Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part1: Essential Package of Health Services for Primary Health Care in Punjab

(Weightage 10%)

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Acronyms

AJK	Azad Jammu and Kashmir
ANC	Antenatal Care
ARI	Acute Respiratory Infection
AusAID	Australian Aid Agency
BCC	Behaviour Change Communication
BHU	Basic Health Unit
CMWs	Community Midwives
COPD	Chronic Obstructive Pulmonary Disease
CPR	Cardio-Pulmonary Resuscitation
CVD	Cardiovascular disease
DFID	Department for International Development
DHIS	District Health Information System
DHO	District Health Officer
DHQH	District Headquarter Hospital
DOH	Department of Health
EDO	Executive District Officer
EDO (H)	Executive District Officer Health
EmONC	Emergency Obstetric and Neonatal Care
ENC	Essential Neonatal Care
ENT	Ear, Nose and Throat
EPHS	Essential Package of Health Services
EPHS-PHC	Essential Package of Health Services for Primary Health Care
EPI	Expanded Programme on Immunization
GOP	Government of Pakistan
HCWs	Health Care Workers
HMIS	Health Management Information System
HSRU	Health Sector Reform Unit
IDD	Iodine Deficiency Disorder
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
IUCD	Intra Uterine Contraceptive Device
IYCF	Infant and Young Child Feeding
LBW	Low Birthweight
LHV	Lady Health Visitor
LHW	Lady Health Worker
MAM	Moderate Acute Malnutrition
MCH	Maternal and Child Health
MCHC	Maternal and Child Health Centre
MDG	Millennium Development Goal
MMR	Maternal Mortality Ratio
MNCHP	Maternal Neonatal and Child Health Program
NID	National Immunisation Day
NMNCHP	National Maternal Neonatal and Child Health Program
NNS	National Nutritional Survey
NPPHC&FP	National Programme for Primary Health Care and Family Planning

OPD	Outpatient Department
ORS	Oral Rehydration Solution
PC1	Planning Commission Document 1
PDHS	Pakistan Demographic and Household Survey
PHC	Primary Health Care
PIH	Pregnancy Induced Hypertension
PPE	Personal Protective Equipment
PPH	Post-Partum Haemorrhage
RHC	Rural Health Centre
SAM	Severe Acute Malnutrition
SCFN	Secondary Care Facility for Newborns
SHNS	School Health Nutrition Supervisor
SIA	Supplementary Immunization Activity
STI	Sexually Transmitted Infection
THQH	Tehsil Headquarter Hospital
TRF	Technical Resource Facility
UNICEF	United Nation International Children's Education Fund
WHO	World Health Organization

1. The Primary Health Care (PHC) Concept

1.1. Definition

The conceptual model of PHC encompasses primary care, disease prevention, health promotion, population health, and community development within a holistic framework, with the aim of providing essential community-focused health care. The cornerstones of PHC are access, equity, essentiality, appropriate technology, multi-sectoral collaboration, and community participation and empowerment.

1.2. PHC Services

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

- Education concerning prevailing health problems and the methods of preventing and controlling them
- Promotion of food supply and proper nutrition
- An adequate supply of safe water and basic sanitation
- Maternal and child health care, including family planning
- Immunization against major infectious diseases
- Appropriate treatment of common diseases and injuries
- Prevention and control of locally endemic diseases, and
- Provision of essential drugs

The areas of PHC are not only related to health, but also pertain to areas governed by other departments in Punjab. To maintain the holistic approach required for improving the health of targeted population, the DOH will attempt to involve related departments in target areas. The EPHS-PHC is limited to detailing the essential health services to be delivered directly by the DOH.

1.2.1. Service delivery facilities and personnel

PHC services in Punjab are being delivered through community and facility based interventions. Community workers include LHWs and CMWs, while facility based services are offered at BHUs and RHCs. Punjab has also introduced 24 hour services at BHUs and RHCs, and plans to increase the number of these facilities, which primarily offer Basic and/or Comprehensive EmONC services. The outline of services offered at these facilities is given in Table 1.

Table 1: PHC service delivery network in Punjab

S. no.	Type	Availability and major tasks assigned to workers and facilities	Number
	Community based services		
1.	LHW	▪ Availability: limited hours **Main services include:** ▪ Preventive services: health education, counselling, motivation ▪ Promotion of FP methods; emphasizing spacing interventions ▪ Immunization including establishing vaccination post. ▪ Nutrition education, counselling and treatment. ▪ Referral to appropriate providers and facilities for Intra-uterine devices (IUDs) and contraceptive surgery; other conditions and ailments.	48,500
2.	CMW	▪ Availability: 24-hours maternal and new-born care services **Main services include:** ▪ Prenatal services: identify/register pregnant women; provide ANC; assess nutritional status and give appropriate advice/treatment; manage minor discomforts and infections; refer for immunization, danger signs etc; guide/facilitate birth preparation plan, birth spacing. ▪ Intra natal services: identify/monitor labour; ensure clean/safe delivery; physical and emotional support; identify/refer for danger signs. ▪ Post Natal services: immediate PNC and following 6 weeks; breast feeding; identify/refer for danger signs; educate on feeding, weaning, immunization, birth spacing, provide FP supplies ▪ Newborn care: manage immediate care, minor disorders, identify/refer for danger signs; educate mothers on clean cord care, eye care, warmth, immunization, nutrition, breast feeding, clothing and hygiene. ▪ Community Based Midwifery Care: assess community, build linkages; report/interact with Lady Health Supervisor (LHS); LHWs, WMOs; Lady Health Visitor (LHV).	4,200
	Facility based services		
3.	BHU	▪ Availability: 6 hours/day ▪ Planned health education services at the centre and in schools. ▪ General treatment services.	2,456

		▪ Antenatal, intranatal and postnatal services ▪ Limited lab services. ▪ Referral service. **BHUs will perform all 7 signal functions of Basic EmONC that include:** 1. Administer parenteral antibiotics 2. Administer uterotonic drugs (parenteral oxytocin, ergometrine, misoprostol) 3. Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (Magnesium sulphate, diazepam) 4. Perform manual removal of placenta 5. Perform removal of retained products (MVA, Misoprostol, E&C, without general anaesthesia); referral. 6. Perform assisted vaginal delivery (only if WMO is present) 7. Perform neonatal resuscitation (with bag and mask) However, these BHUs will not be labelled as a basic EmONC facility because the services would not be available round the clock.	
4.	BHU-24 hour	▪ Availability: 24 hours/day ▪ 6-hours planned health education services at the centre and in schools ▪ 6-hours general treatment services ▪ 6-hours ANC services ▪ 24 hour intranatal and 6 hour PNC services ▪ 24 hour limited lab services ▪ 24-hour referral service **BHU-24h will perform all 7 signal functions of Basic EmONC that include:** 1. Administer parenteral antibiotics 2. Administer uterotonic drugs (parenteral oxytocin, ergometrine, misoprostol) 3. Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (Magnesium sulphate, diazepam) 4. Perform manual removal of placenta 5. Perform removal of retained products (MVA, Misoprostol, E&C, without general anaesthesia); referral. 6. Perform assisted vaginal delivery (only if WMO is present) 7. Perform neonatal resuscitation (with bag and mask)	
5.	RHC	▪ Availability: 24 hours ▪ 6-hours planned health education services at the centre ▪ 6-hours general treatment services ▪ 24-hour delivery and new-born care services	293

