Malhi	1	1
29	Dai	1	1
30	Sanitation Worker	1	6

Data source: DGHSS office

5.1.6 Rural Health Centre (to be strengthened for Comprehensive EmONC)

It is proposed that at least one RHC per district should be considered to be elevated to provide 24/7 comprehensive EmONC services. The selection of the RHC will be based on location, catchment population and turnover of patients. The specialized services will be provided at the selected RHC with involving the existing staff through 'Task Shifting'. Training to the exiting doctors and paramedics at that RHC will be provided so that their knowledge and skills get elevated to offer gynecologist, pediatrician, anesthetics, LHV, midwife, blood bank services in that particular RHC.

Physical Standard: RHC

A small blood bank is established.

Table 13: Additional services and activities at selected RHC

Services at RHC	Activities
Maternal & New born Health	
Comprehensive EmONC	C. Section, managing eclampsia,
Post natal care	Management of PPH by blood transfusion, I/V fluids, AMTSL (Misoprostol), Management of pleural sepsis
New-born care: resuscitation	Management of sepsis, tetanus and jaundice, screening of birth

	defects
Child Health	Treatment/Management of minor complications such as per IMNCI protocol
Nutrition Services	Identification and management of severe and moderate malnutrition
Family Planning	Provision of tubal ligation and vasectomy
Basic Diagnostic/Investigations	
	Blood typing, matching and donor identification and blood transfusion following safety measures including screening for HIV/AIDS and Hepatitis B & C, etc.

5.1.7 Health House of LHW

The LHW house is designated as a Health House. She is advised to establish a corner in the house where she can give counselling or treat minor illnesses. If possible, this place should display relevant posters. She is provided with the necessary material equipment and registers for recording her performance. Recording and reporting instruments include map of area, community chart, Khandan Register, Meeting register, treatment & Family planning register, LHW diary, growth chart, referral slip, monthly report form, LHW Kit Health Salter Scale, Thermometers, Scissors, Pencil Torch, Six Type Charts, snellen chart, medicine, Family planning and other supplies, House Board, Identity Card

5.1.8 Work Station of CMW

A room in the house of CMW will be her Work Station, which is a place where pregnant mothers will contact a CMW for consultation and examination. Please note that this will not be a Birthing Station as MNCH Programme promotes safe delivery at mothers' home. The programme intends to gradually replace TBAs with trained CMWs, and it is very important that they compete with TBAs for the socially acceptable practices for the place of birth without compromising the quality.

A CMW needs a small space of not more than 4x6 feet in a room near the exit door in her house for establishing her Working Station. The need and importance of a Work Station should be mentioned to CMWs during their training so that she and her family are well prepared to make some arrangement. This is also very important that choice of the corner

for Work Station should be made without disturbing family's privacy. MNCH Programme will provide an examination couch to place there for ANC and PNC check-ups. CMW will keep her equipment, medicines and supplies in a secured corner.

The CMW will also hang a poster on the most prominent wall of her work station highlighting her catchment population, its indicators for maternal and child health, list of danger signs during pregnancy, list of do's and don'ts for her, and the most appropriate facilities for referral for different situations and needs

CMW will hang a signboard of 3x4 feet on the wall above the front door of her house. The board provided by the NMNCH Programme will be made up of tin and color pink. The board will display her name, qualifications, affiliation with government, and a very brief summary of the services she provides. Her telephone number may also be mentioned.

6. ESSENTIAL HEALTH SERVICES

6.1 MATERNAL AND NEW-BORN HEALTH

The main care provider at the community level for pregnancy related services is the CMW, while the LHW provides preventive and referral services for supporting interventions. Similarly, at the PHC facility level the RHC and Maternity homes are better equipped in term of human resource and material to address the maternal and newborn health issues.

The table below list the various services that will be provided to a women at various level of PHC during her antenatal, natal and postnatal period. Moreover, list the basic and comprehensive EmONC services at PHC level and services to be offered to a new born. Few important events talked about in the context of MNCH PHC are:

Basic EmONC

1. Administer parenteral antibiotics
2. Administer uterotonic drugs (parenteral oxytocin, ergometrine, misoprostol)
3. Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (Magnesium sulphate, diazepam)
4. Perform manual removal of placenta
5. Perform removal of retained products (MVA, Misoprostol, E&C, without general anaesthesia); referral
6. Perform neonatal resuscitation (with bag and mask)

Comprehensive EmONC

- Caesarean section: Caesarean section will be preferred under spinal anaesthesia (SA) given its benefits over general anaesthesia. However, options for anaesthesia will vary according to the availability of trained staff.
- Blood transfusion services: Blood storage and transfusion services will be provided to support C-section services, by equipping the existing lab. This will be more efficient as space, equipment and supplies, such as centrifuge, refrigerator and microscope, will be shared. The lab technician will be trained in safe blood screening and transfusion services.
- Ambulance Services for prompt referral of complicated case

Maternal and New-born Health								
Service	Activities	PHC Facilities					Community Health Worker	
		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Antenatal Care	1.1. Health education on MNCH	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2. Identification and early registration of pregnant women	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.3. Assessment of pregnant woman: such as height, weight, height of funds, B.P., oedema, anemia, abdominal & breast examination and inquiry about vaginal discharge, , counselling on danger signs, birth planning, advanced antenatal distribution of misoprostol	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.4. To ensure 4 ANC checkups (during pregnancy i.e 1 st & 2 nd trimester, 8 th & 9 th month respectively	Yes	Yes	Yes	Yes	Yes	Ref	Yes
	1.5. Minimum laboratory investigations like haemoglobin estimation, urine for albumin and sugar.	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	1.6. Blood grouping	-	Yes	Yes	Yes	Yes	-	-
	1.7. Blood pressure monitoring	Yes	Yes	Yes	Yes	Yes	Ref	Yes
	1.8. Iron and Folic Acid supplementation and Nutritional	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	counseling							
	1.9. Tetanus Immunization	-	Yes	Yes	Yes	Yes	Ref	Ref
	1.10. Symptomatic management of intestinal worms, malnutrition, malaria, UTI & STI	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	1.11. Management of complicated cases of intestinal worms, malnutrition, malaria, UTI & STI	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	1.12. Identification of high risk pregnancies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.13. Treatment of Vit A deficiency (if night blindness appears in last trimester)	Administer Vit A / if required Ref	Administer Vit A / if required Ref	Administer Vit A / if required Ref	Administer Vit A / if required Ref	Administer Vit A / if required Ref	Ref	Ref
	1.14. Management of shock	Stabilize /Ref	Stabilize /Ref	Stabilize /Ref	Stabilize /Ref	Stabilize /Ref	Ref	Stabilize /Ref
2. Natal care	2.1. Identify true labour and monitor, progression of labour – partograph	-	Yes	Yes	Yes	Yes	-	Yes
(Basic EmONC)	2.2. Danger signs in the first, second and third stages of labour	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.3. Prepare environment and materials following infection control protocols	Yes	Yes	Yes	Yes	Yes	-	Yes
	2.4. Identify and refer complicated labour	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.5. Conduct normal delivery	-	Yes	Yes	Yes	Yes	-	Yes
	2.6. Conduct Assisted Vaginal Delivery (AVD) - MVA, and Forceps	Ref	Yes	Yes	Yes	Yes	-	-
	2.7. Administer intravenous (IV) fluids	Yes	Yes	Yes	Yes	Yes	-	Yes
	2.8. Administer parenteral Oxytocin	-	Yes	Yes	Yes	Yes	-	Yes
	2.9. Administer parenteral anticonvulsants	Yes	Yes	Yes	Yes	Yes	-	-
	2.10. Administer parenteral antibiotics	Yes	Yes	Yes	Yes	Yes	-	Yes
	2.11. Transfuse safe blood	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	2.12. Prevention of PPH, (Bimanual compression of uterus)	-	Yes	Yes	Yes	Yes	-	Yes
	2.13. Recognition and Repair/Suturing	-	Yes	Yes	Yes	Yes	-	Yes

		of 1st and 2nd degree vaginal tears							
	2.14.	Recognition and referral to hospital for 3rd degree vaginal & cervical tears	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.15.	Manual removal of placenta	Ref	Yes	Yes	Yes	Yes	Ref	Yes
	2.16.	Manual Vacuum Extraction/Evacuation and Curettage	Ref	Ref	Yes	Ref	Yes	Ref	Ref
	2.17.	Management of prolapsed cord	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.18.	Management of shoulder dystocia	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.19.	Manage prolonged and obstructed labor	Ref	Ref	Yes	Ref	Ref	Ref	Ref
	2.20.	Administer Ergometrine	Yes	Yes	Yes	Yes	Yes	-	Yes
	2.21.	Caesarean section	Ref	Ref	Ref	Ref	Ref	Ref	Ref
3. Post natal care	3.1.	Breast examination for breastfeeding management	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	3.2.	Iron and folic acid supplementation misoprostil administration	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	3.3.	Management of PPH, shock							
		Diagnosis	Yes	Yes	Yes	Yes	Yes	-	Yes
		First aid, supportive management and referral	Yes	Yes	Yes	Yes	Yes	-	Yes
		Treatment	Ref	Ref	Yes	Ref	Ref	Ref	Ref
		I/V fluids	Yes	Yes	Yes	Yes	Yes	-	Yes
	3.4.	Blood transfusion	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	3.5.	Management of puerperal sepsis	Ref	Ref	Yes	Ref	Yes	Ref	Ref
	3.6.	Oral antibiotics	Yes	Yes	Yes	Yes	Yes	-	Yes
4. Family Planning	4.1.	Counseling on family planning methods to enhance CPR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.2.	Provision of contraceptives/family planning interventions							
		Condoms	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Pills	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Injections	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		IUDs	-	Yes	Yes	Yes	Yes	-	Yes
		Implants	-	-	Yes	-	Yes	-	-
		Tubal ligation	-	-	Yes	-	-	-	-
		Vasectomy	Ref	Ref	Ref	Ref	Ref	Ref	Ref

	4.3.	Referral of couple for infertility to THQ/DHQ hospital	Yes	Yes	Yes	Yes	Yes	Yes	Yes
The two critical elements of immediate Essential New-born Care includes: (a) preventing hypothermia by maintaining the body temperature, and (b) maintaining the airway and breathing. Besides these, essential new-born care includes other measures like breastfeeding the baby within half-an-hour of birth, taking care of the cord and eyes and promoting exclusive breastfeeding for 6 months (only breast milk and not even water).									
5. Newborn Care	5.1.	Information, education & communication	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	5.2.	Neonatal resuscitation	Yes	Yes	Yes	Yes	Yes	-	Yes
	5.3.	During delivery: ENC including clean airway, clean clamp and cord cutting, weighing baby	-	Yes	Yes	Yes	Yes	-	Yes
	5.4.	Avoid hypothermia and ensure exclusive breast feeding including colostrums	-	Yes	Yes	Yes	Yes	Yes	Yes
	5.5.	Immunization (see relevant section)							
	5.6.	Identify and Manage neonatal jaundice and infections	Ref	Yes	Yes	Ref	Yes	Ref	Ref
	5.7.	Manage neonatal complications	Ref	Ref	Ref	Ref	Ref	Ref	Ref

6.2 CHILD HEALTH AND DEVELOPMENT

6.2.1 Child development and Integrated management of neonatal and childhood illness (IMNCI):

The initially IMCI strategy was designed on the recognition of limited number of clinical signs and symptoms of childhood illnesses, such as pneumonia, diarrhoea, measles, malaria, and malnutrition, which claimed to kill 70% of under-five children. The guidelines relied on the detection of cases using simple clinical signs without laboratory tests and offered empirical treatment. The scope of IMNCI was premeditated to cover only children aged seven days to five years (excluding the first week of life) and targeted health workers at primary-care facilities. Subsequently the newborn care was recognized as critical component of child survival and it was strengthened by mounting the newborn-care component of the capacity building training program and including prevention and management of health conditions in the early neonatal period and was labeled as IMNCI.

Child Health and Development (IMNCI Protocol)			
Service	Activities	PHC Facilities	Community Health Worker

		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Child Development	1.1. Observe child development milestones	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. IMNCI	2.1. Assessment of Childhood illness	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.2. ARI Management (cold, cough, fever)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.3. Management of child with fast breathing (signs of mild Pneumonia)	Yes	Yes	Yes	Yes	Yes	Anti biotics/ Ref er	Anti biotics/ Ref er
	2.4. Management of severe Pneumonia	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	2.5. Management of convulsing child	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	2.6. Child with wheeze	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	2.7. Oxygen/Nebulization /Bronchodilator Inhalation	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	2.8. Management of Diarrhea	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.9. Management of severe Diarrhea	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	2.10. Management of Fever, acute illness of childhood illness	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.11. Management of case of Measles/Tetanus	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	2.12. Management of acute malnutrition	Yes	Yes	Yes	Yes	Yes	-	-

6.2.2 Immunization

Immunization services are the backbone of PHC services. Recently, with the involvement of LHW in EPI services it is expected that the routine immunization coverage will increase. The LHWs will augment the role of vaccinators in the community while they perform the outreach vaccination.

Below are some operational features of immunization activities in the community:

- LHWs will administer vaccines (mainly OPV, TT) and will be supported by the vaccinator in provision of vaccines and supplies.

- LHW will ensure that children under 5 years and pregnant women have 100% vaccination in her catchment area, as this is among her prime responsibilities.
- LHW's health house will also be a focal point for the vaccinator to coordinate with LHW for vaccination of children and mother in her catchment area.
- The LHW will support the vaccinator in his outreach vaccination services by organizing the women and children in the community for their vaccination.
- All Static centers (BHUs/RHCs and MCH centers) will be responsible for routine immunization of children and pregnant women for TT vaccination and will maintain the Cold Chain and will have outreach vaccinators
- Vaccination status of all children less than five years of age and women of reproductive age visiting any BHU and RHC and MCH-will be assessed through vaccination cards.
- Routine immunization and missed out dose/s will be administered at the facility, and an immunization card will be issued with the instructions to share the card with the LHW.
- Will manage the side effects and complications of vaccinations
- Under the provincial routine EPI programme five vaccines are administered to children, pregnant women and child bearing age (CBA) women. These are; BCG, OPV, Pentavalent (DPT+HB+Hib), Measles and TT. Pneumococcal vaccine for the children has recently started which has follow the same schedule as for the pentavalent vaccine. The Rota Virus vaccine will be introduced in coming years.

