**THE MINIMUM SERVICE DELIVERY PACKAGE (MSDP) FOR PRIMARY HEALTHCARE FACILITIES IN SINDH PROVINCE: UPDATING THE STANDARDS**

**JOINT COLLABORATION OF**

**SINDH HEALTHCARE COMMISION**

**ENTERPRISE FOR MEDICAL EDUCATION AND RESEARCH (E.M.E.R.)**

**APPNA INSTITUTE OF PUBLIC HEALTH**

**AND**

**UNICEF**

**Message by Secretary of Health**

**Message by CEO SHCC**

**The Core Team**

|  |  |  |  |
| --- | --- | --- | --- |
| S.No. | Name | Designation and Organization | Email |
| **Technical Team** |
|  | Prof. Syeda Kausar | Project Lead EMER | skauser.ali@jsmu.edu.pk |
|  | Prof. Lubna A Baig | Co-Investigator Professor and DeanAPPNA Institute of Public Health | lubna.baig@jsmu.edu.pk |
|  | Dr. Shiraz Shaikh | Chief Consultant Associate Professor APPNA Institute of Public Health | shiraz.shaikh@jsmu.edu.pk |
|  | Dr. Rabia Baloch | Co-Consultant LecturerAPPNA Institute of Public Health | rabia.baloch04@yahoo.com |
| **MSDP Core Committee** |
|  | Dr. Masood Solangi | Director GeneralDepartment of Health | dg@sindhhealth.gov.pk |
|  | Dr. Minhaj Qidwai | Chief Executive OfficerSindh Healthcare Commission | ceo@shcc.org.pk |
|  | Dr. Syed Kamal Asghar | Health SpecialistUNICEF | skasghar@unicef.org |
|  | Dr. Ahmed Raza | Director Clinical Governance & TrainingSindh Healthcare Commission  | dcgt@shcc.org.pk |
|  | Dr. Murtaza Memon | EpidemiologistDepartment of Health | murtaza.memon@sindhhealth.gov.pk |
|  | Dr. Zaib Dahar (MNH) | Senior Technical AdvisorPPHI | zaib.dahar@pphisindh.org |
|  | Dr. Badar Munner  | National Professional Officer MNCHWHO | munirb@who.in |
|  | Dr. Dileep | Project Management Specialist (Health)USAID |  |
|  | Dr. Adam Malik | Regional Program Manager SindhMERF | adam.malik@merf-pakistan.org |
|  | Dr. Abdul Rashid  | ConsultantIntegrated Health Services |  |
|  | Dr. Sara Salman | Provincial Head of OfficeWHO | salmans@who.int |
|  | Dr. Shabir Chandio | Senior Health Advisor Sindh and Baluchistan USAID | sachandio@usaid.gov |
|  | Dr. Kashif Ali Raza | Health Services ManagerIntegrated Health Services | pm@ihspakistan.com |
| **Technical Experts** |
|  | Dr. Nighat Shah | Assistant Professor APPNA Institute of Public Health | nighat.shah@jsmu.edu.pk |
|  | Dr. Sattar Chandio  | Additional Program DirectorLHW Program | drschandio@gmail.com |
|  | Prof. Marie Andrades  | Professor Family MedicineJinnah Sindh Medical University | mardrades0@gmail.com |
|  | Dr. Sahib Dino  | Pediatrician Department of Health | **-** |
|  | Dr. Arit Parkash  | Assistant Professor PediatricsNICH | aritparkash@gmail.com |
|  | Dr. Umar Khan | Nutrition SpecialistUNICEF | ukhan@unicef.org |
|  | Dr. Naveed Bhutto | Program Lead PFANutrition Wing MoNHSR&C | drnaveedbhutto@yahoo.com |
|  | Dr. Abid Jalaluddin Shaikh  | Provincial Program ManagerFFP Nutrition International | abidshaikh@nutrtionintl.org |
|  | Dr. Farhana Shahid  | Assistant Professor APPNA Institute of Public Health | drfarhanashahid@gmail.co |
|  | Mr. Zahid Memon  | Women and Child Health DivisionAga Khan University | zahid.memon@aku.edu.pk |
|  | Dr. Bahar Wasan | Manager Regional OfficePPHI | baharwassan@gmail.com |
|  | Dr. Zakir  | Manager DHISPPHI | manager.dhis@pphi.sindh.org |

**TABLE OF CONTENTS**

**Section I – Conceptual Framework**

* 1. Background and Introduction: Healthcare System Organization of Pakistan
	2. – Health Profile of the Province of Sindh
	3. Organization of PHC Services in Sindh
	4. Concept of Minimum Service Delivery Standards and Package

**Section II – Methodology of Updating MSDP for Primary Healthcare (PHC) Services**

* 1. Generating List of Services and Resources required at Primary Healthcare
	2. Development of Updated Minimum Service Delivery Package (MSDP)
	3. Validation and Publication of Revised MSDP

**Section III – MSDP for PHC Services**

3.1 Importance and Scope of PHC Services

3.2 Recommended Services for PHC

3.3 Physical Standards: Infrastructure and Catchment Areas

3.4 List of Facility Based and Outreach Services with Referral

3.5 Human Resources required at different types of PHC Facilities

3.6 Essential Drugs, Supplies and Equipment for Facility Based and Outreach Services

**Section IV Implementation Plan**

4.1 Pre-Requisites for Successful Implementation

4.2 Performance Indicators

**Annexure**

1. **Permission letter of DG Health**

**ACRONYMS**

|  |  |
| --- | --- |
| **ANC** | **Antenatal Care** |
| **BHU** | **Basic Health Unit** |
| **CD** | **Community Dispensary** |
| **CHW** | **Community Health Worker** |
| **CMW** | **Community Midwife** |
| **DHQH** | **District Headquarter Hospital**  |
| **DOH** | **Department of Health** |
| **EBF** | **Exclusive Breastfeeding** |
| **EML** | **Essential Medicines List** |
| **EPHS** | **Essential Package of Health Services** |
| **EPI** | **Expanded Program on Immunization** |
| **HANDS** | **Health and Nutrition Development Society** |
| **HCDS** | **Healthcare Delivery System** |
| **IHS** | **Integrated Health Services** |
| **IU** | **International Units** |
| **IYCF** | **Infant Young Child Feeding** |
| **LHV** | **Lady Health Visitor** |
| **LHW** | **Lady Health Worker** |
| **MCHC** | **Maternal Child Health Center** |
| **MERF** | **Medical Emergency Resilience Foundation** |
| **MNCH** | **Maternal. Neonatal and Child Health** |
| **MSDP** | **Minimum Service Delivery Package** |
| **NCD** | **Non-Communicable Diseases** |
| **NGO** | **Non-Government Organizations** |
| **NNS** | **National Nutrition Survey** |
| **PDHS** | **Pakistan Demographic Health Survey** |
| **PHC** | **Primary Healthcare** |
| **PNC** | **Postnatal Care** |
| **PPHI** | **People’s Primary healthcare Initiative** |
| **PPP** | **Public Private Partnership** |
| **RHC** | **Rural Health Center** |
| **SBA** | **Skilled Birth Attendant** |
| **SRSO** | **Sindh Rural Support Organization** |
| **TBA** | **Traditional Birth Attendant** |
| **THQH**  | **Taluka Headquarter Hospital**  |
| **TRF** | **Technical Resource Facility** |
| **UNICEF** | **United Nation’s Children Fund** |
| **USAID** | **United States Agency for International Development** |
| **WHO** | **World Health Organization** |
| **WMO** | **Woman Medical Officer** |
| **W/V** | **Weight by Volume** |
| **W/W** | **Weight by Weight** |

**SECTION 1: CONCEPTUAL FRAMEWORK**

* 1. **BACKGROUND: HEALTHCARE SYSTEM ORGANIZATION OF PAKISTAN**

The concept of health care system includes the involvement of the people, organizations, agencies, and resources that provide services to meet the health needs of the individual, community, and population (1). In a balanced health care system people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, through the different levels and sites of care within the health system (2).

Pakistan has a mixed health system that includes public, parastatal, private, civil society, philanthropic contributors, and donor agencies (Figure 1). In Pakistan, health care delivery to the consumers is systematized through four modes of preventive, promotive, curative, and rehabilitative services. Furthermore, in Pakistan under article 18th amendment the health care services are the obligations of provisional government except for the federal area (3).

The public health delivery system functions through a three-layer approach primary, secondary, and tertiary (**Figure 1**).

**Primary Health Care** – refers to "essential health care" that is based on practical, scientifically sound and socially acceptable methods and technology, which make universal health care accessible to all individuals and families in a community (4). Primary health care in Pakistan has two components

1. *Community component* of service provision through frontline health workers (Community Health Workers, Lady Health Workers, Community Midwives and Vaccinators) that involves primarily preventive and health promotive services.
2. *Health facility component* including Basic Health Units (BHUs), and Rural Health Centers (RHCs), Maternal and Child Health Centers (MCHCs) and Civil Dispensaries. The MCHCs and Civil Dispensaries are often located in urban and large rural areas.

**Secondary Health Care** – refers to the medical care that is provided by a specialist or facility upon referral from primary care and that requires more specialized knowledge, skill, or equipment than the primary care professional can provide. The Secondary level health facilities in Pakistan include Tehsil Headquarter Hospital (THQH) and District Headquarter Hospital (DHQH). The services provided at the health facilities are primarily curative in nature. The Primary and Secondary Health Care constitutes the District Health Service system.

**Tertiary Health care** – refers to state of the art specialized consultative health care that involves all specialties and sub-specialties supported by availability of required infrastructure, human resource, supplies, medicines and equipment including Hi-tech medical equipment. These tertiary care hospitals are generally located in the provincial capital and ideally expected to receive patients from secondary care hospitals situated in the districts. With few exceptions, these are also affiliated with the medical teaching institutions for graduates and post-graduates.



* 1. **HEALTH PROFILE OF SINDH**

***Population and its distribution***

Sindh is the most urbanized and industrialized province of Pakistan. The Province of Sindh has an area of 140,914 sq. kilometers giving an average population density of 340 persons per square kilometer (5). The estimated population of Sindh in 2017 was 47.89 million (6). Male/Female and Urban/Rural distribution of population is almost equal (Figure 2)

Figure 2: Distribution of Population in Sindh (Source: Census 2017)

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***Major Health Indicators***

Sindh has the 2nd highest Human Development Index out of all of Pakistan's provinces at 0.628 (7). In spite of extensive network of health care facilities, health status of the people of the province as a whole is below the desired level. As per the information available in recent Pakistan demographic and health survey and National Nutrition Survey, it has been observed that health indicators in Sindh are at par with national average, however they a below the level of provinces of Punjab and Khyber Pakhtunkhwa.

*Child Health and Nutrition*

According to Pakistan Demographic and Health Survey 2017-18 (8), immunization coverage of all basic vaccines among children in dismally low at 49%. One third of children reported having experienced fever in the last two weeks. Child mortality rates are also unacceptably high. Sindh is severely affected by intensifying malnutrition and stunting indicators. According to National Nutrition Survey 2018, as many as 45.5 per cent children under the age of five are stunted while wasting counts for 23.3 percent children, 41.3 percent are underweight and 5.2 percent are overweight (9).

Maternal Health and Family Planning

Maternal care indicators have improved in Sindh but family planning indicators need a catch up. Three fourths of women have access of skilled birth attendance and most of them deliver in health facility. However, only 20.1% of women utilize public sector health facilities which is indicative of high use of private services. Contraceptive prevalence continue to be low at 30% while fertility rates are very high especially for rural areas.

Communicable and Non-Communicable Diseases

There is dearth of information on burden of communicable and non-communicable diseases and their risk factors. Statistics on risk factors for communicable diseases are alarming. Half of the population has no awareness on mode of transmission of tuberculosis. Although access to improved water source and sanitation have improved, only percent of the population has access to safe drinking water sources (10, 11). Moreover, risk factors for non-communicable diseases are also on rise with almost one out of every 6 men using some form of tobacco.