		▪ 24-hour inpatient service (20 beds) ▪ 24-hour emergency services, such as appropriate management of injuries, accident, dog bite/snake bite cases; First Aid, stabilisation of the condition of the patient in these and other emergency conditions; ▪ 24-hour timely and appropriate referral ▪ 6-hour selected surgical services ensuring universal infection control measures (stitching, abscess draining, removal of ingrowing toe nail, circumcision, E&C, back slab plaster, splinting, gastric lavage, catheterisation) ▪ 24-hour medico legal services. **RHCs will perform all 7 signal functions of Basic EmONC that include:** 1. Administer parenteral antibiotics 2. Administer uterotonic drugs (parenteral oxytocin, ergometrine, misoprostol) 3. Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (Magnesium sulphate, diazepam) 4. Perform manual removal of placenta 5. Perform removal of retained products (MVA, Oxytocin/Misoprostol, E&C, without general anaesthesia); referral. 6. Perform assisted vaginal delivery 7. Perform neonatal resuscitation (with bag and mask)	
6.	RHC+	▪ Availability: 24 hours ▪ In addition to the above services at the RHC level, 24 hour Comprehensive EmONC services with the availability of blood transfusion, and C-section services.	

2. Education on health issues and preventive methods

2.1. Key interventions and levels

Given the importance of health education, most related services will be promoted by all providers and levels. Areas of health education and promotion on various areas are given below, while may overlap with specific messages in subsequent sections.

2.1.1. Uniform MNCH and FP messages

On 4th March 2010, a notification was issued by the then National MNCH Programme Pakistan (NMNCHP), after stakeholder consultations. This informs uniform health education messages related to MNCH and FP.[7] These messages are mentioned in table 3, and are to be promoted at all levels by providers and facilities.

[7] Notification from Ministry of Health. Ref: PHC Wing/FPIU No. F.01-10/2009-PHC. Subject: "Notification of consensus health education messages on maternal, newborn and child health; and family planning (MNCH and FP)." Dated 4 March 2012. Islamabad.

Table 2: Uniform health education areas/messages for MNCH and FP notified in March 2010.[8]

Issue	Content of message	Content in Urdu (Local Language)
Antenatal check-up: when to start, how many and when?	1. Four ANC check-ups starting from one in 1st, one in 2nd and two in 3rd trimester	1۔ ہر حمل کے دوران ہنرمند فرد/ماہر زچگی سے چار مرتبہ طبی معائنہ ضرور کراوئیں جس میں پہلا معائنہ ابتدائی تین ماہ کے دوران ہو۔
Tetanus Toxoid (TT) injections: how many and when?	2. Regardless of previous status, two TT injections are useful	2۔ ہر حمل کے دوران تشنج کے ٹیکے ضرور لگوائیں۔
Danger signs during pregnancy	3. Danger signs and actions to be taken (if any one of these appear)	3۔ حمل کے دوران ان خطرناک علامات میں سے کسی ایک کے بھی ظاہر ہونے پر فوراً بڑے ہسپتال سے رجوع کریں۔ a) خون جاری ہونا چاہے ایک دھبہ ہی ہو b) دورے پڑنا c) شدید سر درد یا نظر کا دھندلانا d) ہاتھ یا چہرے پر سوجن ہونا e) پیٹ میں شدید درد f) قبل از وقت پانی کی تھیلی پھٹنا
Who is a skilled birth attendant?	4. Introduce the cadre that are designated as Skilled Birth Attendants (SBAs)	4۔ صرف ڈاکٹر نرس لیڈی ہیلتھ وزیٹر (LHV) اور لیڈی ہیلتھ ورکر ہی وہ ہنرمند افراد ہیں جو حمل اور زچگی کے دوران ایک ماں کی مدد کر سکتے ہیں۔
Danger signs during labour	5. 3 danger signs during labour and actions to be taken (if any of these appear)	5۔ پیدائش کے دوران ان علامات میں سے کسی ایک کے ظاہر ہونے پر بھی فوراً بڑے ہسپتال سے رجوع کریں۔ a) خون کا بہنا b) دوروں کا دورانیہ 8 گھنٹے سے زیادہ ہونا c) دورے پڑنا
Consulting for post-partum examination	6. At least one check-up within 6 hours after delivery	6۔ پیدائش کے بعد پہلے چھ گھنٹے کے دوران ماں اور بچے کا معائنہ لازمی ہے۔

[8] Implementing National MNCH Communication Strategy. Phase I Developing Implementation and Monitoring Plans. TRF. Islamabad.

Danger signs after delivery	7. Priority danger signs after delivery and actions to be taken if any of these appear	
Bathing the neonate	8. Delayed bathing is advised to avoid hypothermia and keep the protection of vernix intact	
Early wrapping and keeping baby warm	9. Baby's body, including head, should be wrapped properly to prevent hypothermia	
Initiating breastfeeding	10. Prevents neonatal deaths as it improves resistance to many diseases	
Neonatal danger signs	11. Mothers should know and be able to recognize 5 danger signs in the neonate	
Exclusive breastfeeding	12. Mother should know that even water deprives the child from advantages of breastfeeding	
Initiating weaning	13. Breastfeeding should continue until the age of six months, an appropriate time for weaning	
Optimal period of birth spacing	14. Optimal birth spacing should be known to couples	
Child immunization	15. Families should know and complete the immunization course for their children.	

2.1.2. Promoting birth spacing as an important FP intervention

FP is being repositioned as a birth spacing health intervention to promote its benefits on the health of the mother, the child and the whole family. This is also to raise awareness on the risk associated with too early and too late pregnancies; improving knowledge about contraceptives; and increasing service delivery access. The messages are to be propagated at all levels by providers, during community meetings, and during counselling.[9]