Child and Maternal Immunization									
Service	Activities		PHC Facilities					Community Health Worker	
			Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
3. Immunization	3.1.	Giving polio drops on all NIDs and SNIDs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	3.2.	Vaccinating new born	-	Yes	Yes	Yes	Yes	Ref	Ref
	3.3.	Vaccinating out-of schedule child	-	Yes	Yes	Yes	Yes	Ref	-
	3.4.	Assess immunization status and refer in case of complications (AEFI)	Ref	Yes	Yes	Yes	Yes	Ref	Ref

	3.5.	Routine immunization	-	Yes	Yes	Yes	Yes	Ref	-
	3.6.	Storage of vaccines	-	Yes	Yes	Yes	Yes	-	-
	3.7.	Recordkeeping/updating immunization cards	-	Yes	Yes	Yes	Yes	Yes	-
	3.8.	Outreach vaccination	-	Yes	Yes	Yes	Yes	-	-
	3.9.	TT vaccination of women /CBA	-	Yes	Yes	Yes	Yes	Facilitate	-
	3.10.	TT vaccination pregnant women	-	Yes	Yes	Yes	Yes	-	-
	3.11.	Disease surveillance & case reporting	-	Yes	Yes	Yes	Yes	-	-

Adolescent Health: Young people between the ages of 10-19 years (storm age) are not only adventurous but vulnerable to different influences, accidents, violence, and other illnesses. Young males encounter certain reproductive health issues. While females, due to early age marriages (12-17 ages) are confronted with pregnancy and poor reproductive outcomes as well. Therefore, there is a need to promote healthy life style behaviours, including teaching the youth about RH systems and roles and responsibilities of both men and women in building a healthy family, imparting knowledge about menstrual cycle to females and educating about risks involved in early age marriages and pregnancies. Also part of intersectoral strategy

4. Adolescent Health (Innovation)	4.1.	Life skill based education (LSBE)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.2.	Promoting healthy life behaviors	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.3.	Role of youth in making healthy families	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.4.	Imparting education about RH systems and menstrual cycle	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.5.	Education risk early age marriages & pregnancy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5. School Health Services	5.1.	School Health Services (linkage of schools with PHC centers)	Yes	Yes	Yes	Yes	Yes	-	-
	5.2.	Screening for eye sight	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	5.3.	Screening for hearing	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	5.4.	Deworming	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	5.5.	Screening for skin problems	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	5.6.	Educate & ensure oral hygiene services	Yes	Yes	Yes	Yes	Yes	Ref	Ref
	5.7.	Educate & ensure personal hygiene services	Yes	Yes	Yes	Yes	Yes	Ref	Ref

6.3 Nutrition

The key target groups for prevention and management of malnourishment includes children and pregnant and lactating women. Categories are:

- Severe Acute Malnourished (SAM) children
- Moderate Acute Malnourished (MAM) children
- Chronic malnourished children
- Malnourished Pregnant/Lactating women (PLW)

The services which will be provided to these children and women through PHC approach is listed below:

Nutrition								
Service	Activities	PHC Facilities					Community Health Worker	
		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Nutrition	1.1. Nutritional counseling and promotion (breast feeding, weaning, balance diet, use of iodized salt, etc)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2. Assessment (screening) of nutritional status							
	Community based screening (children under 5 and lactating mothers)	-	-	-	-	-	Yes	Yes
	Growth monitoring	Yes	Yes	Yes	Yes	Yes	Yes	-
	Referral to facility after screening at community level (mild and sever	-	-	-	-	-	Yes	Yes
	1.3. Prevention of malnutrition							
	Support and promote exclusive breastfeeding upto 6 month after which addition of weaning	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Screening malnutrition in pregnant and lactating women	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Promote exposure to sunshine for women and children to avoid vitamin D deficiency	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Promotion of iodized salt	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Iron supplementation for children 6 months to 5 years	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Zinc supplement for treatment and prevention of diarrhea (children under five years)	Yes	Yes	Yes	Yes	Yes	Yes	-
	Multi-micronutrient sachet for children 6-24 months of age (Innovation)	-	-	-	-	-	Yes	-
	Iron/Folic acid supplementation for pregnant and lactating women	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Iron tablets for women of child bearing age	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	Deworming of children under 5 years	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Management of Malnutrition							
	Screening/identification cases of severe and moderate acute malnutrition in children (SAM/MAM)	Yes	Yes	Yes	Yes	Yes	-	-
	Treatment of SAM (child) with nutrition supplement, Ready to use therapeutic food (RUTF)-Innovation	-	Yes	Yes	Yes	Yes	-	-
	Treatment of malnourished pregnant mother	Yes	Yes	Yes	Yes	Yes	-	-
	Identification & referral of SAM children with complications	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	Treatment of anemia in women and children	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.4. Vitamin A supplementation (along with NIDs)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

6.4 Control of communicable diseases

Infectious diseases continue to be the world's leading killer in developing countries and poor people, women, children, and the elderly are the most vulnerable. The goal is to reduce the negative impact of communicable diseases on health and social well-being as effective and cheap interventions are available for most of them.

Dealing with these diseases needs strong vector control, surveillance systems, community mobilization, and capacity building. Strengthening of health systems and better use of existing tools is crucial to prevent and control the following diseases, which are a major public health problem. Role of community health workers is a key to identify the suspects of communicable disease and prompt referral. In addition, they can play a crucial role in raising awareness among the community about prevailing communicable diseases.

Control of Communicable Diseases and Common Ailments								
Service	Activities	PHC Facilities					Community Health Worker	
		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Skin Infections	1.1. Information, education and communication	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2. Identification of skin problems including scabies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.3. Initial diagnosis and management of skin problems including scabies	Yes	Yes	Yes	Yes	Yes	Ref	Ref
2. TB	2.1. Information, education, communication	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.2. Identification of suspected TB cases on the basis of clinical symptoms	Yes	Yes	Yes	Yes	Yes	Yes	

	2.3.	Screening of suspected TB cases and their contacts (Sputum smear , X Ray chest (in case of smear –ve cases)	Ref	Ref	Ref	Ref	Yes	Ref	Ref
	2.4.	Treatment of diagnosed TB cases	Ref	Ref	Ref	Yes	Yes	-	-
	2.5.	Data recording	-	-	-	-	Yes	-	-
	2.6.	Follow-up of TB cases	-	-	-	Ref	Yes	Ref	-
3. Malaria	3.1.	Information, education & communication and promote use of insecticide treated bed nets / LLIN	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	3.2.	Clinical diagnosis of malaria	Yes	Yes	Yes	Yes	Yes	Yes	-
	3.3.	Collection of slides of suspected malaria cases		Yes	Yes	Yes	Yes	-	-
	3.4.	Microscopy of slides of suspected malaria cases	-	-	-	-	Yes	-	-
	3.5.	Treatment of un complicated cases of malaria	Yes	Yes	Yes	Yes	Yes	-	-
	3.6.	Treatment of complicated cases of malaria	Ref	Ref	Ref	Ref	Ref	-	-
4. Dengue	4.1.	Information, education & communication and promote use of insecticide treated bed nets / LLIN	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.2.	Clinical screening of dengue	Yes	Yes	Yes	Yes	Yes	-	-
	4.3.	Confirmation of suspected dengue cases	-	-	-	-	Yes	-	-
	4.4.	Treatment cases of dengue	-	-	-	-	Yes	-	-
5. Hepatitis	5.1.	Information, education, communication on hepatitis A& E, B&C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	5.2.	Screening for hepatitis (RDTs) and vaccination	-	Yes	Yes	Yes	Yes	-	-
	5.3.	Treatment of hepatitis B& C of registered cases	Ref	Ref	Ref	Ref	Ref	Ref	Ref
6. STIs	6.1.	Information, education communication	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	6.2.	Syndrome based screening	Yes	Yes	Yes	Yes	Yes	-	-
	6.3.	Treatment (syndrome based management)	-	Yes	Yes	Yes	Yes	-	-
7. HIV/AIDS	7.1.	Information, education, communication on HIV/AIDS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	7.2.	Screening (RDTs) & referral of HIV/AIDS cases to appropriate level	-	-	-	-	Yes	-	-
	7.3.	Treatment of HIV/AIDS cases	Ref	Ref	Ref	Ref	Ref	Ref	Ref
8. Typhoid	8.1.	Clinical screening	Yes	Yes	Yes	Yes	Yes	-	-

	8.2.	Confirmatory diagnosis and treatment	-	-	-	-	Yes	-	-
	8.3.	Complicated cases	Ref	Ref	Ref	Ref	Ref	Ref	Ref
9. GIT problems	9.1.	Acute Diarrhoea	Yes	Yes	Yes	Yes	Yes	Yes	-
	9.2.	Chronic Diarrhoea	Ref	Ref	Ref	Ref	Yes	-	-
	9.3.	Dysentery	Yes	Yes	Yes	Yes	Yes	-	-
10. Respiratory tract problems	10.1.	Common cold and cough	Yes	Yes	Yes	Yes	Yes	Yes	-
	10.2.	Acute Bronchitis	Yes	Yes	Yes	Yes	Yes	-	-
	10.3.	Pneumonia	-	-	-	-	Yes	-	-
	10.4.	COPD	-	-	-	-	Yes	-	-

6.5 Control of non communicable diseases

In recent years, the province of Sindh has observed an increase in burden of diseases including cardiovascular diseases and hypertension, diabetes, chronic respiratory diseases and mental illness. The response to such problems requires a multi-prong approach through involvement of all levels of health care delivery and district /facility teams as a key player.

The PHC system can be used for:

- Early identification, prevention, treatment/referral of the major NCD affected patients
- Health care providers should be trained on treatment protocols of NCDs
- They should coordinate with community based workers in their catchment areas
- Must have an adequate supply of medicines to manage major NCDs.
- According to WHO, Cardiovascular disease (CVD), cancer, respiratory disease and diabetes are the leading causes of death in low-income countries. Low income group people are most at risk of developing chronic diseases and dying prematurely, as they have higher rates of exposure to risk factors such as smoking and maternal under-nutrition. Also, poor patients are likely to get benefit from early detection and proper management, although, their poverty contributes directly to the higher prevalence of NCDs and mortality rates. NCDs also restrict people from gainful employment due to frequent exacerbations of the illness. Furthermore, hospital care to deal with serious conditions such as heart attacks, strokes, complications of diabetes requires huge expenditures which are difficult to afford.

Control of Non Communicable Diseases								
Service	Activities	PHC Facilities					Community Health Worker	
		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
All NCDs	Information, education communication on NCDs including healthy life style, disability prevention	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hypertension	Identification/screening	Yes	Yes	Yes	Yes	Yes	-	-
	Treatment of routine cases	Yes	Yes	Yes	Yes	Yes	-	-
	Management of complications	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Diabetes Mellitus	Identification/ Screening	Yes	Yes	Yes	Yes	Yes	-	-
	Treatment of routine cases	Yes	Yes	Yes	Yes	Yes	-	-
	Management of complications	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Coronary Artery Disease and Stroke	Identification	Yes	Yes	Yes	Yes	Yes	-	-
	Treatment of routine cases	Yes	Yes	Yes	Yes	Yes	-	-
	Management of complications	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Mental Disorders	Attention deficit disorder	Ref	Ref	Ref	Ref	Ref	-	-
	Generalized anxiety disorder							
	Identify	Yes	Yes	Yes	Yes	Yes	-	-
	Manage	Ref	Ref	Ref	Ref	Ref	-	-
	Depression (including postpartum depression)	Ref	Ref	Ref	Ref	Ref	-	-
Drug Abuse	Screening	Yes	Yes	Yes	Yes	Yes	Yes	-
	Treatment	Ref	Ref	Ref	Ref	Yes	Ref	-
Epilepsy	Symptomatic Screening	Yes	Yes	Yes	Yes	Yes	Yes	-
	Diagnosis	-	-	-	-	-	-	-
	Treatment	-	-	-	-	Yes	-	-
Cancers	Symptomatic Screening (Breast, cervical)	Yes	Yes	Yes	Yes	Yes	Yes	-
	Diagnosis	Ref	Ref	Ref	Ref	Ref	Ref	-
	Treatment	Ref	Ref	Ref	Ref	Ref	Ref	-
Asthma	Symptomatic Screening	Yes	Yes	Yes	Yes	Yes	Yes	-

Diagnosis	-	-	-	-	-	-	-
Follow-up treatment	-	Yes	Yes	Yes	Yes	Ref	-
Management of complicated cases	Ref	Ref	Ref	Ref	Ref	Ref	-

6.6 Dental and oral health

Oral Health is essential to general health and quality of life. It is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing.

The most common oral diseases are dental cavities, periodontal (gum) disease, oral cancer, oral infectious diseases, trauma from injuries, and hereditary lesions. Severe periodontal (gum) disease, which may result in tooth loss, is found in 15–20% of middle-aged (35-44 years) adults. Worldwide, 60–90% of school children and nearly 100% of adults have dental cavities.

- At the community level, oral hygiene will be promoted by the LHWs and CMWs.
- Health education regarding oral hygiene will be promoted as part of the overall hygiene practices.
- Dental treatments will be offered and mainly at RHCs, whereas the problem could be identified at all levels of PHC

Dental and Oral Health									
Service	Activities		PHC Facilities					Community Health Worker	
			Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Dental & Oral Health	1.1.	Health education on dental and oral hygiene	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2.	Treatment of toothache	Yes	Yes	Yes	Yes	Yes	-	-
	1.3.	Management of gingivitis	-	-	-	Yes	Yes	-	-
	1.4.	Filling	-	-	-	-	Yes	-	-
	1.5.	Scaling	-	-	-	-	Yes	-	-

1.6.	Tooth Extraction	-	-	-	-	Yes	-	-
1.7.	Treatment of oral thrush	-	-	-	-	Yes	-	-
1.8.	Treatment of oral ulcers	-	-	-	-	Yes	-	-

6.7 Basic emergency and first aid services

First aid is the provision of initial care for an injury or illness to an injured or sick person until definitive medical treatment can be accessed. It generally consists of a series of simple and in some cases, potentially life-saving techniques that an individual can be trained to perform with minimal equipment.

The key aims of first aid are to:

- **Preserve life:** the overriding aim is to save lives.
- **Prevent further harm:** such as by moving a patient away from any cause of harm, or applying first aid techniques to prevent worsening of the condition, such as applying pressure to stop a bleed becoming dangerous.
- **Promote recovery:** first aid also involves trying to start the recovery process from the illness or injury, and in some cases might involve completing a treatment, such as in the case of cleaning and dressing a small wound.

Basic Emergency and First Aid Services

Service	Activities	PHC Facilities					Community Health Worker	
		Dispensary	MCH Centre	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Basic Emergency	1.1. Information, Education, Communication on Basic emergency and first aid	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2. Prompt management of minor injuries	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.3. Stabilize & prompt referral of serious injuries to THQ/DHQ Hospital	Yes	Yes	Yes	Yes	Yes		Yes
	1.4. Diagnosis and management of acute poisoning due to pesticides & insecticides	Stabilize & Ref.	Stabilize & Ref	Stabilize./Ref	Yes	Yes	Ref	Ref
	1.5. Diagnosis, management /referral of insect bite, snakebite and dog bite cases	Stabilize &	Stabilize &	Yes	Yes	Yes	Ref	Ref

		Ref	Ref					
1.6.	Detection & management/referral of cases of acute shock	Stabilize &Ref	Stabilize &Ref	Stabilize &Ref	Stabilize &Ref	Yes	Ref	Ref
1.7.	Cardio pulmonary Resuscitation (CPR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1.8.	Stabilize and referral of road traffic accidents	Stabilize &Ref	Stabilize &Ref	Stabilize &Ref	Stabilize &Ref	Yes	Ref	Ref

6.8 Allied services

The care providers in the PHC facility and at the community level will primarily focus on early detection of various types of disabilities and will refer to the appropriate source of care. Any potential limitation in function that could be aggravated in the future can also be identified by the CMWs and LHWs at the community level, while facilities will also focus on identification, prompt and appropriate referral.

The identification of goiter can be done at the PHC level and on identification could be referred to appropriate level such as DHQH or Tertiary level facility. Certain social issues surround our society, though less talked publicly and have unknown information on the prevalence of such problem in Pakistan. One such issue is the occurrence of domestic violence, which is perceived more in the rural community, for which PHC could be the first level of support. The PHC level can help in identifying such issues and can arrange for appropriate referral.

The use of tobacco in all of its form i.e. smoking and smokeless tobacco (niswar, gutka, etc) is on an increase in Pakistan. The province of Sindh with no exception is facing a huge burden of tobacco related health issues. Smoking is the lead cause of heart problems and cancer. Similarly, it is highly associated with the occurrence and aggravation of many respiratory conditions and diseases. The use of chewing tobacco is a major risk factor to oral cancers. One form of such chewing tobacco is gutka along with which pan with tobacco is also highly prevalent in the province of Sindh. This calls for an attention to such allied health issues by considering possibility of opening “cessation clinics” in few selected PHC outlets in each district which could help people to quit smoking and use of smokeless tobacco. The burning of wood and other materials for cooking and heating is quite common in rural settings. With the increase in power shortage, the use of such materials has increased in the recent years. The smoke from burning of wood and related materials is strongly associated

with the occurrence of eye problems and respiratory problems. Appropriate education is required for such patients who visit the PHC outlets with such problems and guidance should be provided by which they can protect them from the exposure of domestic smoke. Similarly, the LHWs and CMWs can also play an important role in making such awareness in the communities.