**Table 1: Key Health Indicators of Sindh**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Sindh | Pakistan |  |
| Child Health and Nutrition (Children <5 years) |  |  |
|  | Exclusive Breastfeeding | 52.3% | 48.4% | NNS 2018 |
|  | Underweight  | 41.3% | 28.9% | NNS 2018 |
|  | Stunting | 45.5% | 40.2% | NNS 2018 |
|  | Wasting  | 23.3% | 17.7% | NNS 2018 |
|  | Overweight  | 5.2% | 9.5% | NNS 2018 |
|  | Immunization Coverage (12-23 M) | 49% | 66% | PDHS 2017 |
|  | Prevalence of ARI in last two weeks  | 14.7% | 13.8% | PDHS 2017 |
|  | Prevalence of Diarrhea in last two weeks | 14.4% | 19.1% | PDHS 2017 |
|  | Prevalence of Fever in the last two weeks  | 33.6% | 37.6% | PDHS 2017 |
|  | Under 5 Mortality rate | 77/1000 | 74/1000 | PDHS 2017 |
|  | Infant Mortality Rate | 60/1000 | 62/1000 | PDHS 2017 |
|  | Neonatal Mortality Rate | 38/1000 | 42/1000 | PDHS 2017 |
|  | Perinatal Mortality Rate | 52/1000 | 57/1000 | PDHS 2017 |
| Maternal Health and Family Planning |  |
|  | Antenatal Care by Skilled Provider  | 85.7% | 86% | PDHS 2017 |
|  | Low Birth Weight | 22.5% | 22% | PDHS 2017 |
|  | Delivery by Skilled Birth Attendant | 74.8% | 69.3% | PDHS 2017 |
|  | Institutional Delivery | 71.8%(20.1% in public sector facilities) | 66%(22.4% in public sector facilities) | PDHS 2017 |
|  | Contraceptive Prevalence Rate | 30.9% | 34.2% | PDHS 2017 |
|  | Total Fertility Rate | 3.6 | 3.6 | PDHS 2017 |
|  | Birth Spacing of minimum two years | 33.1% | 36.6% | PDHS 2017 |
|  | Teenage Pregnancies | 9.9% | 8.1% | PDHS 2017 |
| Communicable and Non-Communicable Diseases |  |
|  | Tobacco Use | 6.7% F16.3% M | 4.7% F22.6% | PDHS 2017 |
|  | Overweight | 7.8% F7.4% M |  | PDHS 2017 |
|  | Using Improved Water Source | 91.3% | 92.6%  | NNS 2018 |
|  | Using Improved Sanitation Source | 71.6% | 84.7% | NNS 2018 |
|  | Using Insecticide Treated Nets | 5.2% | 3.6% | PDHS 2017 |
|  | Knowledge on mode of transmission of Tuberculosis | 50.4% F51.6% M | 55.4% F52.8% M | PDHS 2017 |

* 1. **PRIMARY HEALTHCARE DELIVERY SYSTEM IN SINDH**

According to WHO, following are the eight essential components of Primary Healthcare:

1. Education concerning prevailing health problems and the methods of preventing and controlling them
2. Promotion of safe food supply and proper nutrition
3. An adequate supply of safe water and basic sanitation
4. Maternal and child health care, including Family Planning.
5. Immunization against major infectious diseases
6. Prevention and control of locally endemic diseases.
7. Appropriate treatment of common diseases and injuries
8. Provision of essential drugs

Health Services in Sindh are delivered through Health Department, Public Private Partnership PPP, and private organizations/NGOs. The private health services sector is dominated by “clinics”, the small office- based practices of general practitioners. Other private sector facilities include maternal and child health centers (maternity homes), dispensaries and diagnostic laboratories. In addition, there are some large hospitals, mainly run by private owners and NGOs and are located in major cities. The quality of care in the private sector is not standardized and regulated. Healthcare in Sindh is delivered at primary, secondary and tertiary levels though outreach and hospital based services.

***Public Sector Primary Healthcare Service Delivery in Sindh***

Primary healthcare services are provided at Basic Health Units (BHU’s), Dispensaries, MCH centers and Rural Health Centers. The outreach services are provided through vertical programs including EPI, LHW Program, Nutrition support program and MNCH program in collaboration with Department of Health. Currently, 17704 Lady Health Workers (LHWs) and 705 Lady Health Workers’ Supervisors working in the field in Sindh, while around 4,000 more LHW are required in order to cover the entire rural population of the province (12)

**DISPENSARIES**

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. 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 are included 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 LHW Program. 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

**MATERNAL AND CHILD HEALTH (MCH) CENTER**

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. It provides range of MCH services include antenatal, natal and postnatal care, family planning, growth monitoring along with referral support. 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.

**BASIC HEALTH UNIT**

The BHU is located in Union Council (mostly one in a UC, but there are UCs having more than 2-3 BHUs). Services provided at BHU are promotive, preventive, curative and referral. Outreach EPI is one of the components of BHU. 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.

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.

**RURAL HEALTH CENTER (RHC)**

The rural health centers (RHC’s) build a link between primary and secondary healthcare facilities where secondary healthcare facilities are deficient. They provide specialist care in the morning hours in addition to minor emergency services and have indoor facilities. The RHC provides a range of primary health care services. RHCs are equipped with a Laboratory and X-Ray facilities and 10-20 bedded inpatient facility. 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. RHC Building comprises service area and residential blocks. Service area 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.

**HEALTH HOUSE OF LADY HEALTH WORKER (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

**WORK STATION OF COMMUNITY MIDWIFE (CMW)**

A room in the house of CMW is her Work Station, which is a place where pregnant mothers will contact a CMW for consultation and examination. MNCH Programme provides an examination couch to place there for ANC and PNC check-ups. CMW keeps her equipment, medicines and supplies in a secured corner. The CMW also hangs 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.

Most of the BHU’s and some dispensaries and MCH centers have been contracted out to privately operated People’s Primary Healthcare Initiative (PPHI). Some units are also contracted out to HANDS NGO in district Malir of Karachi. The PPHI Sindh is a Public Private Partnership Program of Government of Sindh, Pakistan. It was initially launched under the umbrella of Sindh Rural Support Organization (SRSO), Pakistan. From 2014 onwards, PPHI became a registered not for profit company. The objective of the organization is to revitalize delivery of health services in the rural areas of Sindh.(13, 14). Similarly, majority of RHC’s have been outsourced to Integrated Health Services (IHS) while some RHC’s are run by MERF and HANDS.

Table 1: Primary Healthcare Facilities in Sindh

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No | Category | HFs with HANDS | HF’s with MERF | HF’s with IHS |  HFs with PPHI |  HFs with Health Dept. | TOTAL |
| 1 | Rural Health Centers | 2 | 8 | 96 | 9 | 14 | 129 |
| 2 | Basic Health Units | 12 | 0 | 1 | 653 | 129 | 795 |
| 3 | Dispensaries | 12 | 0 | 0 | 468 | 707 |  1187 |
| 4 | Mother & Child Health Centre (MCH Centers) | 6 | 0 | 0 | 34 | 75 | 115 |
|  | Total |  32 | 8 | 97 | 1164 | 925 | **2226** |

Source: PPHI Sindh 2019 and Department of Health Sindh 2019

* 1. **CONCEPT AND IMPORTANCE OF MSDP**

The packaging of the health services delivery at various levels of care facilitate in ensuring the availability of the requisite services at that particular level and takes into account the health care needs of the population and the available financial resources. The health service delivery package primarily includes the list of services along with infrastructure, human resource, medicines, supplies and equipment requirements to deliver those services. The standards of service delivery refer to the qualitative aspects of the services that are being provided and sets out the quality protocols for delivery of each service.

The packaging of services may be a minimum collection of basic health services keeping in view the resources of the country to a more comprehensive Essential Package of Health Services covering the broader determinants of health. Countries with limited resources take a start with a basic package and gradually expand their envelope to include all essential services. Moreover, they also change their packages according to changes in burdens of different emerging and re-emerging diseases.

 Liberia started with a basic package of health services in 2007 and implemented it in majority of their facilities within a few years. The country saw considerable improvement in standardized medical services, health human resource development and supply chain management systems to ensure the acceleration of health care for all in Liberia. This led to the development of Essential Package of Health Services (EPHS) for secondary and tertiary care, The EPHS for secondary and tertiary care provided a more comprehensive set of services to strengthen key areas that were performing poorly and added new services necessary to address needs at all levels of the health care system (15).

Similarly Nepal also started small with basic service package like safe motherhood and control of communicable diseases and gradually enhanced their package in their Health Plan 2010–2015 to include new services under the reproductive health and child health areas, and new programs on mental health, oral health, environmental health, and community-based new-born care, a community-based nutrition care and support program and a non-communicable disease control component to address changes in demographics and diseases (16). Somalia went one step ahead by not only establishing and enhancing essential health service packages but also setting up bare minimum operational standards for the services proposed (17).

After devolution of health sector to provinces, The provinces of Punjab and Khyber Pakhtunkhwa have developed the MSDP for Primary and Secondary Health facilities between 2012 and 2016 (18, 19). Sind formulated a health sector strategy in 2012 which recommends about formulation of a package at different levels of care within district health system with required resources for needs of rural disadvantaged districts inclusive of the key priority needs. (20).

It is therefore imperative that standards of care at PHC and Secondary healthcare are standardized which includes services to be delivered and resources including human resources, drugs, supplies and equipment so that these services are effectively implemented. There is a need to define and document Minimum Health Services Delivery Package (MHSDP) at each level. The provinces of Punjab and KP have already developed their service delivery packages whereas no recent attempts have been made to define such a package in the province of Sindh. There is need for the review of earlier standards available in Sindh and modify them into a practical, acceptable and sustainable package based on consultations with all the relevant stakeholders. With emergence of new dimensions in health systems, such as public-private partnership, it has become imperative to have standard packages of services at different levels with known cost.

**SECTION II –**

**METHODOLOGY OF UPDATING MSDP FOR PRIMARY HEALTHCARE**

The minimum service delivery package for Primary Healthcare was revised in three phases:

1. **Generating List of Services and Resources required at Primary Healthcare**
2. **Development of Updated Minimum Service Delivery Package (MSDP)**
3. **Validation and Publication of Revised MSDP**

**Step 1: Generating List of Services and resources required at Primary Healthcare**

A list of services and resources required to be implemented at PHC level was prepared. Following steps were followed

1. Previous documents on provincial standards and health sector strategy were reviewed to generate the initial list of services and resources required to deliver the services. This included:
2. Zaidi S. Sindh health sector strategy 2012 – 2020
3. Essential Package of Health Services for Primary Health Care Facilities in Sindh-2014
4. Essential Medicines List Department of Health Government of Sindh 2014
5. The list was matched with standards developed by other provinces. This included:
6. Minimum Service Delivery Standards for Primary and Secondary Health Care in Punjab. 2008.
7. Minimum Health Services Delivery Package for Primary Health Care Facilities in Khyber Pakhtunkhwa 2012
8. The international standards for primary care were also reviewed and considered for inclusion of uncovered areas if applicable to local context. The documents and publications reviewed included:
9. Declaration of Alma-Ata: International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Retrieved February. 1978;14:2006.
10. Essential Package of Health Services Country Snapshot: Nepal 2015
11. Essential package of health services - Somaliland 2009. UNICEF; 2009.
12. Primary Care and Primary Health Care: What is the difference? Canadian Journal of Public Health 2006
13. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalize. Lancet 2008; 372: 917–27
14. Primary Health Care: Key to delivering cost-effective interventions. Disease Control Priorities Project 2007
15. The list was shared with core committee of relevant stakeholders to identify any local needs not covered. The core committee comprised of:
* Representative of DG Health Office
* Representatives from Organizations providing primary care services including PPHI, IHS and MERF
* Representatives from International Organization supporting the PHC services in Sindh (WHO/USAID)
1. The list was shared with Service Providers at Primary Healthcare levels. Regional office of PPHI and some BHU’s were visited in this regard and their feedback was incorporated. The preliminary package was shared with the service providers and managers and their input on services, human resources, essential drugs and equipment was noted. The service providers also provided practical feedback on standards for referral.

 **Step 2:** **Development of Minimum Service Delivery Package (MSDP)**

A consultative workshop was held to finalize the standards for the package. The participants included:

1. Members of the core committee of MSDP
2. Representatives of LHW and Nutrition programs
3. Specialists in family medicine, gynecology & Obstetrics, pediatrics and public health.

The participants were briefed about the project objectives and the methodology of updating MSDP. The preliminary list of services and resources were shared with them. They discussed the package in groups and provided their feedback. Decision on change in any component was reached through general consensus among all.

**Step 3: Validation, Publication and Dissemination of Revised MSDP**

The new package developed will be reviewed by two specialists with previous experience of developing PHC package and their feedback will be incorporated. Following peer review and approval by technical experts of the health department, the new MSDP for Sindh will be published and disseminated with relevant stakeholders in department of health. A Survey to assess level of adoption and implementation of recommendations in Revised MSDP may be conducted after one year of dissemination.

**Project Timeline**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Aug** **2019** | **Sep** **2019** | **Oct****2019** | **Nov****2019** | **Dec 2019** |
| Project Submission and approval  |  |  |  |  |  |
| Review of local documents and international guidelines to generate list of services and resources |  |  |  |  |  |
| Formation of Core Committee |  |  |  |  |  |
| Field Visits to PHC centers |  |  |  |  |  |
| Consultative Workshop with core committee and experts  |  |  |  |  |  |
| Revision and Finalization of MSDP |  |  |  |  |  |
| Peer Review |  |  |  |  |  |
| Publication and Dissemination |  |  |  |  |  |

**Section 3: MSDP FOR PRIMARY HEALTHCARE FACILITIES**

* 1. **Importance and Scope of Primary Healthcare**

Primary Health Care (PHC) is heart of all health services in any country which not only includes individual care but also emphasizes of community focused activities to achieve the ultimate goal of good health (21). PHC enhances access to healthcare services, improves health outcomes and decrease in hospitalization and emergency visits eliminating costly visits to hospitals and specialists. It also reduces disease burden, produce economic savings and assures greater equity by making the essential health services accessible to people at risk (22).

The concept of PHC has evolved over the years from a horizontally integrated comprehensive package of services to a vertically selective package over the years. However, the focus is shifting again towards the former in developing countries (23). Moreover, the PHC package which included conditions accounting for majority of burden of ill health and mortality in developing countries (maternity care, Family Planning, childhood immunizations, treatment of common illnesses of children and adults) in the past is now widening to cover growing burden of non-communicable diseases, mental health issues and emerging infections like HIV AIDS (24).