Table 3: Health Promotion & Education Services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	**Hygiene Promotion, water and sanitation**						
1.1	Hand washing with soap	Yes	Yes	Yes	Yes	Yes	Yes
1.2	Proper toilet use and hand washing practices	Yes	Yes	Yes	Yes	Yes	Yes
1.3	Problems related to open defecation	Yes	Yes	Yes	Yes	Yes	Yes
1.4	Advice on safe water techniques, storage and consumption	Yes	Yes	Yes	Yes	Yes	Yes
2.	**Maternal & Newborn Health**						
2.1	Birth preparedness & complication readiness	Yes	Yes	Yes	Yes	Yes	Yes
2.2	Mother's nutrition & rest	Yes	Yes	Yes	Yes	Yes	Yes
2.3	Post-partum care	Yes	Yes	Yes	Yes	Yes	Yes
2.4	Newborn care & feeding	Yes	Yes	Yes	Yes	Yes	Yes
2.5	Family planning	Yes	Yes	Yes	Yes	Yes	Yes
2.6	Birth spacing	Yes	Yes	Yes	Yes	Yes	Yes
3.	**Child health & Development**						
3.1	Exclusive BF up to 6 months	Yes	Yes	Yes	Yes	Yes	Yes
3.2	Completing immunization	Yes	Yes	Yes	Yes	Yes	Yes
3.3	Managing diarrhoea at home	Yes	Yes	Yes	Yes	Yes	Yes
3.4	Growth/development monitoring	Yes	Yes	Yes	Yes	Yes	Yes
3.5	Accident prevention	Yes	Yes	Yes	Yes	Yes	Yes
4.	**Nutrition**						
4.1	Infant & young child nutrition	Yes	Yes	Yes	Yes	Yes	Yes
4.2	Nutrition of pregnant lactating women	Yes	Yes	Yes	Yes	Yes	Yes
4.3	Balanced diet for adolescents and adults	Yes	Yes	Yes	Yes	Yes	Yes
4.4	Weaning after 6 months of age under IYCF guidelines	Yes	Yes	Yes	Yes	Yes	Yes
5.	**Communicable Diseases**						
5.1	Respiratory problems	Yes	Yes	Yes	Yes	Yes	Yes
5.2	Diarrhoea	Yes	Yes	Yes	Yes	Yes	Yes
5.3	Tuberculosis	-	Yes	Yes	Yes	Yes	Yes

[9] Communication themes and guidelines for repositioning Family planning as a birth Spacing health intervention. FALAH, USAID and Government of Pakistan. Islamabad.

5.4	Malaria/Dengue	Yes	Yes	Yes	Yes	Yes	Yes
5.5	STIs including HIV/AIDS	-	Yes	Yes	Yes	Yes	Yes
5.6	Common infections (scabies, pediculosis, helminthiasis)	-	Yes	Yes	Yes	Yes	Yes
6.	**Non-Communicable Diseases**						
6.1	Hypertension	Yes	Yes	Yes	Yes	Yes	Yes
6.2	Diabetes Mellitus	Yes	Yes	Yes	Yes	Yes	Yes
6.3	Cancer	-	-	Yes	Yes	Yes	Yes
6.4	Mental illnesses	-	-	Yes	Yes	Yes	Yes
6.5	Tobacco/smoking control and cessation	Yes	Yes	Yes	Yes	Yes	Yes
6.6	Weight control	-	-	Yes	Yes	Yes	Yes
6.7	Physical activity/exercise	Yes	Yes	Yes	Yes	Yes	Yes
7.	**Prevention of injuries and accidents**						
7.1	Accident/injury prevention	Yes	Yes	Yes	Yes	Yes	Yes
8.	**Use of medication**						
8.1	Rational use of drugs	Yes	Yes	Yes	Yes	Yes	Yes
8.2	Rational use of injections	Yes	Yes	Yes	Yes	Yes	Yes

3. Prevention and management of malnutrition

3.1. Key interventions and services

3.1.1. Target groups

The key target groups for prevention and management of malnourishment through community outreach and facility based services are: Severe Acute Malnourished (SAM) and Moderate Acute Malnourished (MAM) children, chronic malnourished children and malnourished Pregnant/Lactating women (PLW).

3.1.2. Community based services

Key services related to community based nutrition interventions are:

- Community level screening of children will be carried out by LHWs and CMWs by measuring mid-upper arm circumference measurement (MUAC). All concerned providers will refer children to the facility level, as per need.
- LHWs will also assess children through symptoms and clinical signs, and measure height and weight.
- LHWs will sensitize community for identifying possible cases of SAM/MAM children and motivate for seeking health care.
- LHWs will counsel PLWs on nutrition behaviours and practices. They will also counsel mothers on SAM/MAM children's condition.
- LHWs will promote quality breast feeding practices including initiation of newborn breastfeeding within half hour of birth; and exclusive breastfeeding for the first 6 months of life. They will also promote optimal complementary feeding practices, including nutritionally adequate and safe complementary foods starting at 6 months, and continuing breastfeeding up to two years.
- LHWs will promote diversity in food consumed every day.

3.1.3. Facility based Management of SAM

Facility based management of SAM will target: i. SAM children less than five years of age; and ii. PLW. The main functions are below.

- Screening will be carried out at both community and facility level at Outdoor Therapeutic Programme (OTP) in selected districts, where reported Global

Acute Malnutrition rate is high; and in urban slums. LHWs and CMWs will screen PLW in the community.

- Identified SAM and MAM cases will be referred to OTP.
- SAM children without complications will be referred to OTP, while children with complications and without appetite, who are screened in the community and/or OTP, will be referred to the stabilization centres at THQH/DHQH.
- Children will be referred from OTP, or may present directly for inpatient care. After stabilization, children will be referred back to OTP for continued support.

3.1.4. Outpatient Therapeutic Program (OTP)

- In selected districts and in urban slums, OTP at BHU/RHCs will offer Community-Based Management of Acute Malnutrition (CMAM).
- Child will be primarily managed at home with periodic regular visits to the OTP for at least three months.
- The SHNS will screen SAM/MAM children and PLW, and advocate CMAM interventions.
- SAM children with appetite and without complication will be regularly monitored, and their parents will be counselled on management.

3.1.5. Provision of Nutrition Supplements

- Nutrition supplements will be provided to the malnourished children and PLWs identified through screening by community workers (LHWs, CMWs, SHNSs).
- All pregnant women will be given iron and folic acid tablets.
- All married and unmarried women of child bearing age will be provided 1 iron tablet per week, as a blanket cover against iron deficiency anaemia.

3.1.6. Treatment of anaemia

- All health care providers including LHWs, CMWs, LHVs and doctors will identify anemia.
- LHWs and CMWs will educate communities on signs of anemia.

- LHWs and CMWs will provide iron and folic acid tablets to anaemic women, all pregnant mothers and/or lactating women during antenatal and post natal period at the community level; and refer in case of any danger signs.

3.1.7. Deworming of Children

- Worm infestations will be targeted through hygiene related measures, specifically hand washing (before eating and after defecation, etc). LHWs would sensitize mothers and children, and participate in social marketing and distribution of deworming medicines for children. (for pregnant women, see section on maternal health).

- LHWs and CMWs will deworm all children over 2 years, twice every year using standard protocols (Mebendazole) during biannual MCH weeks, ensuring that it is administered orally in their presence.

- Health facilities will provide medicines to the population that is not covered by LHWs.