Allied Services									
Service	Activities		PHC Facilities					Community Health Worker	
			Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Disability prevention	1.1.	Identify/screening physical disability	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2.	Identify visual disability	Ref	Ref	Ref	Ref	Yes	Ref	Ref
	1.3.	Screening hearing disability	Ref	Ref	Ref	Ref	Yes	Ref	Ref
	1.4.	Treat physical, visual and hearing disability	Ref	Ref	Ref	Ref	Ref	Ref	Ref
2. Control of iodine deficiency	2.1.	Health education about illnesses due to iodine deficiency	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.2.	Clinical screening/Identification of goitre and referral	Ref	Ref	Ref	Ref	Ref	Ref	Ref
3. Rehabilitation service	3.1.	Referral to appropriate source	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. Domestic violence	4.1.	Educate about domestic violence	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	4.2.	Referral to appropriate source	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5. Smoking & tobacco use	5.1.	Educate about smoking hazards and cessation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	5.2.	Run smoking quit lines	-	-	-	-	*Yes	-	-
	5.3.	Give smoking replacement therapy	-	-	-	-	*Yes	-	-
	5.4.	Educate about hazards of second hand smoke and smoking inside homes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Domestic smoke	6.1.	Educate about hazards of smoke from wood, etc	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*At selected RHCs in the district

6.9 Infection control

Standard precautions to be observed by all providers at all levels, which are relevant for all procedures including maternal, neonatal and infant care. The focus of infection control activities, which are cross cutting across all services are:

- Hand hygiene between routine examination of clients, and before, during and after any procedure. Personal protective equipment (PPE) for protecting personnel against infections should be used.
- Environmental management including cleaning and disinfection of surfaces, equipment and supplies.

Infection Control									
Service	Activities		PHC Facilities					Community HealthWorker	
			Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Hand wash (soap and water)	1.1.	After physical examination	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.2.	After treatment procedure	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.3.	After removing gloves	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.4.	Educate patient to wash hand before eating and after using toilet	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Wear glove (sterile or highly disinfected)	2.1.	When performing any procedure (vaginal examination, drawing blood, applying stitches, handling and cleaning instruments, etc)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Sample collection	3.1.	In ventilated room	-	-	Yes	Yes	Yes	-	-
4. Sterilization	4.1.	All instruments by autoclave	-	Yes	Yes	-	Yes	-	-
	4.2.	All instruments by disinfectant (Use bleach for cleaning	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	bowls and buckets, and for blood or body fluid spills)							
	4.3. Contaminated clothing or sheets stained with blood or body fluids. DO NOT touch them directly. (Rinse off blood or other body fluids before washing with soap)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5. Personal Hygiene	5.1. Keep hairs and nails short	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	5.2. Rap hairs especially while examining patients (female care provider)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	5.3. Educate patients to take regular bath and wash cloths regularly	Yes	Yes	Yes	Yes	Yes	Yes	Yes

6.10 Waste disposal

Waste handling, management and disposal, including for infectious and non-infectious waste should be done at all levels with provision of locally produced incinerators at least at the level of RHCs.

Waste disposal									
Service	Activities	PHC Facilities					Community HealthWorker		
		Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW	
1. Safe waste disposal	1.1. Drop all used (disposable) needles, plastic syringes and blades directly into a container, without recapping, and without passing to another person.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	1.2. Dispose of placenta or blood, or body fluid contaminated items in leak-proof containers	Yes	Yes	Yes	Yes	Yes	-	Yes	

1.3.	Low cost incinerator to burn solid waste	-	-	-	-	Yes	-	-
1.4.	Bury solid waste	Yes	Yes	Yes	Yes	Yes	Yes	Yes

6.11 Emergency preparedness and disaster management

In recent years, the province of Sindh has been badly affected by floods. This has resulted in a large number of displaced populations which are highly vulnerable to all sorts of diseases and prone to epidemics outbreaks in the form of measles, cholera, malaria, and water born diseases. The response to such emergencies requires a multi-sectoral approach through involvement of various departments including education. Social welfare, agriculture, food, public health, revenue, police, etc in a district among which department of health is a key player.

The PHC system can be used for:

- Preparing plans to address such emergencies
- Doctors and other staff should be trained on responding to outbreaks
- They should be trained to manage outreach camps in their catchment areas
- Must have an adequate buffer supply of medicines which could be utilize immediately in case of such emergencies.

Emergency preparedness and Disaster Management									
Service	Activities	PHC Facilities					Community Health Worker		
		Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW	
1. Natural and Manmade emergencies and disasters	1.1. Plan available to respond to the emergency/ disaster	-	-	-	Yes	Yes	-	-	
	1.2. Additional supplies to address emergencies	-	-	-	Yes	Yes	-	-	
	1.3. Linkages with related departments in the district (such as..)	-	-	-	Yes	Yes	-	-	
	1.4. Organize Camps	Yes	Yes	Yes	Yes	Yes	-	Yes	

6.12 Eye, Ear, Nose and Throat care

Eye care and ear, nose and throat (ENT) services will focus on prevention and early detection of any impairments such as reduced sight or hearing ability at the community level and infection or defect such as DNS. Suspected cases will be referred to the BHU by CMWs and LHWs, and from there onwards to the appropriate health facility as per need. Minor eye and ear problems will be managed at the level of RHC whereas the complicated cases will be referred to THQH/DHQH. Similarly minor nose and throat infection will be managed at all PHC facilities where as complicated cases will be referred to the hospitals.

Eye, Ear, Nose and Throat care									
Service	Activities		PHC Facilities					Community HealthWorker	
			Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1. Eye conditions	1.1.	Diagnosis and treatment of common eye diseases (e.g. viral conjunctivitis, etc)	-	-	Yes	Yes	Yes	-	-
	1.2.	Check visual acuity using Snellen chart	-	-	-	Yes	Yes	-	-
	1.3.	Detection of cataract cases and referral for surgery	-	Yes	Yes	Yes	Yes	-	-
	1.4.	Referral of glaucoma	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	1.5.	Diagnosis and Referral of trachoma	-	-	-	-	Yes	-	-
2. Ear conditions	2.1.	Treatment of otitis media	-	-	-	-	Yes	-	-
	2.2.	Referral of complicated cases	Yes	Yes	Yes	Yes	Yes	-	-
3. Nose conditions	3.1.	Treatment of minor infections	Yes	Yes	Yes	Yes	Yes	-	-
	3.2.	Management of complicated cases (DNS, polyps, etc)	Ref	Ref	Ref	Ref	Ref	-	-
4. Throat conditions	4.1.	Treatment of minor infections	Yes	Yes	Yes	Yes	Yes	-	-
	4.2.	Management of complicated cases (chronic tonsillitis, etc)	Ref	Ref	Ref	Ref	Ref	-	-

7. Diagnostic services at primary health care

Sr.#	Services	Health Facility level					Community level	
		Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW
1.	Laboratory Services							
a.	Haematology (such as CP, ESR, etc)		Yes	Yes		Yes		
b.	Hb		Yes	Yes		Yes		
c.	Hepatitis B and C		Yes	Yes	Yes	Yes		
d.	Syphilis tests			Yes		Yes		
e.	HIV test					Yes		
f.	Bacteriology					Yes		
g.	Serology					Yes		
h.	Clinical Pathology (routine, albumin, glucose, stool)		Yes	Yes		Yes		
i.	Pregnancy test	Yes	Yes	Yes	Yes	Yes	-	Yes
j.	Biochemistry					Yes		
k.	Gram Stain					Yes		
l.	MP microscopy					Yes		
m.	Combo RDT kit	Yes	Yes	Yes	Yes	Yes	Yes	
2.	Imaging/Other Services							
a.	X-Rays		Yes	Yes		Yes		
b.	Ultrasound		Yes	Yes	Yes	Yes		
c.	ECG		Yes	Yes		Yes		

8. Essential drug list

The proposed Essential Drug List (EDL) for LHW, CMW, MCH center and Dispensary is given below.

The department of Health Sindh has recently endorsed the EDL for the level of BHU and RHC (given below)

Table 14: Essential Medicines by facility and provider levels

S. No.	Class/Name	CMW	LHW	Dispensary	MCH
A	Analgesics, antipyretics, non-steroidal anti-inflammatory drugs				
1	Tab. Aspirin (Soluble) 300mg.	-	-	Yes	Yes
2	Tab. Ibuprofen 400mg.	-	-	Yes	Yes
3	Susp. Ibuprofen 100mg/5ml.	-	-	Yes	Yes
4	Syp/Susp/Elixir. Paracetamol 120mg/5ml.	-	Yes	Yes	Yes
5	Tab. Paracetamol 500mg	Yes	Yes	Yes	Yes
6	Inj. Diclofenac Sodium 75mg/3ml.	-	-	Yes	Yes
7	Tab. Diclofenac Sodium 50mg	-	-	Yes	Yes
B	Antibacterial drugs/ Antiprotozoal				
8	Inj. Ampicillin 250mg	-	-	Yes	Yes
9	Inj. Gentamycin 10 mg	-	-	Yes	Yes
10	Tab. Nalidixic acid 250 mg, 500 mg	-	-	Yes	Yes
11	Inj Chloramphenicol IM 1g sodium succinate in vial	-	-	Yes	Yes
12	Cap. Amoxicillin 250mg.	Yes	-	Yes	Yes
13	Cap. Amoxicillin 500mg.	Yes	-	Yes	Yes
14	Inj. Amoxicillin 250mg.	-	-	Yes	Yes
15	Inj. Amoxicillin 500mg.	-	-	Yes	Yes
16	Susp. Amoxicillin 250mg/5ml.	-	Yes	Yes	Yes
17	Tab. Amoxicillin + Clavulanic acid 500 mg + 125 mg	-	-	Yes	Yes
18	Syp. Amoxicillin + Clavulanic acid 125+31.25 mg	-	-	Yes	Yes
19	Inj. Benzyl Penicillin 5,00,000 units.	-	-	Yes	Yes
20	Inj. Benzyl Penicillin 10,00,000 units.	-	-	Yes	Yes
21	Tab. Ciprofloxacin 250mg.	-	-	Yes	Yes
22	Tab. Ciprofloxacin 500mg.	-	-	Yes	Yes

23	Inf Ciprofloxacin 100 mg/ 50 ml	-	-	-	Yes
24	Inf Ciprofloxacin 200 mg/ 100 ml	-	-	-	Yes
25	Syp/Susp. Ciprofloxacin 125 mg/5 ml	-	-	-	Yes
26	Syp/Susp. Ciprofloxacin 250 mg/5 ml	-	-	-	Yes
27	Tab. Metronidazole 200 mg and 400mg	Yes	-	Yes	Yes
28	Metronidazole vaginal cream	Yes	-	-	-
29	Tab. DiloxanideFuroate 500mg.	-	-	Yes	Yes
30	Susp. Metronidazole 5 ml/200mg	-	-	Yes	Yes
31	Tab. DiloxanideFuroate 250 mg.	-	-	Yes	Yes
32	Tab. Erythromycin 250 mg	-	-		
33	Susp. Erythromycin 200mg/5ml	-	-	Yes	Yes
34	Cap. Tetracycline 250 mg	-	-	Yes	Yes
35	Tab. Azithromycin 1g.	-	-	Yes	Yes
36	Tab. Doxycycline cap 100 mg	-	-	Yes	Yes
37	Tab. Sulfamethoxazole + Trimethoprin (400 mg +80 mg)	-	-	Yes	Yes
38	Susp. Sulfamethoxazole + Trimethoprim 200mg+40mg/5ml	-	-	Yes	Yes
39	Inj. Ceftriaxone 250mg and 500mg	-	-	Yes	Yes
40	Syp. Piperazine	-	Yes	-	-
41	Tab. Cefaclor 50/500 mg	Yes	-	-	-
C	Antiallergics and drugs used in anaphylaxis				
42	Tab. Chlorpheniramine Maleate 4mg.	-	Yes	Yes	Yes
43	SypChlorpheniramine Maleate 2mg/5ml	-	-	Yes	Yes
44	Inj. Dexamethasone 4mg/ml.	-	-	Yes	Yes
45	Inj Adrenaline 1 in 1000 (0.1%)/1mg/ml	-	-	Yes	Yes
46	Hydrocortisone Powder for inj.250mg (assodium succinate)in vial	-	-	Yes	Yes
47	Hydrocortisone Powder for injection , 100mg(as sodium succinate)in vial	-	-	Yes	Yes
D	Oxytocics				

48	Inj. Methyl Ergometrine 0.2mg/ml.	Yes	-	Yes	Yes
49	Inj. Oxytocin 10 IU/ml.	Yes	-	Yes	Yes
50	Tab Misoprostol 200 mcg	Yes	-	Yes	Yes
E	Anti-oxytotic/tocolytic				
51	Tab Nifedipine 20mg	Yes	-	-	Yes
F	Contraceptives				
52	Male Condoms	Yes	Yes	Yes	Yes
53	Contraceptives (IUCD)	Yes	-	Yes	Yes
54	Norethisteroneenanthate (8 weekly) Inj. 200mg/ml	Yes	Yes	Yes	Yes
55	Medroxyprogesterone acetate (12 weekly) Inj. 150mg	-	-	Yes	Yes
56	Norethisterone + ethinyloestradiol Tab. 1mg + 35mcg	Yes	Yes	Yes	Yes
57	Levonorgestrel + ethinyloestradiol Tab. 150mg + 30mg	-	-	Yes	Yes
58	Contraceptive emergency: Levonorgestrel Tab 30mcg, 750mcg, 1.5mg	-	-	Yes	Yes
G	Oral Rehydration				
59	ORS	-	Yes	Yes	Yes
60	Low osmolarity ORS (20.5 g sachet)	-	Yes	Yes	Yes
61	Zinc Sulphate Suspension (20mg, bottle of 60 ml)	Yes	Yes	Yes	Yes
62	Tab. Zinc Sulphate	Yes	-	Yes	Yes
H	Parasitic Infections				
63	Tab. Mebendazole 100 mg	Yes	Yes	Yes	Yes
64	Syp. Mebendazole 100mg/5ml in 30ml	-	-	Yes	Yes
I	Antimalarial (Malaria Control Program)				
65	Syp. Chloroquine Sulphate/Phosphate equivalent to 50mg base/5ml.	-	-	Yes	Yes
66	Tab. Chloroquine Sulphate/Phosphate	-	Yes	Yes	Yes

	250 mg				
67	SypChloroquinSulphate 50 mg/5 ml		Yes		
68	Tab. Sulfadoxin 500mg+ Pyrimethamine 25mg	-	-	Yes	Yes
69	Syp. Sulfadoxin500mg+ Pyrimethamine 25mg/5ml	-	-	Yes	Yes
70	Tab Artesunate 50mg	-	-	Yes	Yes
71	Tab Primaquine phosphate 15 mg base	-	-	Yes	Yes
J	Antituberculosis drugs (TB program)				
72	Tab Ethambutol 400 mg Strip/blister	-	-	Yes	Yes
73	Tab Rifampicin+Isoniazid 150 mg + 100 mg strip/blister	-	-	Yes	Yes
74	Tab Rifampicin+Isoniazid 300 mg + 150 mg Strip/blister	-	-	Yes	Yes
75	Tab. Isoniazid+Ethambutol 150 mg + 400 mg strip/blister	-	-	Yes	Yes
76	Tab. Rifampacin+Isoniazid+ Pyrazinamide+Ethambutol 150mg+75mg+400mg+275mg strip/blister	-	-	Yes	Yes
77	Inj. Streptomycin (powder) 1g (as sulfate) in vial	-	-	Yes	Yes
78	Tab. Isoniazid 100mg	-	-	Yes	Yes
K	Antifungal Drugs				
79	Vaginal cream Clotrimazole 2%	-	-	Yes	Yes
80	Skin cream Clotrimazole 1%.	-	-	Yes	Yes
81	Ointment or Cream Benzoic Acid +Salicylic Acid 6% + 3%	-	-	Yes	Yes
82	Tab. Nystatin 500,000 iu	-	-	Yes	Yes
83	Oral drops Nystatin 100,000 iu/ml	-	-	Yes	Yes
L	Antianemia drugs				
84	Tab. Ferrous sulphate	-	-	Yes	Yes
85	Tab. Ferrous Fumarate + Folic Acid	Yes	Yes	Yes	Yes