Despite the known advantages, the coverage and effectiveness of PHC services has remained variable due to insufficient financial allocation and poor availability of required human resources, equipment, drugs and supplies (25). As a result, progress in health indicators has been slower in developing countries as compared to developed countries (26).

* 1. **The Recommended Services for Primary Healthcare**

The following services are recommended to be included in PHC at the Alma-Ata Declaration in 1978:

1. Education concerning prevailing health problems and the methods of preventing and controlling them:
* To be delivered through facility based and outreach services
* Includes Preventive Education and BCC on:
* Prevailing communicable diseases (water/food borne, droplet infections, vector borne, STI’s and blood borne, zoonotic diseases, surface infections)
* Common Non-Communicable Diseases
* Malnutrition
* Maternal, Neonatal and Child Health
* Personal Hygiene
* Environmental protection
1. Promotion of food supply and proper nutrition
* To be delivered through facility based and outreach services
* Includes
* Education and BCC on Balanced Diet, IYCF, EBF, Complimentary Feeding, Maternal Nutrition
* Child Growth Monitoring including identification of specific micronutrient deficiencies
* Community Management of Malnutrition
1. An adequate supply of safe water and basic sanitation
* To be delivered through outreach services
* Includes
* Promotion of use of toilets/garbage disposal
* Water Testing at supply sources
* Safe storage and boiling of Water
1. Maternal and child health care, including family planning
* To be delivered through facility based and outreach services
* Includes
* Antenatal Care
* Delivery Care
* Postnatal Care
* Family Planning
* Early Newborn Care
* Integrated Management of Neonatal and Childhood Illnesses
* Adolescent and Sexual Health
* School health education and services
1. Immunization against the major infectious diseases
* To be delivered through facility based and outreach services
* Includes
* Routine Immunization Services
* Supplementary Immunization
1. Appropriate treatment of common diseases and injuries
* To be delivered through facility based services
* Includes
* First Aid for minor injuries
* First Aid and referral of severe Injuries and bites
1. Prevention and control of locally endemic diseases
* To be delivered through facility based services
* Includes
* Prevailing communicable diseases (water/food borne, droplet infections, vector borne, STI’s and blood borne, zoonotic diseases, surface infections)
* Common Non-Communicable Diseases including mental health disorders
* Malnutrition
* Maternal, Neonatal and Child Health
1. Provision of essential drugs
* Based on Services Needed

We propose an integrated model of PHC in which facility based and outreach services are integrated. The list of services has been classified as Facility based and Outreach Services. The human resources required to implement these services are also listed as a PHC package.

* 1. **Infrastructure and Catchment Area of PHC Facilities**

|  |  |  |
| --- | --- | --- |
| Facility | Catchment Population | Infrastructure |
| Dispensary | 2000-5000 | Doctors Consultation Room**Room for LHV**Procedure Room (Minor Injuries/Sterilization)Waiting Area**Store Room****Toilets (Male/Female)****Drinking Water****Safe Disposal of Waste** |
| MCH Center | 10000-25000 | OPD Room for WMORoom for LHVLabor Room with **two beds/PNC Ward**Waiting AreaDispensarySmall LaboratoryVaccine RoomStock RoomToilets (Male/Female)Drinking WaterSafe Disposal of Waste |
| Basic Health Unit | 10000-25000 | OPD Room for DoctorRoom for WMO/LHVRoom for Health EducationLabor Room Waiting AreaDispensaryLaboratoryVaccine RoomStock RoomToilet (Male/Female)Drinking WaterSafe Disposal of Waste**Residential Area for Doctors and Staff** |
| Rural Health Center | 50,000-100000 | **Administration Block with MS Office****OPD Room for Doctors and WMO’s****OPD Room for Gynecologist****OPD Room for Chest Specialist****OPD Room for Surgeon****OPD Room for Pediatrician** Room for LHVRoom for Health Education10 bed WardsOTLabor Room Waiting AreaDispensaryLaboratoryX-ray RoomVaccine RoomStock RoomGenerator Room/solar SystemToilet (Male/Female)Drinking WaterSafe Disposal of Waste**Residential Area for Doctors and Staff** |
|  |  |  |

* 1. **List of Services at PHC Level**

***Facility Based Services at PHC Level***

1. **Prevention and Management of locally Endemic Communicable Diseases**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **RHC A** | **BHU/RHC B** | **BHU +** | **Dispensary** | **MCH Center** |
| **DROPLET INFECTIONS** |
|  | ARI(Common Cold/Influenza/Acute Bronchitis) | YES | YES | YES | YES | YES |
|  | Pneumonia (without complications) | YES | YES | YES | YES | YES |
|  | Pneumonia with complications | **YES** | Referral | Referral | Referral | Referral |
|  | Otitis Media | YES | YES | YES | YES | YES |
|  | Otitis Media with complications | **YES** | Referral | Referral | Referral | Referral |
|  | **Measles** (without complications) | YES | YES | YES | YES | YES |
|  | Measles with complications | **YES** | Referral | Referral | Referral | Referral |
|  | **Diphtheria without complications** | YES | YES | YES | YES | YES |
|  | Diptheria with complications | **YES** | Referral | Referral | Referral | Referral |
|  | Chicken Pox | YES | YES | YES | YES | YES |
|  | Pertussis | YES | YES | YES | YES | YES |
|  | Tuberculosis  | **YES** | **OPTIONAL** | **OPTIONAL** | **NO** | **NO** |
| **FECAL-ORAL INFECTIONS** |
|  | Acute Diarrhea  | YES | YES | YES | YES | YES |
|  | Acute Severe Diarrhea | YES | Referral | Referral | Referral | Referral |
|  | Chronic Diarrhea | Referral | Referral | Referral | Referral | Referral |
|  | Cholera | YES | Referral | Referral | Referral | Referral |
|  | Dysentery | YES | YES | YES | YES | YES |
|  | Worm Infestation | YES | YES | YES | YES | YES |
|  | Hepatitis A  | YES | YES | YES | YES | YES |
|  | Hepatitis E | Referral | Referral | Referral | Referral | Referral |
|  | Suspected Typhoid | Referral | Referral | Referral | Referral | Referral |
|  | **Acute Flaccid Paralysis** | Referral | Referral | Referral | Referral | Referral |
| **VECTOR BORNE AND ZOONOTIC DISEASES** |
|  | Malaria | YES | YES | YES | YES | YES |
|  | Complicated Malaria | **YES** | Referral  | Referral  | Referral  | Referral  |
|  | Dengue without complications | YES | YES | YES | YES | YES |
|  | Dengue Hemorrhagic Fever | Referral  | Referral  | Referral  | Referral  | Referral  |
|  | Chickenguniya without complications | YES | YES | YES | YES | YES |
|  | Chickenguniya with complications | Referral  | Referral  | Referral  | Referral  | Referral  |
|  | Dogbite (Cat 1 and 2) | YES | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
|  | Dog Bite (Cat 3) | Referral  | Referral  | Referral  | Referral  | Referral  |
|  | Leishmaniasis | Referral  | Referral  | Referral  | Referral  | Referral  |
|  | Suspected Brucellosis | Referral  | Referral  | Referral  | Referral  | Referral  |
|  | Suspected Congo Crimean Hemorrhagic Fever | Referral  | Referral  | Referral  | Referral  | Referral  |
|  |  |  |  |  |  |  |
| **SURFACE INFECTIONS** |
|  | Conjunctivitis | YES | YES | YES | YES | YES |
|  | Trachoma | YES | YES | YES | YES | YES |
|  | Scabies | YES | YES | YES | YES | YES |
|  | Dermatitis | YES | YES | YES | YES | YES |
|  | Fungal Infection | YES | YES | YES | YES | YES |
|  | Impetigo | YES | YES | YES | YES | YES |
|  | Anthrax | Referral | Referral | Referral | Referral | Referral |
|  |  | **RHC A** | **BHU/RHC B** | **BHU +** | **Dispensary** | **MCH Center** |
|  | Tetanus | Referral | Referral | Referral | Referral | Referral |
|  | Leprosy | Referral | Referral | Referral | Referral | Referral |
| **STI’s and BLOOD BORNE** |
|  | Acute Urinary Tract infection | YES | YES | YES | YES | YES |
|  | Syndromic Management of STI’s | YES | YES | YES | YES | YES |
|  | HIV AIDS (Suspect) | Referral | Referral | Referral | Referral | Referral |
|  | Hepatitis B | Referral | Referral | Referral | Referral | Referral  |
|  | Hepatitis C | Referral | Referral | Referral | Referral | Referral |
|  | **Education and BCC on:*** Water/food borne infections
* Droplet infections
* Vector borne infections
* STI’s and blood borne infections
* Zoonotic diseases,
* Surface infections
* Personal Hygiene and Sanitation
 | YES | YES | YES | YES | YES |

1. **Prevention and Management of locally Endemic Non-Communicable Diseases, Mental Health Issues, Dental Health issues and Common Injuries**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **RHC A** | **BHU/RHC B** | **BHU +** | **Dispensary** | **MCH Center** |
| **Cardiovascular Diseases** |
|  | Hypertension (Mild to Moderate) | YES | YES | YES | YES | YES |
|  | Hypertension Complications/CAD/Angina/MI/Stroke  | Referral | Referral | Referral | Referral | Referral |
| **Endocrine Disorders** |
|  | Type 2 Diabetes Mellitus without Complications | YES | YES | YES | YES | YES |
|  | Type 1 Diabetes Mellitus and Diabetes Mellitus with Complication | Referral | Referral | Referral | Referral | Referral |
|  | Arthritis | YES | YES | YES | YES | YES |
|  | Suspect of Hyperthyroidism and Hypothyroidism | Referral | Referral | Referral | Referral | Referral |
| **GI and Urinary Tract Disorders** |
|  | Irritable Bowel Syndrome with Constipation | YES | YES | YES | YES | YES |
|  | Irritable Bowel Syndrome (Chronic) | Referral | Referral | Referral | Referral | Referral |
|  | Peptic Ulcer Disease | YES | YES | YES | YES | YES |
|  | Peptic Ulcer Disease (Chronic) | Referral | Referral | Referral | Referral | Referral |
|  | Biliary Disorders | Referral | Referral | Referral | Referral | Referral |
|  | Renal Calculi | Referral | Referral | Referral | Referral | Referral |
|  | Chronic Renal Failure/ESRD | Referral | Referral | Referral | Referral | Referral |
|  | Cancer Suspect with unexplained weight Loss  | Referral | Referral | Referral | Referral | Referral |
| **Respiratory Disorders** |
|  | Asthma | YES | YES | YES | YES | YES |
|  | Chronic Obstructive Pulmonary Disease | YES | Referral | Referral | Referral | Referral |
|  | Exacerbation of Asthma and COPD | Referral | Referral | Referral | Referral | Referral |
| **Neuro-Psychiatric Disorders** |
|  | Depression (Mild to Moderate) | YES | YES | YES | YES | YES |
|  | Anxiety (Mild to Moderate) | YES | YES | YES | YES | YES |
|  | Severe Depression and Anxiety | Referral | Referral | Referral | Referral | Referral |
|  | Attention Deficit Disorder | Referral | Referral | Referral | Referral | Referral |
|  | Fits/Epilepsy  | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer |
|  | Substance Abuse/Drug Dependence | Referral | Referral | Referral | Referral | Referral |
|  |  | **RHC A** | **BHU/RHC B** | **BHU +** | **Dispensary** | **MCH Center** |
| **Oro-Dental Disorders** |
|  | Toothache | YES | YES | YES | YES | YES |
|  | Dental Caries | YES | Referral | Referral | Referral | Referral |
|  | Periodontitis | YES | YES | YES | YES | YES |
|  | Gingivitis | YES | YES | YES | YES | YES |
|  | Oral Ulcers | YES | YES | YES | YES | YES |
|  | Filling/Scaling/Extraction/RCT | **YES** | Referral | Referral | Referral | Referral |
| **Injuries/Poisoning** |
|  | Minor InjuriesCut/Bruise/Laceration | YES | YES | YES | YES | YES |
|  | BLS and CPR | YES | YES | YES | YES | YES |
|  | Major Trauma/RTA (FIRST AID/BLS) | Referral | Referral | Referral | Referral | Referral |
|  | Burns | Referral | Referral | Referral | Referral | Referral |
|  | Acute Poisoning | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer |
|  | Snakebite  | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer |
| **Miscellaneous** |
|  | **Glaucoma** | YES | Referral | Referral | Referral | Referral |
|  | **Cataract** | YES | Referral | Referral | Referral | Referral |
|  | **HE and BCC on:*** Physical Activity
* Balanced Diet
* Avoidance of Substance Abuse
* Screening of Breast and Cervical Cancer
* Dental Hygiene
 | YES | YES | YES | YES | YES |