Table 4: Nutrition services

S. no.	Services	CMW	LHW	SHNS	BHU	BHU-24h	RHC	RHC+
1	**Nutritional Education & Advice**							
1. 1	Initiating newborn breastfeeding within an hour of birth	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 2	Exclusive breastfeeding up to 6 months	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 3	For infants, nutritionally adequate and safe complementary foods starting at 6 months, while continuing breastfeeding up to two years	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 4	Mobilizing community to identify SAM/MAM cases, and seeking health care through LHWs and CMWs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 5	Nutrition behaviours and practices of pregnant women and lactating mothers towards themselves as well as their children	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 6	Involve community in IYCF activities	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 7	Food diversity	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 8	Health promotion on balanced diet for adolescents and adults	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1. 9	Hygiene messages for prevention of transmission of worm infestation	Yes	Yes	Yes	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	SHNS	BHU	BHU-24h	RHC	RHC+
2	**Assessment of Nutritional Status**							
2.1	Community level screening of women and children	Yes	Yes	-	-	-	-	-
2.2	Growth monitoring	-	Yes	-	Yes	Yes	Yes	Yes
2.3	Referral to facility after screening at community level	-	Yes	-	-	-	-	-
3	**Prevention of Malnutrition**							
3.1	Support and promote exclusive breastfeeding	Yes	Yes	-	Yes	Yes	Yes	Yes
3.2	Promotion of appropriate complementary feeding from 6 months	-	Yes	-	Yes	Yes	Yes	Yes
3.3	Screening malnutrition in pregnant and lactating women	Yes	Yes	-	Yes	Yes	Yes	Yes
3.4	Prevent parasitic infections	-	Yes	Yes	Yes	Yes	Yes	Yes
3.5	Promote exposure to sunshine for women and children to avoid vitamin D deficiency	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.6	Promotion of iodized salt	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.7	Iron supplementation for children 6 months to 5 years	Yes	Yes	-	Yes	Yes	Yes	Yes
3.8	Iron supplementation for pregnant, lactating women	Yes	Yes	-	Yes	Yes	Yes	Yes
3.9	Folic acid supplementation for pregnant, lactating women	Yes	Yes	-	Yes	Yes	Yes	Yes
3.10	Iron tablets for women of child bearing age	Yes	Yes	-	Yes	Yes	Yes	Yes
3.11	Deworming of children under 5 years	Yes	Yes	-	Yes	Yes	Yes	Yes
4	**Management of Malnutrition**							
4.1	Treatment of SAM/MAM children	-	Yes-screening and followup	-	Yes	Yes	Yes	Yes
4.2	Treatment of SAM children with complications	-	Refer	-	Refer	Refer	Refer	Refer
4.3	Identification and treatment of anaemia in women and children	Yes	Yes	-	Yes	Yes	Yes	Yes

4. Maternal and Child Health Service

4.1. Maternal Health: key interventions and services

The main care provider at the community level for pregnancy related services is the CMW, while the LHW provides preventive and referral services for supporting interventions. The key interventions and services at various levels are below. The services are detailed in Tables 6 to 8.

4.1.1. Antenatal Care

- Early registration of all pregnancies, ideally within first trimester.
- Minimum four antenatal check-ups.
- Assessment of pregnant women.
- Identification of high-risk pregnancies and prompt referral.
- Minimum laboratory investigations: haemoglobin estimation, urine for albumin and sugar, and referral for blood grouping.
- Iron & Folic Acid Supplementation.
- Injection Tetanus Toxoid (TT).
- Advice for calcium supplementation (at doses of 1.5 – 2.0 g elemental calcium/day) as it leads to reduction in the risk of pre-eclampsia and eclampsia.[10] The supplementation should be started from 20 weeks of gestation, and should be given several hours apart from iron supplementation, for example morning and evening.

4.1.2. Guidelines for deworming and malaria during pregnancy

- Treat worm infestation ONLY if heavy infestation is suspected. Treat in SECOND and THIRD trimester, NEVER in FIRST trimester, and preferably with MEBENDAZOLE. Studies show that there is no significant improvement in anaemia and birthweight with routine deworming.[11] Also there is no evidence of benefit using Albendazole in pregnant women.[12]

[10] WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia. 2011. ISBN 978 92 4 154833 5.

[11] J. Ndibazza et al. Effects of Deworming during Pregnancy on Maternal and Perinatal Outcomes in Entebbe, Uganda: A Randomized Controlled Trial. Clinical Infectious Diseases; 50:531–40. 2010. DOI: 10.1086/649924.

[12]Gyorkos, W et al. Lack of Risk of Adverse Birth Outcomes After Deworming in Pregnant Women, The Pediatric Infectious Disease Journal. 25:9, Sep 2006.

- **Bed nets would be provided for prophylaxis.**
- **Malaria treatment:** Antimalarials considered safe in the first trimester of pregnancy are chloroquine, proguanil and sulfadoxine–pyrimethamine.
- Artemisinin derivatives should be used to treat uncomplicated falciparum malaria in the second and third trimesters of pregnancy, but should not be used in the first trimester until more safety information becomes available.
- Artemisinin-based combination therapies (ACTs) are considered suitable for second and third trimesters.

4.1.3. Intranatal care

- Promotion of delivery by skilled birth attendants (SBA).
- Appropriate and prompt referral of high risk and complicated cases.

4.1.4. Postnatal care

- At the facility level, a minimum of 5 postnatal visits: first is immediately after birth; second on 3rd day (within 48 hours); third on 7th day; fourth on the 28th day; and fifth on the 42nd day of the birth.
- At the community level, a minimum of 4 postpartum home visits: first on the 1st day/within 24 hours of delivery, second on the 3rd day; third on 7th day; and fourth on 28th day of birth.
- Initiation of early breast-feeding within half-hour of birth.
- Counselling on diet, rest, hygiene, FP emphasizing spacing, essential new born care and infant feeding.

Basic EmONC Services at BHU

BHUs will perform 7 signal functions of Basic EmONC that include:

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

7. Perform neonatal resuscitation (with bag and mask)

4.1.5. Basic EmONC Services at BHU-24 hours

BHU-24h will perform all the 7 signal functions of Basic EmONC that include:

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

4.1.6. Comprehensive EmONC at RHC+

The DOH plans to provide Comprehensive EmONC services at the RHC level. The equipped facilities offering these service will be called RHC+ (plus). The modalities for provision of services is detailed here.

RHCs and RHC+ will perform all the seven signal functions of Basic EmONC that include:

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

In addition, RHC+ will also provide Comprehensive EmONC Services that include:

1. Caesarean section.
2. Availability of blood with storage facility.
3. Ambulance service.

4.1.7. Caesarean section

Caesarean section will be preferred under spinal anaesthesia (SA) given its benefits over general anaesthesia. However, options for anaesthesia will vary according to the availability of trained staff.

4.1.8. Blood transfusion services

Blood storage and transfusion services will be provided to support C-section services, by equipping the existing lab. This will be more efficient as space, equipment and supplies, such as centrifuge and microscope, will be shared. The lab technician will be trained in safe blood transfusion services.