	(150mg+0.5 mg blister strip)				
M	Scabicides and pediculicides				
86	Lotion/Emulsion Benzyl Benzoate 25%	-	Yes	Yes	Yes
87	Cream Permethrin 5%	-	-	Yes	Yes
N	Antipruritic				
88	Lotion Calamine 15%	-	-	Yes	Yes
O	Anticonvulsant				
89	Tab. Phenobarbitone 30mg.	-	-	Yes	Yes
90	Syp. Elixir Phenobarbitone 20mg/ 5ml	-	-	Yes	Yes
91	Inj. Magnesium Sulphate 500mg/ml	Yes	-	Yes	Yes
P	Diuretics				
92	Tab. Furosemide 40 mg Strip/blister	-	-	Yes	Yes
93	Inj. Furosemide 20 mg /2ml	-	-	Yes	Yes
94	Tab. Hydrochlorthiazide 25 mg	-	-	Yes	Yes
95	Tab. Spironolactone 25mg	-	-	Yes	Yes
Q	Antihypertensive/ cardiovascular drugs				
95	Tab. Atenolol 50mg.	-	-	Yes	Yes
96	Tab. Atenolol 100 mg.	-	-	Yes	Yes
97	Tab. IsosorbideDinitrate 10mg	-	-	-	Yes
98	Tab. Dispirin CV/Loprin 75mg	-	-	-	Yes
99	Tab. GlycerylTrinitrate Sublingual 0.5 mg	-	-	Yes	Yes
100	Tab. Propranolol 40mg Strips/blister	-	-	Yes	Yes
101	Tab. Amlodipine Tab 5mg	-	-	-	Yes
102	Tab. Enalapril maleate 5mg	-	-	-	Yes
103	Tab. Methyl Dopa 250mg	-	-	-	Yes
R	Antacids and other anti-ulcer				
104	Tab. Aluminium Hydroxide 250mg + Magnesium Trisilicate 500mg	-	-	Yes	Yes
105	Cap. Omeprazole 20mg	-	-	Yes	Yes
106	Tab. Ranitidine 150mg.	-	-	Yes	Yes

107	Tab. Ranitidine 300mg.	-	-	Yes	Yes
108	Inj. Ranitidine 50mg/2ml.	-	-	-	Yes
S	Anti-emetic drugs				
109	Tab. Metoclopramide 10mg.	-	-	Yes	Yes
110	Syp. Metoclopramide 5mg/5ml.	-	-	Yes	Yes
111	Inj. Metoclopramide 5mg/ml.	-	-	Yes	Yes
112	Tab. Dimenhydrinate 50mg	-	-	Yes	Yes
113	Syp. Dimenhydrinate 12.5mg/4ml	-	-	Yes	Yes
114	Inj. Dimenhydrinate 10mg/2ml	-	-	Yes	Yes
T	Antispasmodic drugs				
115	Tab. Hyoscine butyl bromide 10 mg	-	-	Yes	Yes
116	Inj. Hyoscine butyl bromide 20mg/2ml	-	-	Yes	Yes
U	Laxatives				
117	Ispaghul Husk	-	-	Yes	Yes
118	Glycerine Suppository	-	-	Yes	Yes
119	Enema-small and large	-	-	Yes	Yes
V	Antidiabetic				
120	Tab. Metformin 500mg	-	-	Yes	Yes
121	Tab. Glibenclamide 5mg	-	-	Yes	Yes
122	Inj. Insulin 40 IU/ml	-	-	Yes	Yes
123	Inj. Insulin 100 IU/ml	-	-	Yes	Yes
W	Ophthalmic preparation				
124	Eye Drops Chloramphenicol 0.5%	-	-	Yes	Yes
125	Eye ointment Tetracycline 1%	-	-	Yes	Yes
126	Eye drops 10% Sulphacetamide	-	-	Yes	Yes
127	Eye ointment PolymyxinB+Bacitracin Zinc 10,000iu+500iu	Yes	-	Yes	Yes
X	Ear drops				
128	Ear Drops Chloramphenicol 1%	-	-	Yes	Yes
129	Ear drops Soda glycerine	-	-	Yes	Yes
130	Ear drops Chloramphenicol	-	-	Yes	Yes
131	Ear drops PolymyxinB+LignocaineHCl	-	-	Yes	Yes

	10,000iu+ 50mg				
Y	Antiasthmatic drugs				
132	Inj. Salbutamol 0.5mg/ml.	-	-	-	Yes
133	Salbutamol Inhalation 100mcg/dose for use in nebuliser	-	-	Yes	Yes
134	Tab. Salbutamol 2mg.	-	-	Yes	Yes
135	Tab. Salbutamol 4mg.	-	-	Yes	Yes
136	Syp. Salbutamol 2mg/5ml.	-	-	Yes	Yes
137	Inj. Aminophyllin 250mg	-	-	Yes	Yes
138	Tab. Theophyllin SR 200mg	-	-	Yes	Yes
139	Tab. Prednisolone 5mg	-	-	Yes	Yes
Z	Antitussives				
140	Cough Syrup-5ml: TriprolidineHCl. 1.25mg + Pseudoephedrine HCl . 30mg +Dextromethorphan HBr. 10mg.	-	-	Yes	Yes
AA	Antidepressants/ Anxiolytics				
141	Tab. Diazepam 2mg	-	-	Yes	Yes
142	Tab. Diazepam 5mg	-	-	-	Yes
143	Cap Fluoxetine 20mg	-	-	Yes	Yes
BB	Vitamins and minerals				
144	Cap. Vitamin A	Yes	-	Yes	Yes
145	Tab. Calcium	-	-	Yes	Yes
146	Tab Ascorbic Acid 100mg	-	-	Yes	Yes
147	Cap. Vitamin A 50,000 IU, 100,000 IU, 200,000 IU	-	-	Yes	Yes
148	Tab. Pyridoxin 50mg	-	-	Yes	Yes
149	Syp. Multivitamin	-	-	Yes	Yes
150	Inj. Vitamin K 10mg/1ml	-	-	Yes	Yes
151	Cap. Vitamin A&D	-	-	Yes	Yes
152	Multi-micronutrient Supplementation (Sprinkles Sachet)	-	Yes	Yes	Yes
153	Syp Vitamin B		Yes		

CC	Antidotes and other substances used in poisonings				
154	Inj Naloxone 400mcg/ml	-	-	Yes	Yes
DD	Disinfectants, antiseptics and anti-infectives				
155	Sol Povidone-Iodine 10%	Yes	-	Yes	Yes
156	Surgical Scrub Povidone-Iodine 7.5%.	-	-	Yes	Yes
157	Sol Hydrogen peroxide 6%	-	-	Yes	Yes
158	Paint Gentian violet 0.5%, 1%,	-	-	Yes	Yes
159	Sol Methylated spirit			Yes	Yes
160	Sol 4% Chlorhexidine	Yes	-	Yes	Yes
161	Sol ChlorhexidineGluconate (1.5%-bottle of 50 ml)		Yes		
EE	Parenterals				
162	Infusion Normal Saline.	Yes	-	Yes	Yes
163	Infusion Dextrose in water 5%.	Yes	Yes	Yes	Yes
164	Infusion Hartman's solution.	-	-	-	Yes
165	Infusion Ringer Solution	Yes	-	Yes	Yes
166	InfHaemaccel 3%, 5%	-	-	-	-
FF	Topical antibiotics/ antibacterials				
167	Silver sulphadiazene 1% cream	-	-	Yes	Yes
168	Tetracycline Oint. 1%	-	-	Yes	Yes
169	Skin Ointment/Cream Miconazole Nitrate 2 %, Gentamicin 0.1%	-	-	-	Yes
170	Skin Ointment Polymyxin B Sulphate 10000 Units Zinc Bacitracin 500 Units.	-	Yes	-	Yes
GG	Anesthetics				
170	Inj. Lignocaine Solution 2%.	-	-	Yes	Yes
171	Inj. Lignocaine Solution 4%.	-	-	Yes	Yes
172	Inj. Ketamine HCl 50 mg/ml.	-	-	-	Yes
173	Isoflurane liquid - inhalation	-	-	-	Yes
174	Nitrous oxide - inhalation	-	-	-	Yes

175	Sevoflurane liquid - inhalation	-	-	-	Yes
176	Oxygen				Yes
177	Injection Propofol 200mg	-	-	-	Yes
178	Inj. Thiopentone sodium 500mg	-	-	-	Yes
179	Sol 7.5% Glucose	-	-	-	-
180	InjLidocaine 1%, 2%, 5% solution/2ml ampoule	-	-	-	-
HH	Preoperative/postoperative medication				
181	Inj. Diazepam Inj 2ml/5mg	-	-	Yes	Yes
182	Inj Atropine Sulphate 1mg (sulphate) in 1 ml ampule	-	-	Yes	Yes
183	Inj Tramadol 100mg	-	-	-	Yes
II	Vaccines				
184	Tetanus toxoid	-	-	Yes	Yes
185	BCG vaccine	-	-	Yes	Yes
186	OPV vaccine	-	-	Yes	Yes
187	Pentavalent vaccine	-	-	Yes	Yes
188	Measles vaccine	-	-	Yes	Yes
189	Pneumococcal vaccine	-	-	Yes	Yes
JJ	Other medical/surgical supplies				
190	Cotton roll	Yes	Yes		
191	Absorbent Cotton Bandage BPC 6.5cmx6m.	-	Yes	Yes	Yes
192	Cotton Crepe Bandage	-	-	Yes	Yes
193	Surgical Gauze BPC cloth	Yes	-	Yes	Yes
194	Adhesive Plaster B.P.C.	Yes	-	Yes	Yes
195	Surgical Hypoallergenic Latex Free Breathable Paper Tape	Yes	-	-	Yes
196	Bandage Plaster of Paris BPC.	-	-	-	Yes
197	Gloves	-	-	-	Yes
198	Surgical Gloves (all sizes), sterilized	Yes	-	Yes	Yes

199	Utility Gloves (all sizes)	Yes	-	Yes	Yes
200	Syringes, Cannulae and needles	Yes	-	Yes	Yes
201	Disposable Insulin Syringe 1ml with needle	-	-	Yes	Yes
202	Disposable Syringe 3ml with needle	-	-	Yes	Yes
203	Disposable syringe 5ml with needle	Yes	-	Yes	Yes
204	Disposable syringe 10ml with needle	-	-	Yes	Yes
205	IV Cannula with Injection Port and Integrated Closing Cone Size 20	-	-	Yes	Yes
206	IV Cannula with Injection Port and Integrated Closing Cone Size 24	-	-	Yes	Yes
207	IV set (Sterile)	Yes	-	Yes	Yes
208	Urine Bag (Adult) with no return valve	-	-	Yes	Yes
209	LP/Spinal Anaesthesia Needles (All Sizes)	-	-	-	-
210	Foley's Catheters Two way Silicon Coated (All Sizes)	Yes	-	Yes	Yes
211	Black Silk size 1, 30mm, 3/8 Circle Curved Cutting needle.	Yes	-	Yes	Yes
212	Poly Propylene size 1, 40mm, Straight Cutting needle,	-	-	Yes	Yes
213	Catgut Chromic Size 1, with 45/50mm Intestinal Eye less RB Needle,	Yes	-	Yes	Yes
214	Examination Gloves Standard size,	Yes	-	Yes	Yes
215	Absorbent Cotton wool BPC	-	-	Yes	Yes
216	Blood Lancet	-	-	Yes	Yes
217	Endotracheal Tubes without Cuff (Size 3.0, 3.5, 4.0, 4.5, 7.0 and 7.5)	-	-	-	-
218	Foley's Catheters (Size 12, 14 and 16)	-	-	Yes	Yes
219	Stomach Tube (Size 12, 14, 16 and 18)	-	-	Yes	Yes
220	Feeding Tubes (Size 6, 8 and 10)	-	-	-	-
221	Sterile water for injection	-	-	Yes	Yes
222	Xylocain Gel for cathetrization	-	-	Yes	Yes

Table 15: EDL BHU

S#	Therapeutic Class	Sr. #	Generic Drug Name	Form	Strength
A	Anaesthetics Local	1	Lidocaine (hydrochloride)	Vial	2%w/v
				Topical	2%Gel
B	Analgesics / NSAIDs	2	Acetylsalicylic acid (Dispersible)	Tablets	300 mg
		3	Mefenamic Acid	Tablets	250 mg
		4	Diclofenac (sodium)	Ampule	75 mg in 3ml
		5	Ibuprofen	Tablets	200,400mg
				Syrup	100mg/5ml
		6	Paracetamol	Tablets	500mg
				Syrup	125mg/5ml
				Suppository	100mg
C	Antiallergics and Medicines used in Anaphylaxis	7	Chlorpheniramine (hydrogen maleate)	Tablets	4mg
				Syrup	2mg/ml
				Injection	10mg/ml
		8	Dexamethasone (disodium phosphate)	Injection	4mg/ml
		9	Epinephrine (adrenaline)	Ampule	1mg/ml
		10	Hydrocortisone (sodium succinate)	Injection	100,250 mg
		11	Prednisolone	Tablets	5 mg
	ANTI-INFECTIVES				
D	Antibiotics	12	Amoxicillin (Preferably dispersible tablets)	Capsules	250,500 mg
				Syrup	125 & 250/5ml
				Injection	
		13	Ciprofloxacin (hydrochloride)	Tablets	250,500mg
		14	Cotrimoxazole (sulfamethoxazole + trimethoprim)	Tablets	400+80mg
				Syrup	200mg+40mg/5ml
		15	Metronidazole (benzoate)	Tablets	200, 400 mg
				Syrup	200 mg /5ml
E	Antihelminthic	16	Mebendazole (chewable)	Tablets	100,500 mg

F	ANTI-Fungal	17	Nystatin	Tablets	500,000 IU
				Drops	100,000 IU/ml
		18	Clotrimazole	Vaginal cream	1%
				Vaginal tablets	100,500mg
				Oral Liquid	25 mg/ml
		20	Isoniazid	Tablets/ Syrup	50,100,300mg
		21	Pyrazinamide	Tablets	500 mg
		22	Rifampicin	Capsules/ Syrup	150,300,450,600
		23	Streptomycin	Injection	1gm
		24	Etahambutol+Isoniazid	Tablets	400+150mg
		25	Isoniazid + Rifampicin	Tablets	
		26	Isoniazid + Pyrazinamide +Rifampicin	Tablets	75+400+150mg
		27	Rifampicin+ Isoniazid + Pyrazinamide +Etahambutol	Tablets	150+75+400+275 mg

		28	Etahambutol+Isoniazid+ Rifampicin	Tablets	275+75+150mg
H	Antimalarial For Vivax For Falciparum To be used in combination (coblister)	29	Cholroquine (phosphate or sulfate)	Tablets	150mg
		30	Primaquine(diphosphate)	Tablets	15mg
		31	Sulphadoxine + Pyrimethamine Co-blister / combined therapy	Tablets	500+25mg
		32	Artesunate	Tablets	50mg
I	Anti-Diabetics	33	Glibenclamide	Tablets	5 mg
		34	Metformin (hydrochloride)	Tablets	500 mg
		35	Insulin Regular	Tablets	100 IU/ml
		36	Insulin comp	Tablets	30+70 % w/v