1. **Prevention and Management of Childhood Illnesses (<5 years)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **RHC A** | **BHU/RHC B** | **BHU +** | **Dispensary** | **MCH Center** |
| **Nutrition** |
|  | Growth Monitoring | YES | YES | YES | YES | YES |
|  | Management of Acute Malnutrition  | YES | YES | YES | YES | YES |
|  | Vitamin A Deficiency | YES | YES | YES | YES | YES |
|  | Anemia | YES | YES | YES | YES | YES |
|  | Severe Anemia | **Referral** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Vitamin C, D, E,K Deficiency | **Referral** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Iodine Deficiency | **Referral** | **Referral** | **Referral** | **Referral** | **Referral** |
| **IMNCI** |
|  | ARI | YES | YES | YES | YES | YES |
|  | Fast Breathing/LRTI/Pneumonia | YES | YES | YES | YES | YES |
|  | Wheeze/Nebulization | YES | YES | YES | YES | YES |
|  | Severe Pneumonia/PSBI | **YES** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Convulsing Child | **YES** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Diarrhea | YES | YES | YES | YES | YES |
|  | Zinc supplementation for treatment and prevention of diarrhea | YES | YES | YES | YES | YES |
|  | Severe Diarrhea | YES | Referred | Referred | Referred | Referred |
|  | Malaria without complications | YES | YES | YES | YES | YES |
|  | Malaria with complications | **YES** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Measles without complications | YES | YES | YES | YES | YES |
|  | Measles with complications | **YES** | **Referral** | **Referral** | **Referral** | **Referral** |
|  | Tetanus | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer | Stabilize and Refer |
|  | Ear infection | YES | YES | YES | YES | YES |
|  | **Health Education and BCC on:*** Hygiene
* Healthy diet and physical activity
* Iodized salt
* Sunlight exposure
 | YES | YES | YES | YES | YES |

1. **Maternal and Neonatal Health**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Referral**  | **RHC A** | **BHU/RHC B** | **BHU +** | **DIS** | **MCH Center** |
|  | Antenatal Care * Pregnancy Test
* ANC Card and Check ups
* BP Monitoring
* Iron/Folic Acid Supplements
* Tetanus immunization
* Malnutrition
* Deworming
* Management of Malaria/UTI/STI
* Vaginal Discharge
* Identification of high risk pregnancies
* Vitamin A Deficiency
 | **APH****Pre Eclampsia****Eclampsia****Incomplete Abortion****Ectopic pregnancy****Shock****Complicated cases of intestinal worms, malnutrition, malaria, UTI &STI** | YES | YES | YES | YES | YES |
|  | Delivery Care (NVD and Assisted Delivery)* Identification and monitoring of Labor
* Parenteral Oxytocin
* Parenteral anti convulsants
* Parenteral anti-biotics
* DNC
* Suturing of 1st and second degree tears
* Manual vacuum aspiration of retained products of conception
* Vacuum-assisted delivery
* Manual removal of the placenta
* Newborn resuscitation
 | **Blood Transfusion****Eclampsia****Complicated Labor****Cesarean Section****3rd degree vaginal and cervical tears****Prolapsed Cord****Shoulder dystocia****Puerperal Sepsis** | YES | YES | YES | **NO** | YES |
|  | Postnatal Care* Iron/Folic acid supplementation
* Anti-Biotics
 | **PPH/Shock** | YES | YES | YES | YES | YES |
|  | Family Planning* Counseling on Spacing
* Provision of Contraceptives (Pills/Condoms/Injections/IUD)
* TL
 | **Vasectomy****Infertility** | YES | YES | YES | YES | YES |
|  | Early Newborn Care* Clean Airway/Cord Clamp
* Cord Care
* Weighing the baby
* Kangaroo Mother Care
* Initiation of BF
* Immunization
* Prophylactic Vitamin K
* Chlorhexhidine
* Resuscitation if required
 | **Danger Signs** **Neonatal Jaundice** | YES | YES | YES | **NO** | YES |
|  | **Health Education and BCC on:*** Healthy Pregnancy
* Family Planning
* PSBI
* Hand Hygiene
* Danger Signs
* Neonatal Care
* IYCF
 |  | YES | YES | YES | YES | YES |

1. **Immunization Services**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **RHC** | **BHU** | **BHU +** | **Dispensary** | **MCH Center** |
|  | Tuberculosis (BCG) | YES | YES | YES | YES | YES |
|  | Diptheria | YES | YES | YES | YES | YES |
|  | Pertussis | YES | YES | YES | YES | YES |
|  | Tetanus | YES | YES | YES | YES | YES |
|  | Hepatitis B  | YES | YES | YES | YES | YES |
|  | Meningitis (HIB) | YES | YES | YES | YES | YES |
|  | Pneumonia (HIB/PCV) | YES | YES | YES | YES | YES |
|  | Diarrhea (ROTA) | YES | YES | YES | YES | YES |
|  | Measles | YES | YES | YES | YES | YES |
|  | Typhoid (TCV) | YES | YES | YES | YES | YES |
|  | Polio (OPV/IPV) | YES | YES | YES | YES | YES |

1. **Diagnostic Services**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Services** | **RHC** | **BHU** | **BHU +** | **DIS** | **MCH Center** |
|  | Serum Hemoglobin | YES | YES | YES | NO | YES |
|  | Complete Blood Count | YES | NO | NO | NO | NO |
|  | ESR | YES | YES | YES | NO | YES |
|  | Bleeding Time and Coagulation Time | YES | YES | YES | NO | YES |
|  | Urine DR | YES | YES | YES | NO | YES |
|  | Urine for Albumin and Sugar | YES | YES | YES | NO | YES |
|  | Blood Urea and Creatinine  | YES | YES | YES | NO | YES |
|  | FBS/RBS | YES | YES | YES | NO | YES |
|  | Malaria Microscopy/RDT | YES | YES | YES | NO | YES |
|  | HBs Ag | YES | YES | YES | NO | YES |
|  | Anti HCV | YES | YES | YES | NO | YES |
|  | LFT’s/Serum Bilirubin | YES | NO | NO | NO | NO |
|  | Blood grouping and Rh factors | YES | YES | YES | NO | YES |
|  | Pregnancy Test | YES | YES | YES | NO | YES |
|  | Ultrasound Scan | YES | YES | YES | NO | YES |
|  | X-Ray  | YES  | NO | NO | NO | NO |
|  | HIV/VDRL | YES  | NO | NO | NO | NO |
|  | UCE | YES  | NO | NO | NO | NO |
|  | Serum Cholesterol | YES  | NO | NO | NO | NO |
|  | AFB Smear/Gene Xpert | YES  | OPTIONAL | OPTIONAL | NO | NO |

***Outreach Services at PHC level***

1. Prevention and Management of Childhood Illnesses

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **LHW/CHW** | **CMW** |
|  | Child Development Milestones | YES | YES |
|  | Acute Malnutrition | Identification and Referral to OTP | NO |
|  | Severe Acute Malnutrition | Identification and Referral to NSC | NO |
|  | Chronic Malnutrition | Identification and Referral to OTP | NO |
|  | Micronutrient Deficiency | Identification and Referral to FLCF | NO |
|  |  |  |  |
|  | ARI Management (Cold, Cough, Fever) | YES | YES |
|  | Management of Child with Fast Breathing (Mild Pneumonia) | Referral | Referral |
|  | Mild Diarrhea | YES | YES |
|  | Severe Diarrhea | Referral | Referral |
|  | Wheeze/Convulsions/Dyspnea | Referral | Referral |

1. Maternal and Neonatal Health

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **LHW** | **CMW** |
| **ANTENATAL CARE** |
|  | Registration of Pregnant Women | **YES** | **YES** |
|  | ANC Card and Check ups | **Referral to BeMONC Facility** | **YES** |
|  | BP Monitoring | **YES** | **YES** |
|  | Iron/Folic Acid Supplements | **YES** | **YES** |
|  | Tetanus immunization | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |
|  | Identification of high risk pregnancies | **YES** | **YES** |
|  | Management of * Malnutrition
* Deworming
* Management of Malaria/UTI/STI
* Vaginal Discharge
* Vitamin A Deficiency
 | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |
| **NATAL CARE** |
|  | Identification and monitoring of LaborParenteral iv Fluids and OxytocinParenteral anti-bioticsSuturing of 1st and second degree tearsManual removal of the placenta | **Referral to BeMONC Facility** | **YES** |
|  | Assisted DeliveryParenteral anti convulsantsBlood TransfusionEclampsiaComplicated LaborCesarean Section3rd degree vaginal and cervical tearsProlapsed CordShoulder dystociaPuerperal Sepsis | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |
| **POSTNATAL CARE** |
|  | Iron/Folic acid supplementationAnti-Biotics | **YES** | **YES** |
|  | PPH/Shock | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |
| **FAMILY PLANNING** |
|  | Delaying marriageBirth Spacing | **YES** | **YES** |
|  | Condoms, Pills, Injections | **YES** | **YES** |
|  | IUCD’s | **NO** | **YES** |
|  | Implants, TL, Vasectomy | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |
| **NEWBORN CARE** |
|  | Neonatal Resuscitation | **NO** | **YES** |
|  | Clean Airway/Cord ClampWeighing the babyKMCInitiation of BF | **NO** | **YES** |
|  | JaundiceDanger signs | **Referral to BeMONC Facility** | **Referral to BeMONC Facility** |

1. **Health Education**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **LHW** | **CMW** |
|  | Personal Hygiene and Sanitation | YES | NO |
|  | Water/food borne DiseasesDroplet infectionsVector borneSTI’s and blood borneZoonotic diseasesSurface infections | YES | NO |
|  | Physical ActivityBalanced DietAvoidance of Substance AbuseScreening of Breast and Cervical CancerDental Hygiene | YES | NO |
|  | Healthy PregnancyFamily PlanningPSBIHand HygieneDanger SignsNeonatal CareIYCF | YES | YES |
|  | Breast feeding, weaning, balance dietIodized saltSunlight exposure | YES | YES |

1. **Immunization Services**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Vaccinator** | **LHW/CHW/CMW** |
|  | **Routine Immunization**Tuberculosis (BCG)DiptheriaPertussisTetanusHepatitis B Meningitis (HIB)Pneumonia (HIB/PCV)Diarrhea (ROTA)MeaslesTyphoidPolio (OPV/IPV) | **YES** | **NO** |
|  | **SNID’s/NID’s** | **YES** | **YES** |

* 1. **Human Resources for PHC Services**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **RHC** | **BHU** | **BHU +** | **Dispensary** | **MCH Center** |
| **Medical Superintendent** | 1 | 0 | 0 | 0 | 0 |
| Medical Officer | 4 | 1 | 1 | 1 | 0 |
| Female Medical Officer | 2 | 1 | 1 | 0 | 1 |
| **Dental Surgeon** | 1 | 0 | 0 | 0 | 0 |
| **Dental Technician** | 1 | 0 | 0 | 0 | 0 |
| **Staff Nurse** | 4 | 0 | 0 | 0 | 0 |
| LHV/Midwife | 8 | 2 | 4 | 1 | 4 |
| Laboratory Technician | 2 | 1 | 1 | 1 | 1 |
| **X-ray Technician** | 1 | 0 | 0 | 0 | 0 |
| Dispenser | 4 | 1 | 1 | 1 | 1 |
| Attendant | 1 | 1 | 1 | 1 | 1 |
| Ward Boy | 1 | 0 | 0 | 0 | 0 |
| Computer Operator | 1 | 1 | 1 | 1 | 1 |
| Chowkidar | 2 | 2 | 2 | 1 | 1 |
| Cleaner/Sanitory Worker | 3 | 1 | 3 | 1 | 1 |
| Maalhee | 1 | 1 | 1 | 1 | 1 |
|  |
| LHW | 1/100 households |
| CMW | 1/100 households |
| Vaccinator | 1/10000 population * There shall be at-least one vaccinator in every PHC facility
* Ideally there shall be two: One for the fixed center and other for outreach services
 |