Table 5: Antenatal services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Identify pregnant women in the community	Yes	Yes	-	-	-	-
2.	Persuade and register pregnant women in the community to receive ANC	Yes	Yes	-	-	-	-
3.	**Diagnosis of pregnancy**						
3.1.	History	Yes	Yes	Yes	Yes	Yes	Yes
3.2.	Examination	Yes	Yes	Yes	Yes	Yes	Yes
3.3.	Laboratory	Refer	Refer	Yes	Yes	Yes	Yes
4.	**Antenatal Visits**						
4.1.	Fundal Height	Yes	-	Yes	Yes	Yes	Yes
4.2.	Maternal Weight	Yes	-	Yes	Yes	Yes	Yes
4.3.	BP measurement	Yes	Yes	Yes	Yes	Yes	Yes
4.4.	Tetanus immunization	Refer	Refer	Yes	Yes	Yes	Yes
4.5.	Iron/Folic acid supplementation	Yes	Yes	Yes	Yes	Yes	Yes
4.6.	Goitre	Refer	Refer	Refer	Refer	Refer	Refer
4.7.	Oedema	Yes	Yes	Yes	Yes	Yes	Yes
4.8	Urine for albumin/sugar	Yes	Refer	Yes	Yes	Yes	Yes
4.9.	Birth preparedness plan/plan for emergencies:	Yes	Yes	Yes	Yes	Yes	Yes
	· Identifying SBA/referral hospital for delivery	Yes	Yes	Yes	Yes	Yes	Yes
	· Arranging money	Yes	Yes	Yes	Yes	Yes	Yes
	· Identifying transport	Yes	Yes	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
	· Identifying blood donor	Yes	Yes	Yes	Yes	Yes	Yes
	· Clean delivery kit for home delivery	Yes	Yes	Yes	Yes	Yes	Yes
4.10.	Vaginal bleeding, including post abortion care in early and late pregnancy as per protocol	Yes	Yes	Yes	Yes	Yes	Yes
4.11	Treatment of vaginal infections (Bacterial vaginosis, Trichomoniasis, Moniliasis)	Yes	-	Yes	Yes	Yes	Yes
5.	**Management of anaemia**						
5.1.	History and examination	Yes	Yes	Yes	Yes	Yes	Yes
5.2.	Haemoglobin estimation	Yes	Refer	Yes	Yes	Yes	Yes
5.3.	Treatment	Yes	Yes	Yes	Yes	Yes	Yes
6.	Management of inter-current illness*	Refer	Refer	Yes	Yes	Yes	Yes
7.	Worm infestation identification and deworming	Yes	Yes	Yes	Yes	Yes	Yes
8.	Prevention of malaria by promoting use of bed nets	Yes	Yes	Yes	Yes	Yes	Yes
9.	Treatment of malaria	Refer	-	Yes	Yes	Yes	Yes
10.	Treatment of Urinary Tract Infections	-	-	Yes	Yes	Yes	Yes
11.	Hypertension of Pregnancy	Identify and Refer	Identify and Refer	Yes	Yes	Yes	Yes
12.	Management of complication pre-eclampsia/eclampsia	Stabilize and refer	-	Stabilize and Refer	Stabilize and Refer	Stabilize and Refer	Stabilize and Refer
13.	Incomplete miscarriage/abortion	Identify and Refer	-	-	Yes	Yes	Yes
14.	Diabetes Mellitus	Identify and Refer	-	Yes	Yes	Yes	Yes
15.	Ectopic pregnancy	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital
16.	Syndromic management of	-	-	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
	sexually transmitted infections						
17.	Treatment of Vitamin A deficiency (in the last trimester, if night blindness appears)	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital
18.	Management of shock	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital
19.	Ultrasound	-	-	Refer	Yes	Yes	Yes

*Intercurrent illness refers to illness occuring with other condition/s that could cause complications.

Table 6: Intranatal care services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1	Identify true labour and monitor progression of labour – Partograph	Yes	-	Yes	Yes	Yes	Yes
2	Danger signs in the first, second and third stages of labour	Identify and Refer	-	Refer	Refer	Refer	Refer if needed
3	Prepare environment and materials following infection control protocols	Yes	-	Yes	Yes	Yes	Yes
4	Identify foetal malposition	Refer	Refer	Yes	Yes	Yes	Yes
5	External cephalic version	-	-	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital
6	Identify and refer high risk pregnancy	Yes	-	Yes	Yes	Yes	Yes
7	Conduct normal delivery	Yes	-	Yes	Yes	Yes	Yes
8	Conduct Assisted Vaginal Delivery (AVD) - MVA, Forceps	Refer	-	-	-	Yes	Yes
9	Provide safe delivery kit	Yes	-	Yes	Yes	Yes	Yes
10	Administer intravenous (IV) fluids	Yes	-	Yes	Yes	Yes	Yes
11	Administer parenteral Oxytocin	Yes	-	Yes	Yes	Yes	Yes
12	Administer parenteral anticonvulsants	Refer	-	Yes	Yes	Yes	Yes
13	Administer parenteral antibiotics	Yes	-	Yes	Yes	Yes	Yes
14	Transfuse safe blood	Refer	-	-	Refer	Refer	Yes
15	Prevention of PPH Bimanual compression of uterus	Yes	-	Yes	Yes	Yes	Yes
16	Recognition and Repair/Suturing of 1st and 2nd degree vaginal tears	Yes	-	Yes	Yes	Yes	Yes
17	Recognition and referral to hospital for 3rd degree vaginal & cervical tears	Yes	-	Yes	Yes	Yes	Yes
18	Suturing of 3rd degree vaginal & cervical tears	Refer to hospital	-	Refer to hospital	Refer to hospital	Refer to hospital	Refer to hospital
19	Follow all steps of active management of third stage of labour	Yes	-	Yes	Yes	Yes	Yes
20	Manual removal of placenta	-	-	Yes, without GA[1]	Yes, without GA[1]	Yes, without GA[1]	Yes, without GA[1]
21	Removal of retained products (Manual Vacuum Extraction/Evacuation and Curettage)	Refer	-	Yes, without GA[1]	Yes, without GA[1]	Yes, without GA[1]	Yes, without GA[1]
22	Management of prolapsed cord	Refer	-	Refer	Refer	Yes	Yes
23	Management of shoulder dystocia	Refer	-	Refer	Refer	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
24	Manage prolonged and obstructed labor	Recognize and refer	-	Yes/ Refer	Yes/ Refer	Yes/ Refer	Yes/ Refer
25	Administer Ergometrine	Yes		Yes	Yes	Yes	Yes
26	Caesarean section	Refer	-	Refer	Refer	Refer	Yes
27	Neonatal resuscitation	Yes	-	Yes	Yes	Yes	Yes
28	Appropriate disposal of placenta and other wastes	Yes	-	Yes	Yes	Yes	Yes
[1] = when dilated and general anaesthesia is not needed.							