J	Cardiovascular Drugs	37	Furosemide	Tablets	20,40mg
				Injection	10mg

K	GIT Drugs	38	Glyceryl Trinitrate	Sublingual	500mg
		39	Methyldopa	Tablets	250mg
		40	Enalapril (Maleate)	Tablets	5,10 mg
		41	Hyoscine (Butylbromide)	Tablets	4mg/ml
				Injection	10mg
		42	Phloroglucinol	Tablets	Phloroglucinol +Trimethylphloroglucinol 80mg
		43	Metoclopramide (hydrochloride) +	Tablets	10mg
				Syrup	5mg/5 ml
				Injection	10mg
		44	Omeprazole	Capsules	20 mg
L	Respiratory Drugs	45	Ranitidine	Injection	25mg/ml in 2ml
		46	Aluminium Hydroxide + Magnesium Trisilicate	Tablets	250mg/+500mg
		47	ORS (Low osmolarity)	Sachet	WHO Specs
M	Miscellaneous	48	Glycerin	Suppository	
		49	Solbutamol (sulfate)	Tablets	2.4mg
				Solution	5 mg/ml for nebulizer
M	For Eclampsia only	50	Aminophylline	Injection	25mg/ml
		51	Atropine (sulfate)	Ampule	1 mg in 1ml
		52	Charcoal Activated	Powder	
		53	Diazepam	Injection	10 mg
		54	Magnesium Sulphate	Injection	500mg/ml
		55	Naloxone (hydrochloride)	Injection	400 mcg in 1 ml
		56	Oxygen Concentrator / Cylinder		

N	Ophthalmic / ENT	57	Boroglycerine		40.00%
		58	Chloramphenicol	Eye Drops	1 %w/v, 0.5 %w/v
		59	Gentamycin (sulfate)	Eye Drops	0.30%
		60	PolymixineB (Sulphate)+ Bacitracin Zinc	Eye Drops	10000IU/g + 500IU/g
O	I/V Infusions Plasma Substitutes	61	Dextrose + Saline	Infusion	5 % +0.9% w/v
		62	Glucose / Dextrose	Infusion	5.10 %
		63	Normal Saline	Infusion	0.9%
		64	Ringer's Lactate	Infusion	CaCl 0.2 g/L KCL 0.3 g/L NaCl 6+ g/L lactate 3.1 g/L
		65	Water for Injection	Ampule	5 ml ,10ml
P	Vitamins & Minerals Micronutrients	66	Ascorbic Acid	Tablets	50, 100, 500 mg
		67	Calcium Gluconate	Injection	100 mg/ml in 10-ml
		68	Calcium Lactate	Tablets	500mg, 1gm
		69	Ergocalciferol (Vitamin D)	Tablets	1.25 mg (50 000 IU)
		70	Ferrous salt (Fumerate)	Tablets	Equ 60 mg
				Syrup	
		71	Folic acid	Tablets	1 & 5mg
		72	Ferrous salt + Folic Acid	Tablets	DRAP approved
		73	Multiple Micronutrients	Sachet	UNICEF approved
		74	Retinol (Vitamin A)	Tablets	100 mg
		75	Zinc Sulphate	Dispersible Tablets	20 mg
		76	B Complex	Tablets	DRAP approved
		77	Multivitamins	Tablets	DRAP approved
Q	Dermatological	78	Benzyl Benzoate	Lotion	5% & 25%
		79	Calamine	Lotion	15%

		80	Hydrocortisone	Cream	1%
		81	PolymixineB (Sulphate)+ Bacitracin Zinc	Ointment	1000U/g + 500 U/g
		82	Silver Sulphadiazine	Cream	1 %
R	Oxytocic Drugs	83	Ergometrine ((hydrogen maleate)	Injection	200 mcg in 1ml
		84	Misoprostol	Tablets	200 mcg
		85	Oxytocin	Injection	10 IU in 1-ml

S	Contraceptives	86	Condoms		
		87	Ethynylestradiol + Norethisterone	CO Pills	35mcg + 1mg
		88	Levonorgestrel	CO Pills	30 mcg
		89	Copper T / Multiload	IUCD	
		90	DMPA (medroxyprogesterone acetate)	Injection	150 mg 1ml
		91	Norethisterone enantate	Injection	200 mg/ml in 1ml
T	Vaccines &Sera	92	BCG Vaccine	Injection	WHO Approved
		93	DPT Vaccine	Injection	
		94	Hepatitis Vaccine	Injection	
		95	Measles Vaccine	Injection	
		96	Polio Vaccine (OPV trivalent)	Oral	
		97	Pentavalant Vaccine	Injection	
		98	Pneumococcal Vaccine	Injection	
		99	Tetanus Toxoid	Injection	
		100	Anti-Rabies Vaccine (PVRV)	Single dose vi	2.5 iu
		101	Anti-Snake Venum Serum	Injection	
U	Antiseptics/Disinfectants	102	Povidone-Iodine	Solution	10 %w/v
		103	Chlorine base compound	Powder	(0.1% available chlorine) for solution
		104	Chlorhexidine + Ceterimide	solution	1.5%w/v + 15%w/v
V	Disposable Supplies	105	Syringe (Autodisable)	Sterile Packs	1cc, 5cc
		106	I.V Sets (DRAP approved)	Sterile Packs	
		107	I.V Canula (DRAP approved)	Sterile Packs	16G, 20G, 24G
		108	Adhesive Tape (Hypoallergenic)	Roll	1, 2 inch
		109	Surgical Gauze		40 M
		110	Cotton Bandage	Roll	6.5cm x 2m
		111	Absorbant Cotton	Pack	500gm

		Wool		
	112	Examination Gloves	Pairs	Box of 100
	113	Sterile Surgical Gloves	Pairs	7, 7½
	114	Silk Sutures	Sterile Packs	0, 1/0, 2/0, 3/0, 4/0
	115	Face Masks Disposable		
	116	Blood Lancets	Sterile Packs	
	117	Slides		
	118	Safe Delivery Kits	Sterile Packs	

Indicates similar clinical performance within a pharmacological class

Indicates that there is an age or weight restriction on use of the medicine

Signifies that there is a specific indication for restricting its use to children

Table 16: Emergency Tray for BHU

Emergency Tray for BHU			
S #	Items Name	Strength	Qty
1.	Injection Tranexamic Acid	250mg/5ml	2
2.	Injection Atropine	1mg/1ml	2
3.	Injection Adrenaline	1mg/ml	3
4.	Injection Diazepam	5mg/ml	5
5.	Injection Diclofenac Sodium	25mg/ml	2
6.	Injection Hydrocortisone sodium	100mg	1
7.	Injection Chlorpheniramine	10 mg/ml	2
8.	Injection Lidocaine	2% W/V	5
9.	Water for injection,	5ml	5
10.	Injection ringer lactate	500ml	2
11.	Injection Normal Saline	500ml	2
12.	Injection Glucose / Dextrose	25%	2
13.	Glyceryl Trinitrate Sublingual	500 mcg	

14.	<i>Isosorbide dinitrate Sublingual</i>	<i>5 mg</i>	
15.	<i>Lidocaine</i>	<i>gel</i>	1
16.	<i>Cotton Roll</i>	<i>500gms</i>	1
17.	<i>Compression bandage</i>		5
18.	<i>D/S</i>	<i>5 cc</i>	10
19.	<i>IV set</i>		5
20.	<i>IV Cannula</i>	<i>18G, 20G, 22G, 24G</i>	10
21.	<i>Silk Sutures Sterile Packs</i>	<i>0, 1/0, 2/0</i>	10
22.	<i>ETT</i>	<i>(3 mm, 3.5 mm, 4 mm, 7.5 mm, 8mm,)</i>	10
23.	<i>Foleys catheter</i>	<i>all sizes (10 F to 28 F)</i>	12
24.	<i>NG Tube</i>	<i>(14-18 Fr, infant/child: 10-14 Fr)</i>	10

Source: EDLs Department of Health, Sindh

Table 17: ELD for RHCs

Sr. #	Therapeutic Class	Sr. #	Generic Drug Name	Form	Strength
A	Anaesthetics Local	1	Lidocaine (hydrochloride)	Ampoule	2%w/v
				Topical forms	2%Gel, 4%Solution
		2	Lignocaine + Epinephrine (adrenaline)	Injection	2% + 1:200 000
		3	Lignocaine + Epinephrine (adrenaline)	Dental cartridge	2% + 1:80 000
B	Analgesics Opioid	4	Morphine (Sulphate or Hydrochloride)	Ampoule	10 mg 1-ml
		5	Pethidine (Hydrochloride)	Ampoule	50 mg/ml in 2ml
C	Analgesics / NSAIDs	6	Acetylsalicylic acid (Dispersible)	Tablets	300 mg
		7	Mefenamic Acid	Tablets	250 mg
				Suspension	50mg/5ml
		8	Diclofenac (sodium)	Tablets	50 mg
				Ampoule	75 mg in 3ml

		9	Ibuprofen +	Tablets	200, 400 mg
				Syrup	100 mg/5ml
		10	Paracetamol	Tablets	500 mg
				Injection	150 mg/ml
				Syrup	125 mg / 5ml
				Suppository	100 mg
D	Antiallergics and Medicines used in Anaphylaxis	11	Chlorpheniramine (hydrogen maleate)	Tablets	4 mg
				Injection	10 mg/ml
				Syrup ©	2 mg / ml
		12	Dexamethasone (disodium phosphate)	Injection	0.5 mg
				Tablets	0.5 mg
		13	Epinephrine (adrenaline)	Ampoule	1 mg /m
		14	Hydrocortisone (sodium succinate)	Injection	100, 250 mg
		15	Promethazine (HCL)	Tablets	25 mg
				Syrup ©	25 mg/5ml
				Injection	25 mg/ml in 2ml
		16	Prednisolone	Tablets	5 mg
E	Antidotes and Other Substances used in Poisonings	17	Atropine (sulfate)	Ampoule	1 mg in 1ml
		18	Charcoal Activated	Powder	
		19	Diazepam	Injection	10 mg
		20	Methylthioninium chloride (methylene blue)	Ampoule	40mg/ml -in 10ml
		21	Naloxone (hydrochloride)	Ampoule	400 mcg in 1ml
F	Anti-Epileptics	22	Carbamazepine	Tablets	200 mg
				Syrup	100mg / 5ml
	For Eclampsia only	23	Magnesium Sulphate	Injection	500mg/ml

G	Antihelminthic	26		Tablets	200 mg
		24	Phenobarbital (sodium)	Tablets	30 mg
			Phenytoin (Sodium)	Injection	200 mg /ml
		25	Phenytoin (Sodium)	Tablets	100 mg
				Syrup	100 mg / 5ml
		27	Mebendazole (chewable)	Tablets	100 mg
		28	Pyrantel (pamoate)	Tablets	250 mg
				Syrup	250 mg / 5ml
H	Anti-Fungal	29	Clotrimazole	Vaginal cream	1%
				Vaginal cream	100, 500 mg
				Topical Cream	1 %w/w
		30	Nystatin	Tablets	500,000 IU
				Drops ©	100,000 IU/ml
I	ANTI-INFECTIVES	31	Amoxicillin (trihydrate) (Preferably dispersible tablets)	Capsules	250, 500 mg
				Syrup	125 & 250 /5ml
				Injection	250, 500 mg
		32	Ampicillin (sodium)	Capsules	250, 500 mg
				Syrup	125 & 250 /5ml
				Injection	250, 500 mg
		33	Azithromycin	Capsules	250, 500 mg
				Suspension	125mg / 5ml in 22.5ml
		34	Benzathine Penicillin	Injection ©	0.6, 1.2 m IU
		35	Chloramphenicol	Capsules	250 mg
			(palmitate)	Syrup	125 mg / 5ml
			(sodium succinate)	Injection	1 gm
		36	Cefixime* (trihydrate)	Capsules	400 mg
		37	Ciprofloxacin (hydrochloride)	Tablets	250, 500 mg
		38	Cotrimoxazole sulfamethoxazole + trimethoprim)	Tablets ©	400 + 80 mg
				Syrup ©	200mg + 40mg/5 ml
		39	Doxycycline (hyclate)	Caps	100 mg
		40	Gentamicin (sulfate)	Injection	40, 80 mg
		41	Metronidazole (benzoate)	Tablets	200, 400 mg
				Syrup ©	200 mg / 5ml
				Infusion	5mg/ml in 100ml
		42	Nitrofurantoin	Tablets	100 mg
		43	Procaine benzylpenicillin	Injection	1, 3 m IU
		44	Phenoxymethylpenicillin (potassium)	Tablets	250, 500 mg
				Syrup ©	125 mg / 5ml
J	Anti-Tuberculosis	45	Ethambutol	Tablets	400 mg

	Drugs As per national program guidelines			Oral Liquid ©	25 mg/ml
		46	Isoniazid	Tablets/Syp©	50, 100, 300 mg
		47	Pyrazinamide	Tablets	500 mg
		48	Rifampicin	Caps / Syp ©	150, 300, 450,600
		49	Streptomycin	Injection	1 gm
		50	Ethambutol + Isoniazid	Tablets	400 + 150 mg
		51	Isoniazid + Rifampicin	Tablets	75 + 150; 150 + 300mg
		52	Isoniazid + Pyrazinamide + Rifampicin	Tablets	75 + 400 + 150 mg
		53	Rifampicin + Isoniazid + Pyrazinamide + Ethambutol	Tablets	150+75+ 400+250mg
		54	Ethambutol + Isoniazid + Rifampicin	Tablets	275 + 75 + 150 mg
K	Anti-Diabetics	55	Glibenclamide	Tablets	5 mg
		56	Metformin (hydrochloride)	Tablets	500 mg
		57	Insulin Regular	Injection	100 IU / ml
		58	Insulin comp	Injection	30 + 70 % w/v
L	Antimalarial For Viva For Falciparum To be used in combination (coblister) management of severe malaria	59	Chloroquine (phosphate or sulfate)	Tablets	150 mg
		60	Primaquine (diphosphate)	Tablets	15 mg
		61	Sulphadoxine+Pyrimethamine Co-blister / combined therapy	Tablets	500 + 25 mg
		62	Artesunate	Tablets	50 mg
		63	Artemether	Injection	40 mg/ml
M	GIT Drugs	64	Hyoscine (Butylbromide)	Injection	4mg/ml
				Tablets	10 mg
		65	Phloroglucinol	Tablets	Phloroglucinol 80+ Trimethylphloroglucinol 80
		66	Metoclopramide (hydrochloride)	Tablets	10 mg
				Syrup	5 mg / 5ml
				Injection	10 mg
		67	Omeprazole	Capsules	20 mg
		68	Ranitidine	Injection	25 mg / ml in 2ml
				Tablets	150, 250mg
		69	Aluminium Hydroxide + Magnesium Trisilic	Tablets	250mg +500mg