* 1. **Essential Drugs and Vaccines**
1. **For Facilities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| **Anesthetics** |  |  |  |  |
| Lidocaine (hydrochloride) Ampoule 2% w/v (10 ml) | YES | YES | YES | YES |
| Lidocaine (hydrochloride) Topical 2% Gel (15 gm) | YES | YES | YES | YES |
| Lignocaine + Epinephrine (adrenaline)Dental Cartridge 2% +1:80000 | YES | NO | NO | NO |
| Lignocaine + Epinephrine (adrenaline) 2% +1:80000 | YES | NO | NO | NO |
| **Analgesics Opioid** |  |  |  |  |
| Morphine (Sulphate or Hydrochloride) Ampoule 10mg 1-ml | YES | NO | NO | NO |
| Pethidine (Hydrochloride) Ampoule 50mg/ml in 2 ml | YES | NO | NO | NO |
| **Analgesics** |  |  |  |  |
| Acetylsalicylic acid (Dispersible) Tab 100 mg to 500 mg | YES | YES | YES | YES |
| Acetylsalicylic acid Suppository 50 mg to 150 mg | YES | YES | YES | YES |
| Mefenamic Acid Tab 250 mg | YES | YES | YES | YES |
| Mefenamic Acid Suspension 50mg/5ml | YES | YES | YES | YES |
| Diclofenac (sodium) Tab 50 mg | YES | YES | YES | YES |
| Diclofenac (sodium) Ampoule 75mg in 3 ml | YES | YES | YES | YES |
| Ibuprofen + Tab 200, 400 mg | YES | YES | YES | YES |
| Ibuprofen + Syrup 200mg/5ml | YES | YES | YES | YES |
| **Paracetamol Tab 500 mg\*** | YES | YES | YES | YES |
| **Paracetamol Injection 150 mg/ml\*** | YES | NO | NO | NO |
| **Paracetamol Syrup 125 mg/5ml\*** | YES | YES | YES | YES |
| **Paracetamol Suppository 100 mg\*** | YES | YES | YES | YES |
| **Anti-Allergics and Medicines used in Anaphylaxis** | YES |  |  |  |
| **Chlorpheniramine (hydrogen maleate) Tab 4 mg\*** | YES | YES | YES | YES |
| **Chlorpheniramine (hydrogen maleate) Injection 10mg/ml\*** | YES | YES | YES | YES |
| **Chlorpheniramine (hydrogen maleate) Syrup 2.5 mg/5ml\*** | YES | YES | YES | YES |
| Loratidine Tab 10 mg | YES | YES | YES | YES |
| Loratidine Syrup 1 mg/ml | YES | YES | YES | YES |
| **Dexamethasone (disodium phosphate) Tab 0.5mg\*** | YES | YES | YES | YES |
| **Dexamethasone (disodium phosphate) Injection 4 mg/ml\*** | YES | YES | YES | YES |
| Epinephrine (adrenaline) Ampoule 1 mg/ml | YES | YES | YES | YES |
| Hydrocortisone (sodium succinate) Injection 100,250 mg | YES | YES | YES | YES |
| Prednisolone Tab 5 mg | YES | YES | YES | YES |
| **Antidotes and Other Substances used in Poisonings** |  |  |  |  |
| Atropine (sulfate) Ampoule 1 mg in I ml | YES | YES | YES | YES |
| Charcoal Activated Powder | YES | YES | YES | YES |
| **Diazepam Injection 10 mg\*** | YES | YES | YES | YES |
| **Diazepam rectal gel solution\*** |  |  |  |  |
| Methylthioninium chloride (methylene blue) Ampoule 40 mg/ml in 10 ml | YES | **NO** | **NO** | **NO** |
| Naloxone (hydrochloride) Ampoule 400 mcg in 1 ml | YES | **NO** | **NO** | **NO** |
| **Anti-Epileptics** |  |  |  |  |
| Carbamazepine Tab 200 mg | YES | **NO** | **NO** | **NO** |
| Carbamazepine Syrup 100 mg/5ml | YES | **NO** | **NO** | **NO** |
| Phenobarbital (sodium) Tab 30 mg | YES | **NO** | **NO** | **NO** |
| Phenobarbital (sodium) Inj 200mg/ml | YES | **NO** | **NO** | **NO** |
| Phenytoin Sodium Tab 100 mg | YES | **NO** | **NO** | **NO** |
| **Magnesium Sulphate Injection 500 mg/ml (only for eclampsia)\*** | YES | YES | YES | YES |
| **ANTI-BIOTICS/Anti Microbials** |  |  |  |  |
| **Amoxicillin (trihydrate) Tab/Cap 250, 500 mg\*** | YES | YES | YES | YES |
| **Amoxicillin (trihydrate) Syrup 125 and 250 mg/5ml\*** | YES | YES | YES | YES |
| **Amoxicillin (trihydrate) Injection 250,500 mg\*** | YES | YES | YES | YES |
| **Ampicillin (sodium) Cap250, 500 mg\*** | YES | **NO** | **NO** | **NO** |
| **Ampicillin (sodium) syrup125 and 250 mg/5ml\*** | YES | **NO** | **NO** | **NO** |
| **Ampicillin (sodium) Injection 250,500 mg\*** | YES | **NO** | **NO** | **NO** |
| Azithromycin Cap 250,500 mg | YES | **NO** | **NO** | **NO** |
| Azithromycin Suspension 125mg/5ml  | YES | **NO** | **NO** | **NO** |
| Benzathine Penicillin Injection 0.6, 1,2 m IU | YES | **NO** | **NO** | **NO** |
| Chloramphenicol Cap 250 mg | YES | **NO** | **NO** | **NO** |
| Chloramphenicol (palmitate) Syrup 125 mg/5 ml | YES | **NO** | **NO** | **NO** |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| Chloramphenicol (sodium succinate) Injection 1 gm | YES | **NO** | **NO** | **NO** |
| Cefixime\* (trihydrate) Cap 400 mg | YES | **NO** | **NO** | **NO** |
| **Ceftriaxone Injection 250, 500, 1000 mg/5mg/ml in 100ml\*** | YES | **NO** | **NO** | **NO** |
| Ciprofloxacin (hydrochloride) Tab 250, 500 mg | YES | YES | YES | YES |
| Cotrimoxazolesulfamethoxazole + trimethoprim) Tab 400+80 mg | YES | YES | YES | YES |
| Cotrimoxazolesulfamethoxazole + trimethoprim) Syrup 200 mg + 40 mg/5 ml | YES | YES | YES | YES |
| Doxycycline (hyclate) Cap 100 mg | YES | **NO** | **NO** | **NO** |
| **Gentamicin (sulfate) Inj 40, 80 mg\*** | YES | **NO** | **NO** | **NO** |
| **Metronidazole (benzoate) Tab 200,400 mg\*** | YES | YES | YES | YES |
| **Metronidazole (benzoate) Syrup 200 mg/5ml\*** | YES | YES | YES | YES |
| Metronidazole (benzoate) Infusion 5 mg/ml in 100 ml | YES | YES | YES | YES |
| Nitrofurantoin Tab 100 mg | YES | **NO** | **NO** | **NO** |
| Procaine benzylpenicillin Injection 1,3 m IU | YES | **NO** | **NO** | **NO** |
| Phenoxymethylpenicillin (potassium) Tab 100 mg | YES | **NO** | **NO** | **NO** |
| Phenoxymethylpenicillin (potassium) Syrup 125 mg/5ml | YES | **NO** | **NO** | **NO** |
| **Anti Tuberculosis Drugs (As per TB Guidelines)** |  |  |  |  |
| Ethambutol Tab 400 mg  | YES | optional | optional | optional |
| Ethambutol Syrup 25mg/ml | YES | optional | optional | optional |
| Isoniazid Tab/Syp 50, 100, 300 mg | YES | optional | optional | optional |
| Pyrazinamide Tab 500 mg | YES | optional | optional | optional |
| Rifampicin Cap/Syp 150, 300, 450,600 | YES | optional | optional | optional |
| Streptomycin Injection 1 gm | YES | optional | optional | optional |
| Ethambutol + Isoniazid Tab 400+150 mg | YES | optional | optional | optional |
| Isoniazid + Rifampicin Tab 75 + 150; 150 + 300mg | YES | optional | optional | optional |
| Isoniazid + Pyrazinamide + Rifampicin Tab 75 + 400 + 150 mg | YES | optional | optional | optional |
| Rifampicin + Isoniazid +Pyrazinamide + Ethambutol Tab 150+75+ 400+250mg | YES | optional | optional | optional |
| Ethambutol + Isoniazid + Rifampicin Tab 275 + 75 + 150 mg | YES | optional | optional | optional |
| **Antimalarial** |   |  |  |  |
| Chloroquine (phosphate or sulfate) Tab 150 mg (VIVAX) | YES | YES | YES | YES |
| Primaquine (diphosphate) Tab 15 mg (VIVAX) | YES | YES | YES | YES |
| Artesunate+Sulphadoxine+Pyrimetha mine Co-blister / combined therapy Tab 50+500+25mg (FALCIPARUM) | YES | YES | YES | YES |
| Artesunate+Sulphadoxine+Pyrimetha mine Co-blister / combined therapy Tab 100+500+25mg (FALCIPARUM) | YES | YES | YES | YES |
| Artemether Inj 40mg/ml | YES | **NO** | **NO** | **NO** |
| **Anti-Helminthic**  |  |  |  |  |
| **Mebendazole (chewable) Tab 500 mg only for adults\*** | YES | YES | YES | YES |
| **Mebendazole Syrup 200mg/5ml\*** | YES | YES | YES | YES |
| Albendazole Tab 200 mg | YES | YES | YES | YES |
| Albendazole Syrup 100mg/5ml | YES | YES | YES | YES |
| Pyrantel (pamoate) Tab 250 mg | YES | **NO** | **NO** | **NO** |
| Pyrantel (pamoate) Syrup 250 mg/5ml | YES | **NO** | **NO** | **NO** |
| **Anti-Fungal** |  |  |  |  |
| Clotrimazole Vaginal Cream 1% | YES | YES | YES | YES |
| Clotrimazole Vaginal TAB 100, 500 mg | YES | YES | YES | YES |
| Clotrimazole Topical Cream 1% w/w | YES | YES | YES | YES |
| Nystatin Tab 500000 I/U | YES | YES | YES | YES |
| Nystatin drops 100000 IU/ml | YES | YES | YES | YES |
| Nystatin pessary 100000 IU | YES | YES | YES | YES |
| **Anti-Diabetics** |  |  |  |  |
| Glibenclamide Tab 5 mg | YES | YES | YES | YES |
| Metformin (hydrochloride) Tab 500mg | YES | YES | YES | YES |
| Insulin Regular Injection 100 IU.ml | YES | YES | YES | YES |
| Insulin comp Injection 30+70% w/v | YES | YES | YES | YES |
| **GIT Drugs** |  |  |  |  |
| Hyoscine (Butylbromide) Tab 10 mg | YES | YES | YES | YES |
| Hyoscine (Butylbromide) Inj 20mg/ml | YES | YES | YES | YES |
| Phloroglucinol Tab 80+80 | YES | YES | YES | YES |
| Metoclopramide (hydrochloride) Tab 10 mg | YES | YES | YES | YES |
| Metoclopramide (hydrochloride) Syrup 5mg/5ml | YES | YES | YES | YES |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| Metoclopramide (hydrochloride) Inj 5mg/ml | YES | YES | YES | YES |
| Omeprazole Cap 10, 20, 40 mg | YES | YES | YES | YES |
| Ranitidine Inj 25 mg/ml in 2 ml | YES | YES | YES | YES |
| Ranitidine Tab 150, 250 mg | YES | YES | YES | YES |
| Aluminium Hydroxide + Magnesium Trisilic Tab 250+500 mg | YES | YES | YES | YES |
| **ORS (Low osmolarity) Sachet with 20 mg Zinc dispersible** **Tab\*** | YES | YES | YES | YES |
| Bisacodyl Tab 5 mg | YES | YES | YES | YES |
| Glycerin Suppository | YES | YES | YES | YES |
| Ispaghol Husk | YES | YES | YES | YES |
| **Cardiovascular Drugs** |  |  |  |  |
| Glyceryl Trinitrate Sublingual 500 mcg | YES | YES | YES | YES |
| Isosorbide dinitrate Sublingual 5 mg | YES | YES | YES | YES |
| Amlodipine (Besylate) Tab 2.5, 5 mg | YES | **NO** | **NO** | **NO** |
| **Methyldopa Tab 250,500 mg\*** | YES | YES | YES | YES |
| **Hydralazine Tab 25 & 50 mg\*** |  |  |  |  |
| **Hydralazine Inj 20 mg\*** |  |  |  |  |
| Methyldopa Inj 250 mg | YES | **NO** | **NO** | **NO** |
| Hydrochlorothiazide Inj 20 mg | YES | **NO** | **NO** | **NO** |
| Hydrochlorothiazide Tab 25,50 mg | YES | **NO** | **NO** | **NO** |
| Enalapril (Maleate) Tab 5,10 mg | YES | YES | YES | YES |
| Atenolol Tab 5, 10, 25 mg | YES | **NO** | **NO** | **NO** |
| Furosemide Tab 20, 40 mg | YES | YES | YES | YES |
| Furosemide Inj 10 mg | YES | YES | YES | YES |
| **Oxytocic Drugs** |  |  |  |  |
| Ergometrine ((hydrogen maleate) Inj 200 mcg in 1 ml | YES | YES | YES | YES |
| **Misoprostol Tab 200 mcg\*** | YES | YES | YES | YES |
| **Oxytocin Inj 10 IU in 1 ml\*** | YES | YES | YES | YES |