Table 7: Postnatal care

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Breast examination for breastfeeding management	Yes	Yes	Yes	Yes	Yes	Yes
2.	Iron and folic acid supplementation	Yes	Yes	Yes	Yes	Yes	Yes
3.	**Management of PPH; shock**						
3.1.	Diagnosis on history and examination	Yes	-	Yes	Yes	Yes	Yes
3.2.	First aid, supportive management and referral	Yes	-	Yes	Yes	Yes	-
3.3.	Treatment	-	-	Stabilize and refer	Stabilize and refer	Stabilize and refer	Yes/ Refer if needed
3.4.	I/V Fluids	Yes	-	Yes	Yes	Yes	Yes
4.	Blood Transfusion	Refer	-	Refer	Refer	Refer	Yes
5.	**Management of Puerperal Sepsis**						
5.1.	Identification/diagnosis on history and examination	Yes	Refer	Yes	Yes	Yes	Yes
5.2.	Supportive management & referral	Yes	-	Yes	Yes	Yes	Yes/ Refer if needed
5.3.	Laboratory	-	-	-	-	Yes	Yes
5.4.	Parenteral Antibiotics	-	-	Yes	Yes	Yes	Yes
5.5.	Oral Antibiotics	Yes	Yes	Yes	Yes	Yes	Yes
6	Oral Antibiotics	Yes	-	Yes	Yes	Yes	Yes
7	Counselling on family planning specially spacing for at least 2 years	Yes	Yes	Yes	Yes	Yes	Yes
8	Provide contraceptives: condoms and pills	Yes	Yes	Yes	Yes	Yes	Yes
9	Provide contraceptives: injectables and IUDs	Yes	-	Yes	Yes	Yes	Yes
10	Female sterilization (tubal ligation)	Refer	Refer	Refer	Refer	Refer	Yes
11	Register births and deaths	Yes	Yes	Yes	Yes	Yes	Yes

4.2. Newborn Care

The major focus of newborn care would be to provide Essential Newborn Care (ENC) services and Basic EmONC for prevention of neonatal complications. ENC services will be offered both at community and facility levels.

The services under ENC would focus at:

- Immediate and critical life support to a new born by resuscitation.
- Prevention from hypothermia by keeping baby warm through Kangaroo mother care and delayed bathing.
- Early initiation of breast feeding and ensuring cord care with 4% chlorhexidine solution.

4.2.1. Community level ENC Services through CMWs and LHWs

- Educate pregnant women and their family on ENC during antenatal care.
- CMW will offer immediate care of the newborn up to the level of performing mouth to mouth resuscitation , following standard protocols.
- At the community level, a minimum of 4 postpartum home visits: first on the 1st day/within 24 hours of delivery, second on the 3rd day; third on 7th day; and fourth on 28th day of birth.
- LHWs and CMWs will identify signs of illness and to provide immediate pre-referral care to the newborn, and refer to health facility.

4.2.2. Facility-based ENC Services at BHUs and RHCs

All providers at BHUs & RHCs working at labour rooms will offer ENC services. Key interventions are below.

- Common illnesses among neonates, especially infections, complications of preterm birth and of birth asphyxia, and prevention from hypothermia; Identifying serious neonatal conditions.
- Provide pre-referral care including first dose of intravenous antibiotic.
- Neonatal resuscitation using ambu bag and mask.
- Management of neonatal cases referred from the community.
- Further referrals to THQH/DHQH or RHC+ as applicable.

4.2.3. Secondary care for newborns at RHC+

The secondary care facility for newborns (SCFN) would essentially be a special care nursery, with oxygen, and good ENC support. The RHC+ would offer Level 2 care, (with some modifications) that includes:[13]

- Evaluation, screening and postnatal care of healthy newborn infants.
- Phototherapy.
- Care for infants with corrected gestational age greater than 28 weeks or weight greater than 1800 g who have mild illness expected to resolve quickly or who are convalescing after intensive care.
- Nasal oxygen with oxygen saturation monitoring (e.g., for infants with chronic lung disease needing long-term oxygen and monitoring).
- Peripheral intravenous infusions and possibly parenteral nutrition for a limited duration.
- Resuscitation and stabilization of ill infants before transfer to an appropriate care facility.
- Safe and appropriate transport, and backup and referral linkage with an NICU facility.

Existing personnel would be trained in relevant areas of care to provide round the clock support, while specialists such as neonatologists will be recruited on a fee for service basis.

Staff will be trained for NG insertion and feeding, IV access, and the use of the equipment. A neonatal intensive care unit (NICU) at the DHQH will provide backup and referral support to the unit.

The unit will include 2 infant cots. Each trained neonatal nurse will look after a maximum of 2 babies at one time.

If the RHC+ has a lot of traffic (at least 10 babies which need intensive care at any given time), then an NICU can be envisioned after 3 years once enough manpower is available (neonatologist, respiratory therapist, neonatal nurses). Specific services are detailed in table 8.

13 There is a lack of a standard definition of neonatal care levels. The Canada classification is used here. From: http://en.wikipedia.org/wiki/Neonatal_intensive_care_unit. Accessed: Dec 2012.

Table 8: Newborn care services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	**Immediate care/Early Newborn Care**						
1.1.	**Health Education/Promotion on:** ▪ Hand Washing ▪ Cord Care ▪ Keeping the baby warm ▪ Early initiation of BF ▪ Exclusive BF ▪Recognizing danger signs/intensity and taking action ▪Completing Immunization	Yes	Yes	Yes	Yes	Yes	Yes
1.2.	Dry and stimulate the baby	Yes	Yes	Yes	Yes	Yes	Yes
1.3.	Clean airway, assesses the baby's breathing and colour, decide if the baby needs resuscitation, and resuscitate if required.	Yes	Yes	Yes	Yes	Yes	Yes
1.4.	Tie/clamp and cut the cord	Yes	-	Yes	Yes	Yes	Yes
	Management of asphyxia	Yes	-	Yes	Yes	Yes	Yes
1.5.	Avoid hypothermia: ▪Keeping baby close to mother ▪Cover both mother and baby with a sheet/blanket ▪Cover the baby's head with a cloth	Yes	-	Yes	Yes	Yes	Yes
1.6.	Recognize danger signs	Yes	Yes	Yes	Yes	Yes	Yes
1.7.	Eye care including prevention of Ophthalmia neonatorum within an hour of birth	Yes	-	Yes	Yes	Yes	Yes
1.8.	Identification of the baby	-	-	Yes	Yes	Yes	Yes
1.9.	Counselling of mother before transfer to post-partum area/before discharge/before provider leaves:	Yes	-	Yes	Yes	Yes	Yes
	▪ On all infant care health education/promotion areas mentioned above						
	▪ On post-partum maternal care (see section on post-partum care)						
1.10.	Cord care using 4% CHX (Chlorhexidine)	Yes	Yes	Yes	Yes	Yes	Yes
2.	**Neonatal Sepsis**						
2.1.	History and examination	Identify and refer	-	Yes	Yes	Yes	Yes
2.2.	Laboratory	-	-	-	-	Yes	Yes
2.3.	Treatment	Refer	-	Refer	Refer	Refer	Yes
3.	**Neonatal Tetanus**						
3.1.	Preventive education on: · Clean Cord cutting · Cord Care · Tetanus Toxoid	Yes	Yes	Yes	Yes	Yes	Yes
3.2.	Diagnosis on history and examination	-	-	Yes	Yes	Yes	Yes
3.3.	Treatment	-	-	Refer	Refer	Refer	Yes
4.	**Neonatal Jaundice**						