		70	ORS (Low osmolarity)	Sachet	WHO Specs
		71	Bisacodyl	Tablets	5 mg
		72	Glycerin	Suppository	
N	Cardiovascular Drugs <i>For severe PIH only</i> <i>For severe PIH only</i>	73	Glyceryl Trinitrate	Sublingual	500 mcg
		74	Isosorbide dinitrate	Sublingual	5 mg
		75	Amlodipine (Besylate)	Tablets	2.5, 5 mg
		76	Methyldopa	Tablets	250, 500 mg
				Injection	250 mg
		77	Hydrochlorothiazide	Injection	20 mg
				Tablets	25, 50 mg
		78	Enalapril (Maleate)	Tablets	5, 10 mg
		79	Atenolol	Tablets	5, 10, 25 mg
		80	Furosemide	Tablets	20, 40 mg
				Injection	10 mg
O	Oxytocic Drugs	81	Ergometrine ((hydrogen maleate)	Injection	200 mcg in 1ml
		82	Misoprostol	Tablets	200 mcg
		83	Oxytocin	Injection	10 IU in 1-ml
P	Respiratory Drugs	84	Solbutamol (sulfate	Tablets	2, 4 mg
				Inhaler	100 micrograms
		85	Ammonium Chloride + Chloroform + Menthol Diphenhydramine + Sodium Citrate		131.5mg/5ml + 22mg/5ml + 1mg/5ml + 13.5mg/5ml + 55mg/5ml
		86	Aminophylline	Antitussive Expect	25 mg/ml
Q	Ophthalmic / ENT	87	Boroglycerine		40.00%
		88	Chloramphenicol	Eye Drops	1 %w/v, 0.5 %w/v
		89	Ciprofloxacin (hydrochloride)	Eye/Ear Drops	0.3 %w/v
		90	Tetracycline (hydrochloride)	Eye Ointment	1%
		91	Xylometazoline	Nasal Drops	0.05%
R	I/V Infusions Plasma Substitutes	92	Dextran 70 / Plasma substitutes	Infusion	Gluco 5% w/v
		93	Glucose / Dextrose	Infusion	5,10%
				Ampule	25%
		94	Normal Saline	Infusion	
		95	Dextrose + Saline	Infusion	0.9%
		96	Ringer's Lactate	Infusion	
		97	Potassium Chloride	Solution	11.2% in 20ml ampule
		98	Sodium Bicarbonate	Injection	1.4% isotonic

S	Vitamins & Minerals	99	Water for Injection	Ampule	5ml, 10 ml
		100	Ascorbic Acid	Ampule	50, 100, 500 mg
		101	Calcium Gluconate	Tablets	100 mg/ml in 10-ml
		102	Calcium Lactate	Injection	500mg, 1gm
		103	Calcium Chloride	Tablets	1.25 mg (50 000 IU)
		104	Ergocalciferol (Vitamin D)	Tablets	Equ 60 mg
		105	Ferrous salt (Fumerate)	Tablets	Equ 25 mg/ml
				Syrup	1 & 5mg
		106	Folic acid	Tablets	
		107	Ferrous salt + Folic Acid	Tablets	
		108	Multiple Micronutrients	Sachet	
		109	Retinol (Vitamin A)	Tablets	100 mg
		110	Zinc Sulphate	Dispersible Tablets	20 mg
		111	Vitamin K	Injection	10 mg
		112	B Complex	Tablets	
		113	Multivitamins	Tablets	
T	Dermatological	114	Benzyl Benzoate +	Lotion	5% & 25%
		115	Permethrin	Cream, Lotion	5%w/w
		116	Calamine	Lotion	15%
		117	Clobetasol (Propionate)	Cream	0.05 %w/w
		118	Coal tar	Lotion	5%
		119	Hydrocortisone	Cream	1%
		120	PolymixineB (Sulphate)+ Bacitracin Zinc	Ointment	10000U/g + 500 U/g
		121	Silver Sulphadiazine	Cream	1 %
U	Contraceptives	122	Condoms		
		123	Ethinylestradiol + Norethisterone	CO Pills	35mcg + 1mg
		124	Levonorgestrel	PO Pills	30 mcg
		125	Levonorgestrel	EC Pills	750mg (pack of 2)
		126	Copper T / Multiload	IUCD	150 mg 1ml
		127	DMPA (medroxyprogesterone acetate)	Injection	200 mg/ml in 1ml
		128	Norethisterone enantate	Injection	
		129	Estradiol cypionate + medroxyprogesterone acetate	Injection	5 mg + 25 mg
V	Vaccines & Sera	130	BCG Vaccine		WHO Approved
		131	DPT Vaccine		
		132	Hepatitis Vaccine		

		133	Measles Vaccine		
		134	Polio Vaccine (OPV trivalent)	Oral	
		135	Pentavalant Vaccine		
		136	Pneumococcal Vaccine		
		137	Tetanus Toxoid		
		138	Anti-Rabies Vaccine (PVRV)	Single dose vi	2.5 iu
		139	Anti-Snake Venum Serum		
W	Miscellaneous	140	Tranexamic acid	Injection	250mg, 500mg /5ml
				Caps	250mg, 500mg
X	Anxiolytics	141	Alprazolam	Tablets	0.5 mg
		142	Diazepam	Tablets	2 mg
Y	Antiseptics/Disinfectant	143	Povidone-Iodine	Solution	10 %w/v
		144	Chlorine base compound	Powder	(0.1% available chlorine) for solution
		145	Chlorhexidine + Ceterimide	solution	1.5%w/v + 15%w/v
Z	Disposable Supplies	146	Syringe (Autodisable)	Sterile Packs	1cc, 5cc
		147	I.V Sets (DRAP approved)	Sterile Packs	
		148	I.V Canula (DRAP approved)	Sterile Packs	18G, 20G, 22G, 24G
		149	Adhesive Tape (Hypoallergenic)	Roll	1, 2 inch
		150	Chromic Catgut Sterile		0, 1/0, 2/0, 3/0, 4/0
		151	Cotton Bandage	Roll	6.5cm x 2m
		152	Absorbant Cotton Wool	Pack	500gm
		153	Examination Gloves	Pairs	Box of 100
		154	Sterile Gauze dressing	Pairs	7.5 x 7.5 cm (10 ply)
		155	Silk Sutures Sterile	Sterile Packs	0, 1/0, 2/0, 3/0, 4/0
		156	Face Masks Disposable	Sterile Packs	
		157	Blood Lancets	Sterile Packs	
		158	Scalp Vein Set (DRAP approved)	Sterile Packs	
		159	Slides		
		160	Safe Delivery Kits	Sterile Packs	
		161	Endotracheal tube	Sterile Packs	Set of 12
		162	Resuscitator Bag with mask		Adult / Paeds
		163	Nasogastric tube		Adult / Paeds
		164	Air Way	Set of 3	Adult / Paeds
		165	Crepe Bandage		7.5, 10 cm x 2.7m
		166	Liquid Parafin Gauze	Sterile Packs	
		167	Silk Gauze dressing	12 / Pack	0, 1/0, 2/0, 3/0, 4/0
		168	Volumetric Chamber (I.V. Burette)	Sterile Packs	100 ml size

Indicates similar clinical performance within a pharmacological class.Indicates that there is an age or weight restriction on use of the medicine.Signifies that there is a specific indication for restricting its use to children

Emergency Tray for RHC			
Sr#	Items Name	Strength	Qty
1	Injection Dobutamine	50 mg/ml	2
2	Injection Tranaxamic Acid	250mg/5ml	2
3	Injection Furosemide	10mg/ml	2
4	Injection Calcium Gluconate	100 mg/ml in 10-ml	3
5	Injection Dimenhydrinate	50mg/ml	2
6	Injection Sodium Bicarbonate	8.4%W/V	1
7	Injection Potasium Chloride	11.2% in 20-ml ampoule	1
8	Injection Atropine	1mg/1ml	2
9	Injection Adrenaline	1mg/ml	3
10	Injection Diazepam	5mg/ml	5
11	Injection Diclofenac Sodium	25mg/ml	2
12	Injection Polygelline I,	500ml	2
13	Injection Hydrocortisone sodium	100mg	1
14	Injection Ranitidine	25mg/ml	2
15	Injection Aminophylline	25mg/ml	1
16	Injection Lidocaine	2% W/V	5
17	Water for injection,	5ml	5
18	Injection 25%DW	20ml ampoule	3
19	Ringer Lactate Infusion	500ml	2
20	Dextrose Infusion	10%,500ml	2
21	Normal Saline Infusion	500ml	2
22	Normal saline with Dextrose Infusion	5%, 500ml	2
23	Lidocaine	gel	1
24	Cotton Roll	500gms	1
25	Cotton bandage,	4,6inch	5
26	D/S	5 cc	10
27	D/S	10CC	5
28	D/S	1CC	5
29	D/S	20Cc	1
30	IV Chamber		3
31	IV set		5
32	IV Cannula	16 G, 18G, 20G, 22G, 24G	10
33	ETT	(3 mm, 3.5 mm, 4 mm, 7.5 mm, 8 mm,)	10
34	Foleys catheter	all sizes (10 F to 28 F)	10
35	NG Tube	(14-18 Fr, infant/child: 10-14 Fr)	12

9. List of supplies and equipment

Table 18: Equipment and supplies for LHW (Health House)

#	Items	Life of items
1.	Salter Scale	1 for three years
2.	Six Type Charts	1 set for 2 years
3.	LHW Kit	1 kit for 3 years
4.	Health House Board	1 board for 3 years
5.	Identity Card	One year/subject to conditions

Table 19: Items in LHW Kit per LHW per month

#	Items	No.
1.	Paracetamol Tablets	200 tablets
2.	Paracetamol Syrup	10 bottles
3.	Chloroquine Tablets 150 mg	100 tablets
4.	Chloroquine Syrup 50 mg/5 ml	5 bottles
5.	Iron + Folic tablets	1000 tablets
6.	Antiseptic lotion	1 bottle
7.	Amoxyciline Suspension 125 mg	5 bottles
8.	Polyfax eye ointment	10 tubes
9.	Vitamin B Syrup	7 bottles
10.	B.B. Lotion	2 bottles
11.	Sticking Plaster	1 roll
12.	Mabendazole Tablets	100 tablets
13.	Cotton Roll	1 roll
14.	Cotton Bandage	1 roll
15.	Piperazine syrup	5 bottles
16.	ORS	20 sachets

17.	Zinc Sulphate Susp	7 bottles
18.	Thermometers	1 each per year
19.	Scissors	1 for two years
20.	Pencil Torch	1 for 6 months
21.	Condoms	100 pcs per month
22.	Oral Pills	10 cycles/month
23.	Depo Injection with syringe	3 injections/month
24.	Health education material	As per requirement
25.	Data recording and reporting instruments	As per requirement

Table 20: Equipment and supplies for CMWs (proposed)

#	Items	No.
1.	Office table	1
2.	Office chair	1
3.	Client stool	1
4.	Examination couch	1
5.	Delivery table	1
6.	Safety box with syringe cutting machine	1
7.	Steriliser (electric 12x16)	1
8.	Vacuum extraction equipment	1
9.	Baby ambubag	1
10.	Screen	1
11.	Fetoscope	1
12.	BP apparatus	1
13.	Thermometer	1
14.	Stethoscope	1
15.	Baby weighing machine	1

16.	Weighing machine adult	1
17.	Measuring tape	2
18.	Delivery items (Forcep, Sponge Forcep, Kidney Tray, Steel Bowl, Speculum, Infusion with set, I/V Cannula)	1
19.	Equipment required for episiotomies	1
20.	Kit box steel	1
21.	Signboard	1

Table 21: List of equipment at Dispensary cum MCH Centre

S #	Items	Recommended
1.	Set of short surgical case instrument	1
2.	Instrument sterilizer	1
3.	Instrument Tray	1
4.	Glucometer	1
5.	Dressing Drums	3
6.	Iron Drip stand	2
7.	Adult weighing machine	1
8.	Baby Weighing macmachinemachine	1
9.	Nebulizer	1
10.	Stethoscope	1
11.	B P apparatus	1
12.	Hemoglobin meter	1
13.	Gynae Instruments	1
14.	Normal delivery set	1
15.	Two Kochors	-
16.	Scissors	1
17.	Bowl	1
18.	D&C set	1
19.	Sims Speculum	1
20.	Dilators	1
21.	Volcellum	1
22.	Curette	1
23.	Sponge holding forceps	1
24.	Delivery table (steel)	1
25.	Labour light (One Bulb)	1
26.	Authert Forcep 6 (Mesquite type)	6
27.	Dressing Scissors 5 1/2	4
28.	Chealets Forcep 9	4
29.	Tongue depressor	1
30.	Needle Holder Mayo 7 1/2	1
31.	LAB ITEMS	
32.	Chemistry analyser	1
33.	Micro scope	1
34.	Centrifuge	1
35.	Water bath	1
36.	'PC 1 Form Dispensary cum MCH	

40.	Nebulizer	2
41.	Stretcher	1
42.	Pregnancy kits	-
43.	Albumin kit	-
44.	Glass slides	-
45.	Microscopes	-
46.	Wire loops	-
47.	Sputum cup	-
48.	Urine sugar kit	-
49.	Delivery set (each contain)	4
50.	Kocher Clamp 6 inch	2
51.	Episiotomy Scissor	1
52.	Plain Scissor	1
53.	Tooth Forcep	1
54.	Kidney Tray	1
55.	Needle Holder 7 inch	1
56.	Medium size Bowel	1
57.	Outlet Forcep 8 inch	1
58.	Generator	1
59.	Furniture	
60.	Office Table with 3 Drawers	3
61.	Office Chairs	12
62.	Office Rack Wooden	3
63.	Iron stool	4
64.	Iron Bench	4
65.	Steel Almirah	2
66.	Dressing Table	1
67.	Revolving Stool	2
68.	Examination Couch (Gynae)	1

Table 22: List of equipment at BHU/UHU
Source: MSDS, DoH, GoS,2010

Table 23: List of equipment at RHC/UHC

S #	Items	Recommended
	MINI-LABORATORY	
1.	Centrifuge (Bench top)	1
2.	Centrifuge Machine	1
3.	Stop watch	2
4.	Refrigerator	1
5.	X-ray Machine	1
6.	Dark room accessories	-
7.	X-ray films (All Size)	-
8.	X-ray illuminator	10
9.	Needle cutter/ Safety Boxes	1
10.	ECG machine	1
11.	Laboratory Chemicals	As per need
12.	Binnocular Microscope	1
13.	Urine Meter	1
14.	OLC Counter	1
15.	Haemocytometer	2
16.	ESR Racks	2

S#	Items	Recommended
17.	ESR Pipettes	2
18.	Water bath	1
19.	Centrifuge Tubes (Plastic)	12
20.	Centrifuge Tubes (Glass)	12
21.	Glass Pipettes various sizes corrected	12
22.	Jester Pipettes Fixed - various sizes	2
23.	Jeter Pipettes Adjustable - various sizes	2
24.	Test Tube	12
25.	Test Tube Racks	2
26.	Pipette Stands	2
27.	Hemoglobin meter	1
28.	Table Lamp	1
29.	Lancets (pack)	6
30.	Beds	1
31.	Tube Sealer	1
32.	Blood Grouping Viewing Box	1
33.	Surgical Blades	12
34.	Test Tube Holder	6
35.	Baskets	8
36.	Wooden Boxes	1
37.	Hepatitis B & C and HIV AIDS Kits	-
38.	Reagent	2
39.	Gas Burner	1
40.	Stainless Steel Test Tube Racks	1

41.	Wooden Slides Box	1
	LABOUR ROOM	
1.	Delivery Table (Labor Room)	2
2.	Delivery Set (each contain)	4
3.	Parto-gram	1
4.	Kocher Clamp 6 inch	2
5.	Episiotomy Scissor	1
6.	Plain Scissor	1
7.	Tooth Forcep	1
8.	I Kidney Tray	1
9.	Needle Holder 7 inch	1
10.	Medium size Bowel	1
11.	Outlet Forcep 8 inch	1
12.	D&C Set (each contain)	4
•	Metallic Catheter	1
•	Uterine Sound	1
•	Sim's Speculum medium	1
•	Set D&E Sponge Holders	1
•	Hegar's Dilator 0-8 em	1
•	Kidney Tray	1
•	Bowl 4 inch	1
•	Volsellum 8 inch	1
•	Set Uterine Curette	1
•	Plain Forcep 8 inch	1
13	Caesarean Section Set (each contain)	4
•	Doven's Retractor	1
•	Green Army Tag	4
•	Big Bowl	1
•	Cord Clamp 7 inch	2
•	Kocher Clamp Straight 8 inch	4
•	Kocher Clamp Curved 8 inch	2
•	Towel Clip	4
•	Artery Forcep 6 inch	6
•	Allis Tissue Forceps 8 inch	4
•	Needle Holder 8 inch	2
•	Needle Holder 6 inch	2
•	Kidney Tray	1
•	Bowl 4 inch	2
•	Volsellum 8 inch	1
•	Knife Holder 4 number	1
•	Plain Forcep 7 inch	1
•	Tooth Forcep 7 inch	2
•	Curve Scissor	2
•	Thread Cutting Scissor	1
•	Sponge Holder 10 inch	2
14	Vacuum Suction Apparatus	1