| **Respiratory Drugs** |  |  |  |  |
| **Solbutamol (sulfate) Tab 2,4 mg\*** | YES | YES | YES | YES |
| **Solbutamol Solution 5 mg/ml for Nebulization\*** | YES | YES | YES | YES |
| **Salbutamol Syrup 2mg/5ml\*** |  |  |  |  |
| Ammonium Chloride + Chloroform + MentholDiphenhydramine + Sodium Citrate131.5mg/5ml + ml mg/5ml + 1mg/5 + 13.5mg/5ml + 55mg/5ml | YES | NO | **NO** | **NO** |
| Aminophylline Injection 25mg/ml | YES | YES | YES | YES |
| **Ophthalmic / ENT** |  |  |  |  |
| Boroglycerine ear drops (For Wax Removal) 40% | YES | YES | YES | YES |
| Plymyxin B Sulphate 1000 IU/ml +Lignocaine 50mg/ml ear drops 5 ml plastic bottle  | YES | YES | YES | YES |
| Chloramphenicol eye drops 1%, 0.5% w/v | YES | YES | YES | YES |
| Gentamicin Sulphate eye drops 0.3% | YES | YES | YES | YES |
| Plymyxin B Sulphate 1000 IU/gm +Bacitracin Zinc 500 IU/gm eye drops | YES | YES | YES | YES |
| Ciprofloxacin (hydrochloride) eye/ear drops 0.3% w/v | YES | NO | **NO** | **NO** |
| Tetracycline (hydrochloride) eye ointment 1% | YES | NO | **NO** | **NO** |
| Xylometalzoline nasal drops 0.05% | YES | NO | **NO** | **NO** |
| **I/V Infusions Plasma Substitutes** |  |  |  |  |
| Plasma Expander Infusion | YES | NO | **NO** | **NO** |
| **Glucose / Dextrose Infusion 5,10%\*** | YES | YES | YES | YES |
| Glucose / Dextrose Ampoule 25% | YES | YES | YES | YES |
| **Normal Saline Infusion 0.9%\*** | YES | YES | YES | YES |
| Dextrose + Saline Infusion 5 % + 0.9% w/v | YES | YES | YES | YES |
| **Ringer’s Lactate Infusion\*** | YES | YES | YES | YES |
| Potasium Chloride Solution 11.2% in 20 ml | YES | **NO** | **NO** | **NO** |
| Sodium Bicarbonate Inj 1.4% Isotonic | YES | **NO** | **NO** | **NO** |
| Water for Injection Ampoule 5 ml, 10 ml | YES | YES | YES | YES |
| **Vitamins and Minerals** |  |  |  |  |
| Ascorbic Acid Ampoule 50,100,500 mcg | YES | **YES** | YES | YES |
| Calcium Gluconate Inj 100 mg/ml in 10 ml | YES | **YES** | YES | YES |
| Calcium Lactate Tab 500 mg,1gm | YES | YES | YES | YES |
| Calcium Chloride Inj 200mg/ml | YES | **NO** | **NO** | **NO** |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| Ergocalciferol (Vitamin D) Tab 50000 IU | YES | YES | YES | YES |
| Ferrous salt (Fumerate) Tab equivalent to 60 mg iron | YES | YES | YES | YES |
| Ferrous salt (Fumerate) Syrup 25mg/ml | YES | YES | YES | YES |
| Folic acid Tablets 0.5, 1, 5 mg | YES | YES | YES | YES |
| **Ferrous salt + Folic Acid Tablets 60mg iron+400 mcg folic acid\*** | YES | YES | YES | YES |
| Multiple Micronutrients Sachet (UNICEF Approved) | YES | YES | YES | YES |
| **Retinol (Vitamin A) Tab 50000, 100000, 200000 IU\*** | YES | YES | YES | YES |
| **Zinc Sulphate Tab 20 mg (dispersible)\*** | YES | YES | YES | YES |
| **Vitamin K Inj 10 mg\*** | YES | NO | **NO** | **NO** |
| B Complex Tablets (DRAP Approved) | YES | YES | YES | YES |
| Multivitamins Tablets (DRAP Approved) | YES | YES | YES | YES |
| **Dermatological** |  |  |  |  |
| Benzyl Benzoate Lotion 5% and 25% | YES | YES | YES | YES |
| Permethrin Cream 5% w/w | YES | NO | **NO** | **NO** |
| Calamine Lotion 15% | YES | YES | YES | YES |
| Clobetasol (Propionate) Cream 0,05% w/w | YES | NO | **NO** | **NO** |
| Coaltar Lotion 5% | YES | NO | **NO** | **NO** |
| Hydrocortisone Cream 1% | YES | YES | YES | YES |
| PolymixineB (Sulphate)+ Bacitracin Zinc ointment 10000 IU/g +500 IU/g | YES | YES | YES | YES |
| Silver Sulphadiazine Cream 1% | YES | YES | YES | YES |
| **Contraceptives** |  |  |  |  |
| Condoms | YES | YES | YES | YES |
| Ethynylestradiol + Norethisterone CO Pills 35mcg+1mg | YES | YES | YES | YES |
| Levonorgestrel PO Pills 30 mcg | YES | YES | YES | YES |
| Levonorgestrel EC Pills 750 mg pack of two | YES | YES | YES | YES |
| Copper T / Multiload IUCD 150 mg/1ml | YES | YES | YES | YES |
| DMPA (medroxyprogesterone acetate) Inj 150 mg/ 1 ml | YES | YES | YES | YES |
| Norethisterone enantate Inj 200 mg/ml in 1 ml | YES | YES | YES | YES |
| Estradiol cypionate + medroxyprogesterone acetate Inj 5 mg+25 mg | YES | YES | YES | YES |
| **Vaccines &Sera (WHO Approved)** |  |  |  |  |
| BCG Vaccine | YES | YES | YES | YES |
| Pentavalent Vaccine (DPT+HBV+HIB) | YES | YES | YES | YES |
| Measles Vaccine | YES | YES | YES | YES |
| Polio Vaccine (OPV/IPV rivalent) | YES | YES | YES | YES |
| Pneumococcal Vaccine | YES | YES | YES | YES |
| Tetanus Toxoid | YES | YES | YES | YES |
| Anti-Rabies Vaccine (PVRV) Single Dose Vial | YES | YES | YES | YES |
| Anti-Snake Venum Serum | YES | YES | YES | YES |
| Typhoid Conjugate Vaccine | YES | YES | YES | YES |
| **Anxiolytics** |  |  |  |  |
| Alprazolam Tab 0.5 mg | YES | YES | YES | YES |
| Diazepam Tab 2 mg | YES | YES | YES | YES |
| **Antiseptics/Disinfectant** |  |  |  |  |
| Povidone-Iodine Solution 10% m/v | YES | YES | **YES** | **YES** |
| Halogenated natrium phosphate powder 100 gms  | YES | NO | **NO** | **NO** |
| Chlorine base compound Powder 0.1%  | YES | YES | YES | YES |
| Chlorhexidine + Ceterimide Solution 1.5% w/v+15%w/v | YES | YES | YES | YES |
| **Chlorhexidine digluconate (7.1%) for cord care Gel equivalent to 4% Chlorhexidine\*** |  |  |  |  |
| **Miscellaneous** |  |  |  |  |
| Tranexamic acid Cap 250,500 mg | YES | YES | YES | YES |
| Tranexamic acid Inj 250,500 mg/5ml | YES | YES | YES | YES |
| **Disposable Supplies** |  |  |  |  |
| Syringe (Autodisable) Sterile packs 1 cc, 5 cc | YES | YES | YES | YES |
| I.V Sets (DRAP approved) Sterile packs | YES | YES | YES | YES |
| I.V Canula (DRAP approved) Sterile packs 16G, 20 G, 22G,24G | YES | YES | YES | YES |
| Adhesive Tape (Hypoallergenic) Roll 1,2 inch | YES | **YES** | YES | YES |
| Chromic Catgut Sterile 0,1/0,2/0,3/0,4/0 | YES | **NO** | **NO** | **NO** |
| Cotton Bandage Roll 6.5cm\*2m | YES | YES | YES | YES |
| Absorbant Cotton Wool Pack 500 gm | YES | YES | YES | YES |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| Examination Gloves Pairs Box of 100 | YES | YES | YES | YES |
| Sterile Surgical gloves pairs 7,71/2  | YES | YES | YES | YES |
| Sterile Gauze dressing Pairs7.5 x 7.5 cm (10 ply)  | YES | YES | YES | YES |
| Liquid Paraffin Gauze (Sterile Packs) | YES | YES | YES | YES |
| Silk Sutures Sterile Packs 0,1/0,2/0,3/0,4/0 | YES | YES | YES | YES |
| Face Masks Disposable Sterile packs | YES | YES | YES | YES |
| Blood Lancets Sterile packs | YES | YES | YES | YES |
| Scalp Vein Set (DRAP approved) Sterile packs | YES | NO | NO | NO |
| Slides  | YES | YES | YES | YES |
| Safe Delivery Kits Sterile packs* 1 Batch soap
* 1 Apron
* 2 paper towels
* 2 pairs of latex examination gloves
* 1 plastic under-sheet (1 square meter)
* 1 underpad 60\*90cm and 2 alcohol pads
* 2 packs of sponges (4 sponges)
* 1 sterile bulb sucker
* 2 sterile umbilical cord clamp
* 1 sterile surgical blade
* 2 cotton threads
* 1 maternity pad
* 1 white polybag for disposal
* 1 unbleached dignity drape
* 1 Instruction sheet
 | YES | **YES** | **NO** | **YES** |
| Endotracheal tube Sterile packs set of 12 | YES | **NO** | **NO** | **NO** |
| Resuscitator Bag with mask Adult/Paeds | YES | YES | YES | YES |
| Nasogastric tube Adult/Paeds | YES | **NO** | **NO** | **NO** |
| Air Way Adult/Paeds | YES | **NO** | **NO** | **NO** |
| Crepe Bandage7.5, 10 cm x 2.7m | YES | **NO** | **NO** | **NO** |
| Liquid Parafin Gauze Sterile packs | YES | **NO** | **NO** | **NO** |
| Silk Gauze dressing 12/pack 0, 1/0, 2/0, 3/0, 4/0 | YES | **NO** | **NO** | **NO** |
| Volumetric Chamber (I.V. Burette) 100 ml size | YES | **NO**  | **NO** | **NO** |
| **Emergency Tray** |  |  |  |  |
| Injection Tranexamic Acid 250MG/5ML (10) | YES | YES | **NO** | YES |
| Injection Atropine 1MG/IML (10) | YES | YES | **NO** | YES |
| Injection Adrenaline 0.1MG/1ML (10) | YES | YES | **NO** | YES |
| Injection Diazepam 5 MG/ML (10) | YES | YES | **NO** | YES |
| Injection Diclofenac Sodium 25MG/ML (10) | YES | YES | **NO** | YES |
| Injection Hydrocortisone sodium 100 MG (10) | YES | YES | **NO** | YES |
| Injection pheniramine maleate 22.7mg MG/2ML (10) | YES | YES | **NO** | YES |
| Injection Lidocaine 2% W/V (5) | YES | YES | **NO** | YES |
| Water for injection 5 ML (5) | YES | YES | **NO** | YES |
| Injection ringer lactate 1000 ML (10) | YES | YES | **NO** | YES |
| Injection Normal Saline 500 ML (10) | YES | YES | **NO** | YES |
| Injection Glucose / Dextrose 25% 25ml ampoule (2) | YES | YES | **NO** | YES |
| Glyceryl Trinitrate Sublingual 500 MCG (50) | YES | YES | **NO** | YES |
| Isosorbide dinitrate Sublingual 5 MG (10) | YES | YES | **NO** | YES |
| Lidocaine GEL (1) | YES | YES | **NO** | YES |
| Cotton Roll 500 GMS (1) | YES | YES | **NO** | YES |
| Compression bandage (5) | YES | YES | **NO** | YES |
| D/S 1 CC, 5 CC, 10 CC (10 each) | YES | YES | **NO** | YES |
| IV set (20) | YES | YES | **NO** | YES |
| IV Cannula18G, 20G, 22G, 24G (20) | YES | YES | **NO** | YES |
| Silk Sutures Sterile Packs0, 1/0, 2/0 (10) | YES | YES | **NO** | YES |
| ETT 3 mm, 3.5 mm, 4 mm, 7.5 mm, 8mm (10) | YES | YES | **NO** | YES |
| Foleys catheter all sizes 10 F to 28 F (12) | YES | YES | **NO** | YES |
| NG Tube 14-18 Fr, infant/child: 10-14 Fr (10) | YES | YES | **NO** | YES |
| Volumetric Chamber IV Burette (5) | YES | NO | **NO** | NO |
| Injection Dobutamine 50mg/ml (5) | YES | NO | **NO** | NO |
| Injection Furosemide 10mg/ml (10) | YES | NO | **NO** | NO |
| Injection Calcium Gluconate 100mg/ml in 10ml (10) | YES | NO | **NO** | NO |
| Injection dimenhydrinate 50mg/ml (10) | YES | NO | **NO** | NO |
| **Name and Strength** | **RHC**  | **BHU** | **DIS** | **MCH** |
| Injection sodium bicarbonate 8.4% w/v, 25ml (10) | YES | NO | **NO** | NO |
| Injection potassium chloride 11.2% in 20 ml ampoule (5) | YES | NO | **NO** | NO |
| Injection plasma expander (5) | YES | NO | **NO** | NO |
| Injection ranitidine 25mg/ml (10) | YES | NO | **NO** | NO |
| Injection Aminophyline 25mg/ml (10) | YES | NO | **NO** | NO |
| Lidocaine Gel (5) | YES | NO | **NO** | NO |