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
4.1.	Preventive education: ▪ Continued feeding ▪ No extra fluids ▪ No medication ▪ Recognizing intensity ▪ Taking action	Yes	Yes	Yes	Yes	Yes	Yes
4.2.	History and examination	Yes	-	Yes	Yes	Yes	Yes
4.3.	Laboratory	Refer	-	Refer	Refer	Refer	Yes
4.4.	Management at home	Yes	Yes	Yes	Yes	Yes	Yes
4.5.	Treatment of severe case	Refer	-	Refer	Refer	Refer	Yes
5.	**Care within the first 6 hours of birth**						
5.1.	Conduct comprehensive examination of the mother and new born: ▪ Respiration, Colour and temperature ▪ Checking/reties cord ▪ Checking danger signs, referral if needed after giving first dose of anti-biotic ▪ Checking/advising BF ▪ Observing BF including attachment at the breast for atleast 5 mins ▪ Advising mother to inform if she notes any problem ▪ Check posture and tone, heart rate, activity, skin, head, eyes, mouth, chest, abdomen, back and spine, anus, and genital organs	Yes	-	Yes	Yes	Yes	Yes
5.2.	Newborn immunization	Refer	Refer	Yes	Yes	Yes	Yes
5.3.	Give vitamin K 1 mg IM	-	-	Yes	Yes	Yes	Yes
5.4.	Managing LBW baby	Yes	Yes	Yes	Yes	Yes	Yes
5.5.	Monitoring the baby during first 6 hours of delivery (every 15m for first 3 hours, every 30m in the third hour and every hour in the next three hours)	Yes	-	-	Yes	Yes	Yes
6.	**Care up to 28 days**						
6.1.	Teach and Counsel mother/family about: ▪Recognising danger signs and taking appropriate actions if they occur ▪ Hand washing ▪ Keep cord clean and dry ▪Cord care including not applying anything ▪Exclusive breastfeeding for 6 months, including colostrum ▪ Keeping the baby warm ▪ Completing immunisation	Yes	Yes	Yes	Yes	Yes	Yes
6.2.	Breastfeeding of LBW baby every 2 to 2½ hours	Yes	Yes	Yes	Yes	Yes	Yes
7.	**Secondary level care for newborns**						
7. 1	Assessment and screening of newborns	-	-	-	-	-	Yes
7. 2	Warmth by keeping baby close to mother	-	-	-	-	-	Yes
7. 3	Breastfeeding support	-	-	-	-	-	Yes
7. 4	Newborn feeding	-	-	-	-	-	Yes
7. 5	Support for premature babies at 28 weeks	-	-	-	-	-	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
7. 6	Support for small for gestational age babies (SGA)	-	-	-	-	-	Yes
7. 7	Support for low birth weight babies (LBW)	-	-	-	-	-	Yes
7. 8	Cardiac and blood pressure monitoring of newborns	-	-	-	-	-	Yes
7. 9	Monitoring of newborns after resuscitation, administration of medicines	-	-	-	-	-	Yes
7. 10	Monitoring for respiratory distress including apnea, grunting, rapid breathing.	-	-	-	-	-	Yes
7. 11	Screening and management for Infections/sepsis	-	-	-	-	-	Yes
7. 12	Management of macrosomia (>4500 g) and hypoglycemia	-	-	-	-	-	Yes
7. 13	Phototherapy for Jaundice	-	-	-	-	-	Yes
7. 14	IV care and support	-	-	-	-	-	Yes
7. 15	Oxygen administration; and oxygenation monitoring	-	-	-	-	-	Yes
7. 16	Referral and transport (in incubator) for complications, congenital malformations, etc.	-	-	-	-	-	Yes

4.3. Infant and child health

The Integrated Management of Neonatal & Childhood Illness (IMNCI) approach will be employed and promoted at the primary level for case management, at both community and facility levels.

4.3.1. Community IMNCI services

The key interventions and role of providers for providing Community IMNCI services is below.

- For promoting community IMNCI services, LHWs, CMWs and Dispensers will raise awareness and educate parents on exclusive breastfeeding, proper weaning, immunization, improving personal hygiene and health seeking behaviours, care at home, and other aspects.
- LHWs will treat simple pneumonia and Acute Respiratory Infection with Amoxicillin.
- In cases of severe pneumonia, LHWs will refer the case to BHU, after administering the first dose of antibiotic.
- LHW will treat diarrhoea without dehydration or some dehydration. Children with moderate to severe dehydration will be referred to the BHU.

4.3.2. Facility-based IMNCI services

- All providers (including paediatricians, MOs/WMOs, LHVsand Medical Technicians), involved in care of infants and children at out patient departments (OPDs) at facilities, will manage cases based on the IMNCI approach.

Table 9: Infant and child care services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Perform growth monitoring	Yes	Yes	Yes	Yes	Yes	Yes
2.	**EPI Services**						
2.1.	Health promotion/education on: ▪ Importance of immunization ▪ Repeated Polio days	Yes	Yes	Yes	Yes	Yes	Yes
2.2.	Storage of vaccines	-	-	Yes	Yes	Yes	Yes
2.3.	Routine immunization	-	Yes*	Yes	Yes	Yes	Yes
2.4.	Campaigns/National Immunization Days (NIDs)	-	Yes*	Yes	Yes	Yes	Yes
2.5.	Disease surveillance & case reporting	Yes	Yes	Yes	Yes	Yes	Yes
** The department of health is piloting the administration of vaccines through the LHWs. Currently, the LHWs have been trained in selected districts where this intervention will be piloted. It will be scaled up only if the results of the pilot are successful. The LHW is not supposed to store vaccines. In this model, the LHWs will provide vaccines that will be supplied to her through the vaccinator.*							
3.	**ARI**						
3.1.	Health education for ARI ▪ Increasing fluids ▪ Continue feeding ▪ Cleanliness	Yes	Yes	Yes	Yes	Yes	Yes
3.2.	Child with cough/cold (no signs of pneumonia)	Yes	Yes	Yes	Yes	Yes	Yes
3.3.	Child with fast breathing (pneumonia)	Yes. Oral antibiotic and refer if needed	Yes. Oral antibiotic and refer if needed	Yes	Yes	Yes	Yes
3.4.	Child with severe pneumonia	Yes. Oral antibiotic and refer	Yes. Oral antibiotic and refer	Yes. Oral antibiotic and refer	Yes. Oral antibiotic and refer	Yes. Parenteral antibiotic and refer	Yes
3.5.	Child with very severe disease	Refer	Refer	Refer	Refer	Refer	Refer
3.6.	Child with wheeze	Refer	Refer	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
3.7.	Child with ear infection	Refer	Refer	Yes	Yes	Yes	Yes
4.	**Management of Diarrhoea**						
4.1.	Health education on Diarrhoea/ORT ▪ How to mix ORS ▪ Increasing fluids ▪ Continue feeding ▪ Handwashing ▪ Identifying danger signs & taking timely actions	Yes	Yes	Yes	Yes	Yes	Yes
4.2.	With no dehydration	Yes	Yes	Yes	Yes	Yes	Yes
4.3.	Some dehydration	Refer	Yes	Yes	Yes	Yes	Yes
4.4.	Severe dehydration	Refer	Refer	Stabilize and refer	Stabilize and refer	Stabilize and refer	Yes
4.5.	Administer Zinc Sulphate	-	Yes	Yes	Yes	Yes	Yes
4.6.	With additional problems: ▪ Diarrhoea>14 days ▪ With severe malnutrition ▪ Fever >38 C	Refer	Refer	Refer	Refer	Refer	Refer
5.	Management of dysentery	Refer	Refer	Yes	Yes	Yes	Yes
6.	**Management of Fever**						
6.1.	History and examination	Yes	Yes	Yes	Yes	Yes	Yes
6.2.	Laboratory	-	Refer	Refer	Refer	Yes	Yes
6.3.	Treatment	Yes / Refer persistent fever > 24h & >102F	Yes / Refer persistent fever > 24h & >102F	Yes	Yes	Yes	Yes
6.4.	Refer persistent fever of more than 24 hours; fever >102F	Yes	Yes	Yes	Yes	Yes	Yes
7.	Management of severely ill child	Stabilize and refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital	Yes/ Refer if needed

4.4. Immunization

4.4.1. Key interventions and providers

Immunisation services will be offered at both levels, with the LHWs to augment the role of vaccinators in the community. The services are outlined below, and details are given in table 10.