15	Baby Resuscitation Apparatus	2
16	Adult Weighing Scale	1
17	Electric Suction Machine	2
18	Autoclave	1
19	Fetal Heart Detector	1
20	Obs/Gynae: General Set	2
21	Dressing Set for Ward	2
22	Eclampsia beds with railing	2
23	Baby Intubation set	1
24	Examination Couch	2
25	Mucus Extractor	2
26	Neonatal Resuscitation Trolley	1
	EMERGENCY	
1.	Electric Sterilizer	1
2	Beds	4
3	Emergency OT Light	1
4	Oxygen Cylinder with flow-meter	2
5	Ambu Bag (Pediatric)	1
6.	Ambu Bag (Adult)	1
7.	Suction Machine Heavy Duty	1
8.	Laryngoscope with 4 blades (Adult & Peads)	1
9.	Endo tracheal Tubes (all sizes)	1
10	Oral Air Way (all sizes)	1
11	Resuscitation Trolley	1
12	Nebulizer	4
13	Stethoscope	3
14	BP Apparatus Mercury (Adult & Peads)	3
15.	Dressing Set for Ward	1
16.	Thermometer	6
17.	Drip stands	2
18.	Instrument Trolley	1
	DENTAL UNIT	
1	Dental unit (complete with chair, light, hand piece unit with hand pieces, suction and compressor)	1
2.	Dental hand instruments (set)	2
3	Aseptic Trolley	1
4	Dental Autoclave	1
5	Amalgamator	1
6	Dental X-ray unit	1
7	Intraoral X-ray film processor	1
8	X-ray view box	1
9	Lead apron	1
10	Ultrasonic scaler	1
11	Dental operating stool	1
12	Ultraviolet sterilizer	1
	INPATIENT (20 Beds/WARD)	
1	Bed with side table / locker	20
2	Electric Suction Machine	1
3	Electric Sterilizer	1

4	Oxygen Cylinder with flow-meter and Stands	2
5.	Stretchers	2
6	Examination Couch	1
7	Wheel chair	2
8	Screens	2
9.	Air Ways	10
10	Suction Pump (Manual)	1
11	IV Drip Stand	10
	OPERATION THEATRE	
1.	Hydraulic Operation Table	1
2.	Shadow fewer Lamps with 9 Illuminators	1
3.	Anesthesia machine with ventilator	1
4.	Multi-parameter	1
5.	McGill Forceps	2
6.	Patient Trolley	1
7.	Oxygen Cylinder (large size with regulator)	2
8.	Oxygen Cylinder (medium size with regulator)	2
9.	Nitrous oxide cylinder with regulator	2
10.	Instruments Trolley	2
11.	Dressing Drum (large size)	2
12.	Stand for Dressing	1
13.	Basin	2
14.	Basin Stands	2
15.	Towel Clips	4
16.	BP Handle	6
17.	BP Blades	100
18.	Dissecting Forceps (plain)	6
19	Needle Holder (large size)	6
20	Sponge Holding Forceps (large size)	2
21	Skin Retractor (small size)	6
22	Metal I ic Catheter (1-12)	6
23	Dilator Complete Set	1
24	Surgical Scissors (various size)	6
25	Nasal Speculum	1
26	Proctoscope	1
27	Thames Splint V.S	1
28	Rubber Sheet	20 meter
29	Scalpels 6"	6
30	Allies Forceps Long	6
31	Allies Forceps 6 inches	6
32	Cheatles Sterilize Forceps 10: long	2
33	Introducer for Catheter	2
34	Smith Homeostatis Forceps Curved	2
35	Arm Splint Different sizes	2
36	Instruments Cabinet Large size	1
37	Spot Light	1
38	Hand scrub set with chemical	2
39	Thermometer	12

40	Lyrango scope adult/peads	2
41	Kidney Tray S.S	2
42	Stand for Drip	4
43	Bucket El	2
44	Aircushion Rubber	2
45	Hot Water Bottles	2
46	Gastric Tube	12
47	Urine Collecting Bags	6
	Instrument trolley	1
48	Air-conditioner (split 1.5 tons)	2
49	Ambulance	1
50	Generator	1
	FURNITURE	
1	Office Tables	10
2	Office chairs	40
3	Iron Bench	20
4	Steel Almirah	2
5	Wooden File Racks	4
6	Four Seater Chairs	10

Source: MSDS, DoH, GoS,2010

Table 24: List of furniture, equipment etc at Maternity Home

FURNITURE

Sr #	Name of Items	No.
1.	Revolving Chair made of Steel Pipe Foam seat/Back rest.	1
2.	Office Chairs made of Seasoned Talhi wood and cane seat/Back rest.	20
3.	Office table 5*3*2 1/2 feet with 3 drawers on one side made of Seasoned Talhi wood and Formica Top.	1
4.	Office table 3*2*2 1/2 feet with 3 Drawers on one side made of Seasoned Talhi wood and Formica Top.	6
5.	Almirahs 6*4*2 1/2 feet Iron Steel with 3 Shelves.	5
6.	Examination Couch 6*4*2 1/2 feet made of Seasoned Talhi wood and Cushion Tap.	2
7.	Ward Screen made of Seasoned Talhi wood 3 folded.	1
8.	Benches with arms and Back rest.	10
9.	Revolving Stool Stainless Steel.	4
10	Stool wooden	12

INSTRUMENTS/APPLIANCES

Sr.#	Name of Items	No.
1.	Instrument Tray 18"*14"1 1/2" Stainless Steel with cover.	4
2.	Tray kidney shaped 8 inches.	4
3.	Tray kidney shaped 10 inches.	4
4.	Bowl 8 inches Diameter Stainless Steel.	4
5.	Basins 14 inches Diameter Stainless Steel.	4
6.	Jug stainless steel 8 pint size.	2
7.	Probe 8 inches.	1
8.	Forceps artery mosquito straight Halsted's 6 inches stainless steel.	12
9.	Scissors dressing 5 1/2" both points blunt straight forged.	4
10.	Needles Holder Mayo 7 1/2" Stainless Steel.	2
11.	Needles suture straight A. Size 4. 12 B. Size 8. 12 C. Size 14. 12	
12.	Cuseo,s vaginal speculum.	2
13.	Needles triangular pointed cutting:- A. Size 4. 12	

	B. Size 8.	12	
	C. Size 14.	12	
14.	Holding forceps 8" straight		1
15.	Saline Infusion Stand.		2
16.	Instrument Sterilizer 16"*4".		4
17.	Oxygen Therapy Unit consisting of :-		1
	i. Oxygen Cylinder	2	
	ii. Oxygen Cylinder	1	
	iii. Flow meter	1	
	iv. Cylinder key	1	
18.	Pelvimeter.		1
19.	Cheatle sterilizer forceps few joint size 10 1/2".		2
20.	Operation Theater ceiling Lamp.		1
21.	Autoclave for sterilizer of instruments/Linen (Medium size)		1
22.	Electric Sterilizer for Operation Theatre Instruments Big size)		1
23.	Dressing Drums.		6
24.	Instruments Tray		4
25.	Instruments Trolley		2
26.	Labour Room Rabble		1
27.	Episiotomy Scissor.		2
28.	Towel clips		12
29.	Scalpel		2
30.	Pared parker knife (knife Handle)		2
31.	Sym,a Abscess knife		2
32.	Tongue forceps		2
33.	Saab Holder		2
34.	Mouth gauge		2
35.	Cheek Retractor.		2
36.	Air Way		2
37.	D & C Set.		1 Set
38.	Blood pressure Instruments		2
39.	Stethoscope Pakistan Made		2

GYNAECOLOGICAL INSTRUMENTS

Sr.#	Name of Items	No.
1.	Sponge Holding forceps 7" straight Box joint foresters.	4
2.	Valsellum forceps teals 9/ 1/2" Teeth Stainless steel box joint.	4
3.	Mayo scissors 8".	4
4.	Auwards Speculum (weight).	4
5.	Female metal catheter.	4

6.	Dilator set hegar in a box.	2
7.	Allis Tissue forceps	12
8.	Ovum forceps	4
9.	Foetus extraction hook.	1
10.	High cavity delivery forceps	11
11.	Cavity delivery forceps	1
12.	Cramiotom	1
13.	Cramioolest.	1
14.	Curved Artery forceps Size.	6
15.	Straight Artery Forceps size 9"	6
16.	Episiotomy Scissor.	2
17.	Mayo, s Abdominal Bivalve Retractor.	1
18.	Mayo, s Abdominal Trivalve Retractor.	1
19.	Abdominal Dearer Retractor set round handle 12" of 5" sizes.	1
20.	Uterine scissors straight 9"	2
21.	Uterine scissors curved 9".	2

BEDDING LINEN ITEMS

Sr.#	Name of Items	No.
1.	Mattress for Hospital Beds 76"*40".	10
2.	Draws Sheets 72"*60".	30
3.	Bed Sheets 90"*40"	30
4.	Blankets Red.	20
5.	Pillow 24"*12".	10
6.	Pillow Covers for above.	20

WARD EQUIPMENT.

Sr.#	Name of Items	No.
1.	Temperature for Charts Holders 15"*9".	15
2.	Hospital Bedsteads 78"*42"*24" Lawson tait pattern strong steel pipe fitted with hard wood rest.	100
3.	Bedside Rockers with a Cupboard below 14"*14"*23" high angular steel frame.	15
4.	Sputum cups stainless steel with cover	100
5.	Urinal Female stainless steel.	15
6.	Bedpan stainless steel with handle.	15
7.	Ward Trolley.	2
8.	Patients Trolley.	15

DIAGNOSTIC APPLIANCE .

Sr.#	Name of Items	No.
1.	Blood pressure Instruments.	2
2.	Percussio Hammer.	2
3.	Stethoscope Pakistan Made.	2
4.	Beaker 1 liter	1
5.	Bottle Reagent Glass	6
6.	ESR tube	4
7.	ESR Stand	1
8.	Test tubes	50
9.	Spirit lamp	1
10.	Funnel	1
11.	Hemoglobin meter	1
12.	Centrifuge electric	1
13.	Microscope Binocular with 2 objectives	1
14.	Glucometer	1
15.	Laboratory table	1

MISCELLIANEOUS ITEMS.

Sr.#	Name of Items	No.
1.	Ambulance Toyota Diesel operated.	1
2.	Petromax.	2
3.	Hurricane Lampe	4
4.	Stave primustone burner.	1

5.	Refrigerator 6 cu.ft.	2
6.	Stretcher with Trolley	1

10. REFERRAL LINKAGES

In routine a patient can be self referred to a PHC, or can be referred by a Community Health Worker (LHW/CMW) to a PHC outlet to get treatment. It usually depends on the type of services available at different outlets and previous experiences of patients. An effective referral system is meant to ensure a close relationship between all levels of the health system and helps to ensure people receive the best possible care closest to home. It also assists in making cost-effective use of hospitals and primary health care services.

Within the formal health services, the referral system is at three levels:

10.1 First level: Community health workers (LHW/CMW) to PHC

A patient when access the LHW/CMW, for a particular problem, she may refer the cases to the BHU and/or other levels as needed. This is mainly the case for females and their children.

- Each household will be registered with the respective LHW, as well as with the BHU
- Each LHW will be linked to CMW and the BHU in the area
- Each CMW will be linked with LHS and the BHU in the area
- LHWs will help CMWs establish their practices in the target areas
- The LHW will refer cases to CMW or PHC outlet with which she is attached, on "LHW Referral Form"
- On receiving a referral from the LHW, the CMW providing services will give feedback to LHW on the same referral form
- Similarly the health care provider at PHC outlet, on receiving referrals from LHWs or CMWs, will provide feedback to respective LHW or CMW
- This communication between referring and referral facilities will be part of records at corresponding levels of the referral system.

Referral Slip: CMW

Source: MNCH program, DoH, GoS

National MNCH Program (Referral Slip)

To be filled by CMW & kept in Health Facility Record

Mother/Newborn Name:

Husband/Father's Name:

Age: _____

Client's Address:

Cause of Referral:

Hospital Referred To:

CMW Name:

—

CMW ID:

Signature of CMW:

National MNCH Program (Feedback Slip)

To be filled by Doctor and returned to patient for CMW record

Mother/Newborn Name:

Age: _____ **Gender in case of Newborn:**

Hospital OPD/Emergency Admission No.

Name of Referring CMW:

CMW ID:

—

Cause of Referral:

Treatment Provided:

Any Other Instruction:

Name of Doctor:

Date: _____	Name of Hospital: _____ Signature: _____ Date: _____
<p align="center">INSTRUCTIONS FOR CMW</p> <p>Please fill this portion of Referral Slip while referring a mother or Newborn to a Hospital</p> <p align="center">INSTRUCTIONS FOR THE REFERRAL HOSPITAL</p> <p>Please keep this portion of the Referral Slip in Hospital Record</p>	<p align="center">INSTRUCTIONS FOR THE REFERRAL HOSPITAL</p> <p>Please fill this slip after providing medical treatment to client and hand it over to the client so that she can give it to CMW</p> <p align="center">INSTRUCTIONS FOR CMW</p> <p>Please follow-up the treatment schedule provided by the Health Facility and keep this record with ANC card</p>

10.2 Second level: PHC to Secondary level of care (THQH or DHQH)

A patient when access the PHC outlet may refer the cases to the THQH/DHQH or other levels as needed.

- At PHC outlet, the health care providers such as medical officer, LHV, medical / health technicians/dispenser constitute the second level of referral system. The patients presenting at/or referred at the PHC will be managed at the facility, and/or will be referred to THQH/DHQH depending upon the nature of the illness.
- The health care providers at PHC will have detailed chart displaying services being provided at the PHC. This chart will be modified with any change in services, even if that is for a short duration. Such changes will be communicated to all relevant health facilities.
- The PHC staff will refer patients to THQH or DHQH on prescribed "Referral Form." Providers at referral facility, after providing services will give feedback to the PHC outlet on the same referral form.
- This communication between referring and referral facilities will be part of records at the corresponding levels of the referral system.
- Patients presenting directly to the THQH or DHQH will be managed there, depending on the nature of the illness

10.3 Third level: THQH/DHQH to Tertiary level hospital

- Patients presenting at or referred to THQH/DHQH will be managed at the hospital, and/or will be referred to Tertiary Care Hospital, depending on the nature of illness.
- THQHs/DHQHs will have detailed chart of services being provided by the hospital, displayed at a minimum of 2 sites. The chart will be modified with any change in services that takes place at THQH/DHQH, even if that occurs for short duration, and changes will be communicated to all concerned levels of health facilities.
- Patients will be referred to Tertiary Care Hospital on prescribed "Referral Form." If the patient is referred from PHC on Referral Form, that will be attached to the THQH/DHQH referral form.
- Tertiary Care Hospital will provide feedback to referring hospital on the same referral form. This communication between the referring and referral facilities will be part of records at the corresponding levels of the system.

Ambulance Service

In the past, several experiences have been done to use ambulance service efficiently for transporting medical emergencies. Usually the ambulance services are available at the level of RHC. They are meant to transport patients in emergency to secondary/tertiary level. The arrangement to utilize the services is mainly;

- The driver and the ambulance are authorized by the incharge RHC
- Fuel charges to be paid by the patient based on millage.