 **\*Very Essential Drug**

1. **For Outreach Workers**

|  |  |  |
| --- | --- | --- |
| **Name and Strength** | **CMW** | **LHW** |
| **Analgesics** |  |  |
| **Paracetamol Tab 500 mg\*** | YES | YES |
| **Paracetamol Syrup 125 mg/5ml\*** | NO | YES |
| **Antiallergics and Medicines used in Anaphylaxis** |  |  |
| **Chlorpheniramine (hydrogen maleate) Tab 4 mg\*** | NO | YES |
| Benzyl Benzoate Lotion 25% | NO | **YES** |
| **ANTI-INFECTIVES** | YES |  |
| **Amoxicillin (trihydrate) Cap 250, 500 mg\*** | YES | NO |
| **Amoxicillin (trihydrate) Syrup 125 and 250 mg/5ml\*** | NO | YES |
| **Cefixime\* (trihydrate) Cap 400 mg\*** | YES | NO |
| **Metronidazole (benzoate) Tab 200,400 mg\*** | YES | NO |
| Piperazine syrup  | NO | YES |
| **Anti Helminthic**  |  |  |
| **Mebendazole (chewable) Tab 100,500 mg\*** | YES | YES |
| **Antimalarial** |  |  |
| Chloroquine (phosphate or sulfate) Tab 150 mg | NO | YES |
| SypChloroquinSulphate 50 mg/5 ml | NO | YES |
| **Oxytocic Drugs** |  |  |
| Ergometrine ((hydrogen maleate) Inj 200 mcg in 1 ml | YES | NO |
| **Misoprostol Tab 200 mcg\*** | YES | NO |
| **Oxytocin Inj 10 IU in 1 ml\*** | YES | NO |
| **Injection Magnesium Suphate 500 mg/ml\*** | YES | NO |
| Eye ointment Polymyxin B+ Bacitracin Zinc 10,000iu+500iu | YES | NO |
| **Cap Vitamin A\***  | YES | NO |
| **I/V Infusions Plasma Substitutes** |  |  |
| **ORS (Low osmolarity) Sachet\*** | NO | YES |
| **Glucose / Dextrose Infusion 5,10%\*** | YES | YES |
| **Normal Saline Infusion\*** | YES | NO |
| **Ringer's Lactate Infusion\*** | YES | NO |
| **Vtamins and Minerals** |  |  |
| **Ferrous salt + Folic Acid Tablets\*** | YES | YES |
| Multiple Micronutrients Sachet | NO | YES |
| Syrup Vitamin B | NO | YES |
| **Zinc Sulphate Tab 20 mg\*** | YES | NO |
| **Zinc Sulphate Suspension (20mg, bottle of 60 ml)\*** | Yes | Yes |
| **Contraceptives** |  |  |
| Condoms | YES | YES |
| Ethynylestradiol + Norethisterone CO Pills 35mcg+1mg | YES | YES |
| Copper T / Multiload IUCD 150 mg/1ml | YES | NO |
| Norethisterone enantate Inj | YES | YES |
| **Antiseptics/Disinfectant** |  |  |
| Povidone-Iodine Solution 10% m/v | YES | NO |
| Solution 4% Chlorhexidine  | YES | NO |
| **Chlorhexidine + Ceterimide Solution 1.5% w/v+15%w/v\*** | NO | YES |
| **Disposable Supplies** |  |  |
| Syringe (Autodisable) Sterile packs 1 cc, 5 cc | YES | NO |
| I.V Sets (DRAP approved) Sterile packs | YES | NO |
| I.V Canula (DRAP approved) Sterile packs 18G, 20 G, 22G,24G | YES | NO |
| Adhesive Tape (Hypoallergenic) Roll 1,2 inch | YES | **NO** |
| Surgical Guaze BPC Cloth  | YES | **NO** |
| Cotton Bandage Roll 6.5cm\*2m | YES | YES |
| Absorbant Cotton Wool Pack 500 gm | YES | YES |
| Examination Gloves Pairs Box of 100 | YES | NO |
| Surgical Hypoallergenic Latex FreeBreathable Paper Tape | YES | NO |
| Surgical Gloves  | YES | NO |
| Foley’s Catheters Two way SiliconCoated (All Sizes) | YES | NO |
| Black Silk size 1, 30mm, 3/8 CircleCurved Cutting needle. | YES | NO |
| Catgut Chromic Size 1, with 45/50mmIntestinal Eye less RB Needle, | YES | NO |
| Safe Delivery Kits Sterile packs | YES | **NO** |

 **\*Very Essential Drug**

* 1. **Equipment and Supplies**
1. For outreach services

|  |
| --- |
| **FOR LHW’s** |
| Salter Scale | 1 per year |
| Six Type Charts | 1 set per year |
| Health House Board | I Board per year |
| Identity Card | Valid for one year or as per contract/rules |
| **LHW Kit** | **Monthly Requirement** |
| Paracetamol Tablets | 200 tablets |
| Paracetamol Syrup | 10 bottles |
| Chloroquine Tablets 150 mg | 100 tablets |
| Chloroquine Syrup 50 mg/5ml | 5 bottles |
| Iron+Follic Acid Tablets | 1000 tablets |
| Anticeptic Lotion | 1 bottle |
| Amoxycillin suspension 125 mg | 5 bottles |
| Polyfax Eye ointment | 10 tubes |
| Vitamin B syrup | 7 bottles |
| BB Lotion | 2 bottles |
| Sticking Plaster | 1 Roll |
| Mebendazole Tablets | 100 tablets |
| Cotton Roll | 1 roll |
| Cotton Bandage | 1 roll |
| Piperazine syrup | 5 bottles |
| ORS | 20 sachets |
| Zinc Sulfate Suspension | 7 bottles |
| Thermometers | 1 each per year |
| Scissors | 1 per year |
| Pencil Torch | 1 per year |
| Condoms  | 100/month |
| Oral Pills  | 10 cycles/month |
| Depo Injection with Syringe | 3 Injections per month |
| Health Education Material |  |
| Data Recording and Reporting Instruments |  |

|  |
| --- |
| **For CMW’s** |
| Office Table | 1 |
| Office Chair | 1 |
| Client Stool | 1 |
| Examination Couch | 1 |
| Delivery Table | 1 |
| Safety Box with syringe cutting machine | **1** |
| Sterliser (Electric 12\*16) | 1 |
| Vaccum Extraction Equipment | 1 |
| Baby Ambubag | 1 |
| Screen  | 1 |
| Fetoscope | 1 |
| BP Apparatus | 1 |
| Thermometer | 1 |
| Stethoscope | 1 |
| Baby Weighing Machine | 1 |
| Weighing Machine Adult | 1 |
| Measuring tape | 2 |
| Delivery items (Forcep, Sponge Forcep, Kidney Tray, Steel Bowl, Speculum, Infusion with set, I/V Cannula) | 1 |
| Equipment required for episiotomies | 1 |
| Kit box steel | 1 |
| Sign Board | 1 |
| Medicines and Supplies | Monthly Requirement |
| Disposable delivery kit | 50 |
| Lignocaine 2% | 1 |
| Suture material | As per need |
| Urine Dipsticks | 50 |
| Hemoglobinometer | 1 |
| Kit for blood grouping | 50 tests |
| Plastic sheet | 1 |
| Partograph chart | 1 |
| Urinary catheters 12G 1x use | 50 |
| Amoxicillin tablets (250 & 500 mg)Cefaclor **(Velosef) if allergic to penicillin** | 8020 |
| Metronidazole tablets (200 & 400 mg) | 200 |
| IV fluid Normal Saline or Ringers | 50 |
| Injection Magnesium Sulphate | 4 |
| Tablet Misoprostal 200 mcg | 20 |
| Tablet Paracetamol/Mefenamic acid | 100 |
| Pyodine Antiseptic solution | 2 |
| Injection Oxytocin required for AMSTL | 20 |
| Disposable syringes 5cc | 100 |
| Iron, Folic acid (tablets) | 3600 |
| Vitamin A (capsule) | 20 |
| Contraceptives (Condoms, Pills, IUCD) | As per need |
| IUCD Insertion Kit | As per need |
| Mebendazole 500 mg | 20 |
| Cannula (18 and 20 size) | 10 |
| Cotton roll (400g) | 1 |
| Antifungal vaginal tablets with applicator | 20 |
| Baby blanket | 2 |
| Gloves | As per need |
| Health education materials |  |
| Data recording and reporting instruments |  |