The GoS is considering new initiative to contract out the operations of the ambulance services.

11. MONITORING AND REPORTING

Monitoring of service is an integral part of the PHC services. The monitoring would help standardize the services and would address the issues of under utilization of public health facilities. In a routine district of Sindh there are mainly two type of monitors under DoH i.e. community level (LHS) and facility level (EDO Health/DHO and programme coordinators). The role of EDO Health/DHO and programme coordinators is also to see the community level activities and report the progress.

The PPHI has its own monitoring and reporting system. They have developed district level and provincial level monitoring check list and also using federal level EPI check list. At the level of facility it is done by SO (social mobilize, one each for approx 10 facilities), the executive monitoring officer (one per 50 health facility), the district support manager (one per district), a regional program manager (one per five district), and an overall program director. The reporting is done on PPHI 07 (monthly routine immunization monitoring compiled sheet), 08 (monthly district wise monitoring compiled sheet) and 09 (quarterly provincial monitoring compiled sheet). The 12 elements from the DHIS reports are also compared with the PPHI reports on regular basis.

11.1 Monitoring by LHS

The focus of the LHSs' work is below.

- A LHS will supervise a maximum of 24 LHWs and 3 CMWs

- Each LHS will monitor the day activities of each LHW and CMW at least once every month
- The LHS will validate LHWs' and CMWs' records, progress, and the last month's report in the field.
- The LHS will provide follow-up training support and supportive supervision; evaluate knowledge and skills and identify training needs

11.2 Monitoring by Health Officers (EDO/ DHO and Programme Coordinators)

- Conduct a monitoring and supervisory visit to the health facility and community on regular basis
- The EDO/DHO and programme coordinators will validate progress reports of LHWs, LHS, CMW, vaccinator, health and nutrition supervisor, and male mobilizers.
- Will review the DHIS and reports from vertical programmes such as TB, Malaria, HIV/AIDS and EPI
- Provide follow-up training support and supportive supervision

11.3 Monthly Review Meeting

The PHC facilities will conduct internal monthly review meeting with their staff and LHWs/CMWs attached with the facilities. Similarly, the EDO/DHO and programme coordinators will also conduct regular meetings at the district level with the concerned staff of the PHC outlet and community.

11.4 DHIS Reporting and Notifiable Diseases

All levels of workers are required to report conditions according to the District Health Information System (DHIS). Further, notifiable diseases should be reported as per protocol to the appropriate level of the system. DHIS helps the district level health managers to gain timely detailed information about the district and initiate required measures. The DHIS gathers information from PHC and also from secondary hospitals, indoors, diagnostic services and about resources (HR, Finance, logistics). DHIS also rationalizes indicators responsive to health managers' needs and has 43 indicators for BHU(monthly 34 + yearly 9), 79 indicators for hospitals and 276variables for RHCs. It reports on 42 diseases from

OPD and 50 diseases from indoors. The software is flexible to accommodate present and future needs⁸.

Since 2009-10, the DoH Sindh has implemented DHIS in all districts of Sindh with the support of partners. The newly developed DHIS system offers a viable platform for a system of monitoring and reporting. The challenge is to incorporate DHIS into a system of performance management that provides incentives to ensure that monitoring data is used effectively by health managers. The strategy suggests strengthening the capacity of HSRU units in the provinces to develop an effective model of generating data and measuring results to make health programmes and policies more responsive to the needs of end-users⁹.

The information mainly reported through PHC outlets consist of:

- Monthly Performance
- Outpatients Attendance
- Cases attending OPD
 - Respiratory Diseases
 - Gastro Intestinal Disease
 - Urinary Tract Diseases
 - Other Communicable Diseases
 - Vaccine Preventable Diseases
 - Cardiovascular Diseases
 - Skin Diseases
 - Endocrine Diseases
 - Neuro-Psychiatric Diseases
 - Eye & ENT
 - Oral Diseases
 - Injuries / Poisoning
 - Surveillance
- Immunization
- TB-DOTS
- Family Planning Services/ Commodities provided
- Maternal and Newborn Health

⁸District Health Information System (DHIS) Training Manual for Trainers.NMNCH . 2009

⁹Responsiveness and Accountability in the Health Sector, Pakistan.TRF Pakistan. 2010

- Community Based Data
- Community Meetings
- Diagnostic Services
- Stock out Report
- Indoor Services
- Indoor Services
- Human Resource Data
- Revenue Generated
- Financial Report -For the current Fiscal Year

11.5 Monitoring Indicators

Broad indicators for monitoring progress of implementation and effectiveness of service delivery, from PHC outlets derived through DHIS includes;

- Daily OPD attendance (#)
- Full immunization coverage (#)
- Antenatal Care (ANC-1) coverage (#)
- Monthly report data accuracy
- Delivery coverage at facility (#)
- TB-DOTS patients missing more than one week (#)
- Total Visits for FP (#)
- LHW pregnancy registration coverage (#)

In addition there are several vertical programmes such as EPI, TB, Malaria, HIV/AIDS, LHWs programme, etc who have their specific performance indicators.

Monitoring and Reporting (DoH)									
Service	Activities	PHC facilities					Community Health worker		
		Dispensary	MCH	Maternity Home	BHU/UHU	RHC/UHC	LHW	CMW	
1. Monitoring	1.1. Field monitoring by LHS	-	-	-	-	-	Yes	Yes	
	1.2. Field monitoring by EDO(H)/DHMT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

	1.3.	Monthly monitoring meetings at health facility	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1.4.	Quarterly meeting at district health office	-	-	-	-	Yes		-
	1.5.	Periodic monitoring by provincial team	-	-	-	-			-
2. Reporting on DHIS formats	2.1.	Prepare regular reports	Yes	Yes	Yes	Yes	Yes	*Yes	*Yes
	2.2.	Consolidate and submit reports	No	No	Yes	Yes	Yes	No	No
3. Reporting on notifiable diseases (as per protocols)	3.1.	Consolidate and submit reports	Yes	Yes	Yes	Yes	Yes	-	-

*The LHWs and CMWs will also prepare and submit reports on the formats specified by their programs.

12. TASK SHIFTING

The public health sector facilities in Pakistan especially PHC outlets faces a shortage of qualified staff due to several reasons which includes; low salary packages and incentives to work in the periphery, minimal benefits, management and security issues, etc. Different initiatives have been taken including contracting out of services to NGOs and organizations such as PPHI to improve the functioning of the PHC outlets. In addition, it has been considered to train and certify the care providers including doctors and paramedics on certain specific task which they can perform in absence of relevant care providers. The term task shifting implies that the care provider who is stationed in a specific facility can perform certain additional task which can initially help a patient in the absence of the relevant staff. Below is the list of certain activities which could be considered as a part of task shifting.

1. Medical Officer
 - Conduct ECG and Interpret
 - Can give anaesthesia (local and spinal)
 - Can conduct and interpret ultrasound
 - Can perform optometry
 - Can perform C/S
2. Women Medical Officer
 - Conduct ECG and Interpret
 - Can give anaesthesia (local and spinal)
 - Can conduct and interpret ultrasound
 - Can perform optometry
 - Can perform C/S
3. Nurse/LHV
 - Conduct ECG
 - Can conduct ultrasound
4. Health/Medical Technician
 - Conduct ECG
 - Can conduct ultrasound
 - Conduct optometry
 - Can give anaesthesia (local and spinal)
 - Can Perform CPR

- Perform ENC

5. LHW/CMW

- Emergency neonatal and child care measures (stabilization and referral)

To perform these additional tasks, incentive for the care provider who is doing additional tasks should also be considered.

13. CAPACITY BUILDING

The capacity building of the newly posted health staff and the previously working human resource is a vital component to improve the quality of services. For the newly posted staff of any category, the basic induction training should be made mandatory to the appointment.

Various vertical disease control programs are also conducting need based training and refresher courses for the regular working staff on the routine/new interventions. This is usually done through project resources. Such initiatives include, IMNCI, Nutrition, DHIS, TB and Malaria Control, Communicable Diseases, HIV/AIDS, Infection Prevention and Control, Waste Management, Referral Protocols, Oral Hygiene, Logistic and Human Resource Management, etc. The inventory of all such training should be properly maintained at the level of EDO/DHO office and at the health facility level.

14. SCOPE OF WORK OF PROVIDERS

Lady Health Worker (LHW)¹⁰

LHW catchments area population 700-1200 (average 1000) or 100-200 households

Activity point: Health House in the community

Integrated Training: 3 months at Health Facility (HF)

Task Based Training 12 month (three weeks of fieldwork followed by one week classroom training at HF)

Continuing Training: monthly 1 day at health facility

Brief Scope of work:

1. Develop liaison with women Groups and Health Committees and for community organization and management support

¹⁰PC1 National Programme for Family Planning and Primary Health Care, the Lady Health Workers Programme 2003 – 2008, Government of Pakistan Ministry of Health

2. Use Health committees and Women groups for health awareness PHC services & FP and community development
3. Conduct awareness raising sessions on PHC, better health, hygiene, nutrition, sanitation and family planning for masses of catchment area
4. Liaison among formal health systems, line departments. NGOs and Community
5. Registration of Pregnant women and eligible couple in catchment area
6. Conduct home visits for Birth Preparedness plan and communicate the health messages regarding MNH
7. To identify the Pregnant women with danger signs
8. To prepare a referral plan with the support of Community organizations, in case of complications keeping in view the 03 delays
9. Coordination with CMW, midwife and TBAs
10. Ensuring Vaccination of children & women
11. Creating service demand Social mobilization and health education.
12. Facilitate in organizing of Events
13. Community based distribution of medicine/supplies

Community Health Worker (CMW)¹¹

CMW Catchments Area Population: 5000

Activity point; Work Station in the community

Training: 18 months

Registration with PNC

Brief Services of CMW in the Community

- Prenatal care
- Delivery care including birth preparedness
- Postnatal care
- Care of Newborn
- Immunization advise
- Nutrition advise

¹¹Guidelines for the Deployment of Community Midwives, National Maternal, Newborn and Child Health Programme, 2010

- Health education
- Family planning
- Post abortion care
- Regular Liaison with LHW and HF
- Referral of patients/clients to nearby appropriate HF
- Community based distribution of misoprostol (MCHIP team)?













Annexure 1: Detailed desk reviews of key documents

- Minimum Service Delivery Standards (MSDS): Government of Sindh Health Department, Karachi Dated May 10, 2010
- Sindh Health Sector Strategy 2012-2020
- Situation Analysis for Post Devolution Health Sector Strategy of Sindh Province, 2011
- Essential Health Services Package for Primary Health Care in Punjab, Technical Component, Feb 2013
- Essential Health Services Package for Primary Health Care in KPK
- DHIS Report, Department of Health, Province of Sindh, 2012
- Intra-Sectoral Analysis of Health Resources and Services Available in Sindh Flood Affected Districts, WHO, 2010
- Indian Public Health Standard(IPHS); Guidelines for Primary Health Care Centers Revised 2012
- A Basic Package of Health Services for Afghanistan, 2010/1389, Islamic Republic of Afghanistan, Ministry of Public Health
- A Basic Package of Health Services for Afghanistan, 2005
- National Essential Medicine List of Pakistan Ministry of Health Government of Pakistan 2007
- Nepal Health Sector Programme Implementation Plan II (NHSP -IP 2)2010 – 2015, 2010.
- List of Health Facilities of City District Government Karachi:LHW Training Plan in EPI 2009-2010
- F. Sabih, *et al*, Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the Millennium Development Goals, Eastern Mediterranean Health Journal, 2010
- 2011 Pakistan Floods Preliminary Damage Needs Assessment Government of Pakistan, Asian Development Bank and World Bank
- PPHI: Minutes of the monthly review meetings 2012(district MATIARI, HYDERABAD, JAMSHORO, KHAIRPUR)NAUSHEHRO FEROZE, THATTATANDO MUHAMMAD KHAN)MIRPURKHAS) BADIN)THARPARKAR, SANGHAR,TANDO ALLAHYAR, UMERKOT,LARKANA,GHOTKI,JACOBABAD,KAMBER-SHAHDADKOT,KASHMORE, SHIKARPUR and SUKKUR)
- Zero Draft Health Policy 2009

Annexure 2: List of Participants with whom Pre-inception Meeting Held for Developing EPHS

List of Participants with whom Pre-inception Meeting Held for Developing EPHS		
	Health Department Team	Office
1	Dr. Ashfaq Ahmed Memon	Director General Health Services Sindh
2	Ms Kiran Nauman	Additional Secretary/Chief HSRU, Health Dept
3	Dr. Sahibjan Badar	Provincial Program Manager Sindh AIDS Control
4	Dr. Hassan Murad Shah	EDOH Matiari
5	Mr. Mohsin Ahmed Shaikh	Additional Director (Dev.) Health Dept. Sindh
6	Ms Shaista Mubarak	Additional Director (Dev.) Health Dept. Sindh
7	Dr. Imdad Siddiqui	EDOH Karachi
8	Dr. Mazhar Khamisani	Project Director Expanded Program on Immunization
9	Dr. M.A Kazi	Provincial Program manager Sindh AIDS Control
10	Dr. Munawer Alam	Coordinator HSRU
11	Dr. Shaikh Mohammad Saif-	Coordinator HSRU
12	Dewan Hammad	Coordinator HSRU
13	Dr. Tariq Feroze	Coordinator HSRU
14	Dr. Saifullah Kaimkhani	Coordinator National Health Program
15	Dr. Younis Asad	Provincial Coordinator DHIS DGHSS Office,
16	Dr. Raj Kumar	Provincial EPI Support Person
17	Dr. Shahid	Director Hospitals Karachi
18	Dr. Zafar Aijaz	DO Admin & Accounts EDOH Office Karachi
19	Dr. Fawad Shaikh	Provincial Coordinator TRF Sindh
Meetings also held initially with following stakeholders		
	Expert	Office
1	Dr. Sheerine Narejo	Ex-Additional Secretary Health
2	Dr. Jamal	Ex Deputy Secretary Health Department
3	Dr. Majid	EX-Special Secretary Health Department
4	Dr. Munawer Alam	Coordinator HSRU
5	Dr. Shaikh Mohammad Saif-	Coordinator HSRU
6	Dr. Khalid Shaikh	Additional Secretary Public Health
7	Dr. Aijaz Khanzada	OSD Health Department
8	Dr. Sahib Jan	PD MNCH Programme Sindh
9	Dr. Saifullah Kaimkhani	Coordinator National Health Program
10	Dr. Masood Solangi	Director Public Health DG Office
11	Dr. Sattar Chandio	Specialist Public Health PPHI
12	Dr. Bahadur Khoro	EDO Health District Shaheed Benazirabad
13	Dr. Abdul Sattar Channa	EDO Health Badin

Annexure 3: List of participants: Consultative Workshop EPHS Sindh

TECHNICAL RESOURCE FACILITY (TRF)- PAKISTAN					
		Consultative Workshop On "Essential Health Services Package for Primary Health Care Facilities"			
Friday, 05th July, 2013					
Venue: Conference Hall of Women Resource Centre, Karachi.					
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26	Dr. Dewan Hameed	Consultant	0321-2628565	dr.dewanhameed@yahoo.com	[Signature]
27					

Annexure 4: List of participants: Final Consultative Workshop EPHS Sindh (June 24, 2014)

Technical Resource Facility (TRF)			
Consultative Meeting "Essential Health Services Package for PHC in Sindh"			
Date: 24th June, 2014.			
Venue: Marriott Hotel, Karachi.			
S. No.	Name of Participant	Designation	Email Address
1	Mr. Iqbal Hussain Durrani	Secretary Health	iqbal.durrani@gmail.com
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