B. **For Facilities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RHC | BHU | **DIS** | **MCH** |
| **OPD** |
| 1. | Stethoscope | YES | YES | YES | YES |
| 2. | B. P. apparatus (mercury/automatic) | YES | YES | YES | YES |
| 3. | Clinical thermometer | YES | YES | YES | YES |
| 4. | Examination torch | YES | YES | YES | YES |
| 5. | Tongue depressor disposable | YES | YES | YES | YES |
| 6. | ENT diagnostic set | YES | YES | YES | YES |
| 7. | Weighing scale for adults | YES | YES | YES | YES |
| 8. | Tuning fork | YES | YES | YES | YES |
|  | Patella hammer | YES | YES | YES | YES |
|  | Pulseoximeter | YES | YES | YES | YES |
|  | ARI Timer | YES | YES | YES | YES |
|  | ORS measuring jug | YES | YES | YES | YES |
| 11. | ORS feeding containers and spoons | YES | YES | YES | YES |
| 12. | Tape measure for nutrition assessment | YES | YES | YES | YES |
| 13. | Baby weighing machine | YES | YES | YES | YES |
| 14.  | Scissors | YES | YES | YES | YES |
| 15.  | Dressing trays | YES | YES | YES | YES |
| 16.  | Dressing scissors | YES | YES | YES | YES |
| 17.  | Kidney tray- large size | YES | YES | YES | YES |
| 18.  | Bowl large size | YES | YES | YES | YES |
| 19.  | Dressing drum | YES | YES | YES | YES |
| 20.  | Sterilizer | YES | YES | YES | YES |
| 21.  | IV drip stand | YES | YES | YES | YES |
| 22.  | Vision testing chart | YES | YES | YES | YES |
| **Vaccination Room** |
|  | Cold box refrigerator for EPI | YES | YES | YES | YES |
|  | Vaccine carrier and ice pack | YES | YES | YES | YES |
|  | ILR/Deep Freezer | YES | YES | YES | YES |
|  | Ice box | YES | YES | YES | YES |
|  | Ice packs | YES | YES | YES | YES |
| **Labor Room** |
|  | Delivery Table (Labor Room) | YES | YES | NO | YES |
|  | Delivery Set (each contain) | YES | YES | NO | YES |
|  | Parto-gram | YES | YES | NO | YES |
|  | Kocher Clamp 6 inch | YES | YES | NO | YES |
|  | Episiotomy Scissor | YES | YES | NO | YES |
|  | Plain Scissor | YES | YES | NO | YES |
|  | Tooth Forcep | YES | YES | NO | YES |
|  | I Kidney Tray | YES | YES | NO | YES |
|  | Needle Holder 7 inch | YES | YES | NO | YES |
|  | Medium size Bowel | YES | YES | NO | YES |
|  | Outlet Forcep 8 inch | YES | YES | NO | YES |
|  | D&C Set (each contain) | YES | YES | NO | YES |
|  | Metallic Catheter | YES | YES | NO | YES |
|  | Uterine Sound | YES | YES | NO | YES |
|  | Sim's Speculum medium | YES | YES | NO | YES |
|  | Set D&E Sponge Holders | YES | YES | NO | YES |
|  | Hegar's Dilator 0-8 em | YES | YES | NO | YES |
|  | Kidney Tray | YES | YES | NO | YES |
|  | Bowl 4 inch | YES | YES | NO | YES |
|  | Volsellum 8 inch | YES | YES | NO | YES |
|  | Set Uterine Curette | YES | YES | NO | YES |
|  | Plain Forcep 8 inch | YES | YES | NO | YES |
| 1.
 | Baby Resuscitation Apparatus | YES | YES | NO | YES |
|  | Adult Weighing Scale | YES | YES | NO | YES |
|  | Electric Suction Machine | YES | YES | NO | YES |
|  | Autoclave | YES | YES | NO | YES |
|  | Fetal Heart Detector | YES | YES | NO | YES |
|  | Obs/Gynae: General Set | YES | YES | NO | YES |
|  | Dressing Set for Ward | YES | YES | NO | YES |
|  | Eclampsia beds with railing | YES | YES | NO | YES |
|  | Baby Intubation set | YES | YES | NO | YES |
|  | Examination Couch | YES | YES | NO | YES |
|  | Mucus Extractor | YES | YES | NO | YES |
|  | Neonatal Resuscitation Trolley | YES | YES | NO | YES |
|  | Vacuum Suction Apparatus | YES | YES | NO | YES |
|  | Caesarean Section Set (each contain)Doven's RetractorGreen Army TagBig BowlCord Clamp 7 inchKocher Clamp Straight 8 inchKocher Clamp Curved 8 inchTowel ClipArtery Forcep 6 inchAllis Tissue Forceps 8 inchNeedle Holder 8 inchNeedle Holder 6 inchKidney TrayBowl 4 inchVolsellum 8 inchKnife Holder 4 numberPlain Forcep 7 inchTooth Forcep 7 inchCurve ScissorThread Cutting ScissorSponge Holder 10 inch | YES  | NO | NO | NO |
| **In All Areas** |  |  |
|  | Running water | YES | YES | YES | YES |
|  | Soaps | YES | YES | YES | YES |
|  | Sinks/ basins | YES | YES | YES | YES |
|  | Alcohol and glycerine for handrub | YES | YES | YES | YES |
|  | Antiseptic solution | YES | YES | YES | YES |
|  | Detergent | YES | YES | YES | YES |
|  | Disinfectant (5% hypochlorite solution – common bleach) | YES | YES | YES | YES |
|  | Mops for cleaning | YES | YES | YES | YES |
|  | Buckets for cleaning | YES | YES | YES | YES |
|  | Green/white/blue buckets (non-infectious waste) | YES | YES | YES | YES |
|  | Red buckets (infectious waste) | YES | YES | YES | YES |
|  | Plastic bags – green/white/blue | YES | YES | YES | YES |
|  | Plastic bags – red | YES | YES | YES | YES |
| **Laboratory and Radiology** |
|  | X-Ray Machine | YES | NO | NO | NO |
|  | Dark room accessories | YES | NO | NO | NO |
|  | X-ray films (All Size) | YES | NO | NO | NO |
|  | X-ray illuminator | YES | NO | NO | NO |
|  | ECG Machine | YES | NO | NO | NO |
|  | Hepatitis B & C and HIV AIDS Kits | YES | NO | NO | NO |
|  | U/S machine | YES | YES | YES | YES |
|  | Sputum and blood specimen bottles | YES | YES | NO | YES |
|  | Centrifuge (bench top) | YES | YES | NO | YES |
|  | Centrifuge machine | YES | YES | NO | YES |
|  | Stop watch | YES | YES | NO | YES |
|  | Refrigerator | YES | YES | NO | YES |
|  | Binocular microscope | YES | YES | NO | YES |
|  | Urine meter. | YES | YES | NO | YES |
|  | Calorie metre for Hb estimation | YES | YES | NO | YES |
|  | DLC counter | YES | YES | NO | YES |
|  | Haemocytometer | YES | YES | NO | YES |
|  | ESR Racks. | YES | YES | NO | YES |
|  | ESR Pipettes | YES | YES | NO | YES |
|  | Water Bath | YES | YES | NO | YES |
|  | Glass rods | YES | YES | NO | YES |
|  | Glass slides | YES | YES | NO | YES |
|  | Cover slips | YES | YES | NO | YES |
|  | Centrifuge Tubes(Plastic) | YES | YES | NO | YES |
|  | Centrifuge Tubes (Glass) | YES | YES | NO | YES |
|  | Glass Pipettes various sizes corrected | YES | YES | NO | YES |
|  | Jester Pipettes Fixed -various sizes | YES | YES | NO | YES |
|  | Jester pipettes adjustable- various sizes | YES | YES | NO | YES |
|  | Test tubes | YES | YES | NO | YES |
|  | Pipette stands | YES | YES | NO | YES |
|  | Sahli Haemoglobinometer | YES | YES | NO | YES |
|  | Table lamp. | YES | YES | NO | YES |
|  | Lancets (pack) | YES | YES | NO | YES |
|  | Tube Sealer. | YES | YES | NO | YES |
|  | Blood Grouping Viewing Box. | YES | YES | NO | YES |
|  | Surgical Blades. | YES | YES | NO | YES |
|  | Test Tube Holder. | YES | YES | NO | YES |
|  | Reagent Bottles. | YES | YES | NO | YES |
|  | Gas Burner. | YES | YES | NO | YES |
|  | Stainless Steel Test Tube Racks. | YES | YES | NO | YES |
|  | Glucometer | YES | YES | NO | YES |
| **EMERGENCY** |
|  | Electric Sterilizer | YES | NO | NO | NO |
|  | Beds | YES | NO | NO | NO |
|  | Emergency OT Light | YES | NO | NO | NO |
|  | Oxygen Cylinder with flow-meter | YES | NO | NO | NO |
|  | Ambu Bag (Pediatrict) | YES | NO | NO | NO |
|  | Ambu Bag (Adult) | YES | NO | NO | NO |
|  | Suction Machine Heavy Duty | YES | NO | NO | NO |
|  | Laryngoscope with 4 blades (Adult & Peads) | YES | NO | NO | NO |
|  | Endo tracheal Tubes (all sizes) | YES | NO | NO | NO |
|  | Oral Air Way (all sizes) | YES | NO | NO | NO |
|  | Resuscitation Trolley | YES | NO | NO | NO |
|  | Nebulizer | YES | NO | NO | NO |
|  | Stethoscope | YES | NO | NO | NO |
|  | BP Apparatus Mercury (Adult & Peads) | YES | NO | NO | NO |
|  | Dressing Set for Ward | YES | NO | NO | NO |
|  | Thermometer | YES | NO | NO | NO |
|  | Drip stands | YES | NO | NO | NO |
|  | Instrument Trolley | YES | NO | NO | NO |
| **DENTAL UNIT** |
|  | Dental unit (complete with chair, light, hand piece unit withhand pieces, suction and compressor | YES | NO | NO | NO |
|  | Dental hand instruments (set) | YES | NO | NO | NO |
|  | Aseptic Trolley | YES | NO | NO | NO |
|  | Dental Autoclave | YES | NO | NO | NO |
|  | Amalgamator | YES | NO | NO | NO |
|  | Dental X-ray unit | YES | NO | NO | NO |
|  | Intraoral X-ray film processor | YES | NO | NO | NO |
|  | X-ray view box | YES | NO | NO | NO |
|  | Lead apron | YES | NO | NO | NO |
|  | Ultrasonic scaler | YES | NO | NO | NO |
|  | Dental operating stool | YES | NO | NO | NO |
|  | Ultraviolet sterilizer | YES | NO | NO | NO |
| **INPATIENT WARD** |
|  | Bed with side table / locker | YES | NO | NO | NO |
|  | Electric Suction Machine | YES | NO | NO | NO |
|  | Electric Sterilizer | YES | NO | NO | NO |
|  | Oxygen Cylinder with flow-meter and Stands | YES | NO | NO | NO |
|  | Stretchers | YES | NO | NO | NO |
|  | Examination Coach | YES | NO | NO | NO |
|  | Wheel chair | YES | NO | NO | NO |
|  | Screens | YES | NO | NO | NO |
|  | Air Ways | YES | NO | NO | NO |
|  | Suction Pump (Manual) | YES | NO | NO | NO |
|  | IV Drip Stand | YES | NO | NO | NO |
| **OPERATION THEATRE** |
|  | Hydraulic Operation Table | YES | NO | NO | NO |
|  | Shadow fewer Lamps with 9 Illuminators | YES | NO | NO | NO |
|  | Anesthesia machine with ventilator | YES | NO | NO | NO |
|  | Multi-parameter | YES | NO | NO | NO |
|  | McGill Forceps | YES | NO | NO | NO |
|  | Patient Trolley | YES | NO | NO | NO |
|  | Oxygen Cylinder (large size with regulator) | YES | NO | NO | NO |
|  | Oxygen Cylinder (medium size with regulator) | YES | NO | NO | NO |
|  | Nitrous oxide cylinder with regulator | YES | NO | NO | NO |
|  | Instruments Trolley | YES | NO | NO | NO |
|  | Dressing Drum (large size) | YES | NO | NO | NO |
|  | Stand for Dressing | YES | NO | NO | NO |
|  | Basin | YES | NO | NO | NO |
|  | Basin Stands | YES | NO | NO | NO |
|  | Towel Clips | YES | NO | NO | NO |
|  | BP Handle | YES | NO | NO | NO |
|  | BP Blades | YES | NO | NO | NO |
|  | Dissecting Forceps (plain) | YES | NO | NO | NO |
|  | Needle Holder (large size) | YES | NO | NO | NO |
|  | Sponge Holding Forceps (large size) | YES | NO | NO | NO |
|  | Skin Retractor (small size) | YES | NO | NO | NO |
|  | Metal I ic Catheter (1-12) | YES | NO | NO | NO |
|  | Dilator Complete Set | YES | NO | NO | NO |
|  | Surgical Scissors (various size) | YES | NO | NO | NO |
|  | Nasal Speculum | YES | NO | NO | NO |
|  | Proctoscope | YES | NO | NO | NO |
|  | Thames Splint V.S | YES | NO | NO | NO |
|  | Rubber Sheet | YES | NO | NO | NO |
|  | Scalpels 6" | YES | NO | NO | NO |
|  | Allies Forceps Long | YES | NO | NO | NO |
|  | Allies Forceps 6 inches | YES | NO | NO | NO |
|  | Cheatles Sterilize Forceps 10: long | YES | NO | NO | NO |
|  | Introducer for Catheter | YES | NO | NO | NO |
|  | Smith Homeostatis Forceps Curved | YES | NO | NO | NO |
|  | Arm Splint Different sizes | YES | NO | NO | NO |
|  | Instruments Cabinet Large size | YES | NO | NO | NO |
|  | Spot Light | YES | NO | NO | NO |
|  | Hand scrub set with chemical | YES | NO | NO | NO |
|  | Thermometer | YES | NO | NO | NO |
|  | Lyrango scope adult/peads | YES | NO | NO | NO |
|  | Kidney Tray S.S | YES | NO | NO | NO |
|  | Stand for Drip | YES | NO | NO | NO |
|  | Bucket El | YES | NO | NO | NO |
|  | Aircushion Rubber | YES | NO | NO | NO |
|  | Hot Water Bottles | YES | NO | NO | NO |
|  | Gastric Tube | YES | NO | NO | NO |
|  | Urine Collecting Bags Instrument trolley | YES | NO | NO | NO |
|  | Air-conditioner {split 1.5 tons) | YES | NO | NO | NO |
|  | Ambulance | YES | NO | NO | NO |
|  | Generator | YES | NO | NO | NO |

**SECTION 4 IMPLEMENTATION PLAN**

**4.1 Requirements for Successful Implementation**

**Facility Based Services**

1. **Non-availability of doctors/paramedics at secondary healthcare** facilities
* Improved salary packages that are better than tertiary care can help in filling the vacant positions of specialist doctors and paramedics
* A rotation policy of doctors and paramedics posted in tertiary care in which serving one month every year can be made mandatory
* A rotation policy for postgraduate residency programs of all disciplines in which residents shall be made to do 3-months rotation at secondary healthcare centers wherever there is lack of doctors.
1. **Lack of capacity to provide quality of care**
* One of the main reasons of low utilization of public sector facilities is poor quality of care. Strengthening the capacity of healthcare providers to implement the package of services with updated guidelines will be the key to enhance the utilization of secondary care facilities
* Private practice will also need to be regulated and healthcare providers serving in public sector facilities shall be barred from private practice. Introducing evening Outpatient clinics with shared packages between the healthcare providers and hospital management can also reduce the culture of private practice
1. **Lack of focus on preventive care**
* Healthcare providers need to be trained to go extra mile to contribute for adoption of healthy behaviors in public
* The physicians shall work closely with outreach workers for behavior change in the community

1. **Lack of medicines, supplies and equipment to deliver the services**
* It is imperative that medicines, supplies and equipment listed in the package shall be available to healthcare providers
* The estimates of quantities required to meet the needs shall be based on periodic assessment of patient burden of different types of services listed in the package
* The minimum service delivery package shall be revised and updated annually and biannually

**Outreach Services**

1. Non-availability of Vaccinators, LHW’s and CMW’s
* It is imperative that special efforts are made to recruit vaccinators, LHW’s and CMW’s in uncovered areas
* Special Incentives for difficult areas need to be given. Wherever required security shall also be provided
1. Enhancing services envelope of LHW’s
* The health awareness messages of LHW’s focus on communicable diseases, nutrition and reproductive health. They shall be trained to provide awareness on emerging infections like HIV AIDS and non-communicable diseases
1. Lack of medicines, supplies and equipment to deliver the services
* It is imperative that medicines, supplies and equipment listed in the package shall be available to outreach healthcare workers
* The estimates of quantities required to meet the needs shall be based on periodic assessment of patient burden of different types of services listed in the package

**4.2 Performance Indicators**

Performance indicators of implementation of the package are based on logical framework approach:

|  |  |
| --- | --- |
|  |  |
| Inputs | 1. % of positions vacant as per MSDP package
2. Availability of Essential drugs, supplies and Equipment
3. % of facilities with infection prevention and proper waste disposal arrangements
 |
| Processes | 1. Knowledge of HCW’s on delivering the MSDP Services
2. Practices on quality of care including consultation and treatment through observation and prescription analysis
3. Criteria for Referral in referred cases
4. Number of obstetric complications
5. Maternal and Neonatal Case facility rates
6. Waste disposal and infection prevention practices
 |
| Outputs  | Facility Based Services1. Daily OPD attendance
2. Volumes of Services provided with break-up of different services
3. Lab services utilization with break-up of each test
4. Bed Occupancy rate (RHC)
5. Daily emergency services (RHC)

Outreach Services1. Number of maternal care and family planning services provided
2. Number of health education sessions conducted
3. Number of children vaccinated
4. Number of children screened for malnutrition
 |
| Outcomes | 1. % Utilizing the facility as first choice in the catchment area
2. % of pregnant women delivering in the facility as first choice in the catchment area
3. Vaccination coverage of basic vaccines
4. Prevalence of malnutrition in children under 5
5. Coverage of antenatal care, skilled birth attendance and postnatal care
6. Contraceptive prevalence rate
7. Prevalence of high priority diseases in the community
 |

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