4.4.2. Community level services

- LHWs will administer vaccines and will be supported by the vaccinator in provision of vaccines and supplies.
- LHW's health house will also be a "vaccination post" for that community.
- LHWs will maintain updated records for missed dose/s and facility level immunizations.
- CMWs will refer for immunization services especially BCG and polio zero dose.

4.4.3. Facility based services

- LHWs and CMWs will refer cases with any side effects and complications of vaccinations to BHUs and RHCs.
- Vaccination status of all children less than five years of age and women of reproductive age visiting any BHU and RHC will be assessed.
- Missed out dose/s will be administered at the facility, and an immunization card will be issued with the instructions to share the card with the LHW.
- In areas not covered by LHWs, instructions will be given to share the card with the vaccinator, who will update records accordingly.

Table 10: Immunisation services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC +
1	**Motivating parents and families**						
1.1.	Regular and timely immunisation	Yes	Yes	Yes	Yes	Yes	Yes
1.2.	Giving polio drops on all NIDs	Yes	Yes	Yes	Yes	Yes	Yes
2	Vaccinating out-of schedule child	-	-	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC +
3	Assess immunization status and refer in case of complications	-	Yes	Yes	Yes	Yes	Yes
4	Routine Immunisation	Refer	-	Yes	Yes	Yes	Yes
5	Storage of vaccines	-	-	Yes	Yes	Yes	Yes
6	Participate in campaigns (NIDs)	-	-	Yes	Yes	Yes	Yes
7	Record keeping/updating immunization cards	Yes	-	Yes	Yes	Yes	Yes
8	Disease surveillance & case reporting	-	Yes	Yes	Yes	Yes	Yes

4.4.4. Current immunization schedule for children

- All children to pay 5 visits to a vaccination center during their 1st year of life, and one visit during their 2nd year of life to complete the schedule.
- The 1st visit would be immediately after birth to get a dose of BCG and one dose of OPV.
- Subsequent visits to the centre are at 6, 10 and 14 weeks age to get one dose of OPV, and one dose of Pentavalent vaccine, during each visit.
- After introduction, three doses of Pneumococcal vaccine will also be given during these same visits.
- Upon completion of 09 months of age, the child would visit for the 1st dose of measles vaccine, and again at 15 months, or anytime during the 2nd year the child to receive the 2nd dose of measles vaccine.
- Beside these, every child should receive all doses of any other vaccine offered during a supplementary immunization activity (SIA), irrespective of the status.
- Vaccines offered during SIAs are considered as additional doses and are not counted as routine dose.

Table 11: Current routine immunization schedule for children

Age	Antigen	Dose	Site of Administration
At Birth	BCG	0.05ml	Intradermaly on right upper arm
	OPV0	2 drops	Oral
	Hepatitis-B	0.5 ml	Intramuscular injection on antero-lateral side of left thigh
6 weeks	*Pentavalent–I	0.5 ml	Intramuscular injection on antero-lateral side of right thigh
	OPV-I	2 drops	Oral

Age	Antigen	Dose	Site of Administration
10 weeks	Pentavalent–II	0.5 ml	Intramuscular injection on antero-lateral side of right thigh
	OPV-II	2 drops	Oral
14 weeks	Pentavalent–III	0.5 ml	Intramuscular injection on antero-lateral side of right thigh
	OPV-III	2 drops	Oral
6 weeks	Pneumococcal	0.5 ml	Intramuscular injection on antero-lateral side of left thigh
10 weeks	Pneumococcal	0.5 ml	Intramuscular injection on antero-lateral side of left thigh
14 weeks	Pneumococcal	0.5 ml	Intramuscular injection on antero-lateral side of left thigh
9 months	Measles-I	0.5 ml	Subcutaneous injection on left upper arm
15 months	**Measles-II	0.5 ml	

*Pentavalent includes DPT+HepB+Hib
* * If the child is seen b/w 12-15 months of age, second dose of measles can be given.

4.4.5. Tetanus Toxoid for pregnant women

- First two doses of Tetanus Toxoid (TT) vaccine during their 1st pregnancy preferably during the second trimester, one month apart.
- Another three doses according to schedule, irrespective of pregnancy to complete the 5 dose schedule which will protect them throughout their child bearing age (15 – 49 years of age).

Table 12: Routine immunization schedule for pregnant women for prevention of neonatal tetanus

Vaccine	When to give	Dose & site	Expected duration of protection
TT 1	Firstcontactduringfirst pregnancy	0.5 ml intramuscular injection on buttock (preferred); or on upper arm	None
TT 2	At least 4 weeks after TT 1		1-3 years
TT 3	At least 6 months after TT 2		5 years
TT 4	At least 1 year after TT 3 or subsequent pregnancy		10 years
TT 5	At least 1 year after TT 4 or subsequent pregnancy		all child bearing years

5. Family Planning

5.1. Key services and providers

LHWs and CMWs will promote child spacing services by educating communities on importance of Healthy Time Spacing (HTSP). They will help women in selecting a method of their choice and provide them with that method, and/or refer them to BHU. They will also counsel women facing any side effects, and refer them to BHU for appropriate treatment and guidance.

The details of services are given in Table 13.

Table 13: Family planning services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	**Counselling on family planning methods to enhance CPR**						
1.1	Educate & motivate for FP	Yes	Yes	Yes	Yes	Yes	Yes
1.2	Help make informed choice	Yes	Yes	Yes	Yes	Yes	Yes
1.3	Suggest alternative in case of side effects	Yes	Yes	Yes	Yes	Yes	Yes
1.4	Correct misconceptions	Yes	Yes	Yes	Yes	Yes	Yes
2.	Clinical examination	Yes	-	Yes	Yes	Yes	Yes
3.	**Education about modern methods**	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Condoms						
	▪ Pills						
	▪ Injections						
	▪ IUDs						
	▪ Implants						
	▪ Tubal ligation						
	▪ Vasectomy						
4.	**Provision of contraceptives**						
4.1.	Oral pills	Yes	Yes	Yes	Yes	Yes	Yes
4.2.	Emergency contraceptive pill	Yes	Yes	Yes	Yes	Yes	Yes
4.3.	Injections	Yes	Yes	Yes	Yes	Yes	Yes
4.4.	Insert IUDs	Yes	Refer	Yes	Yes	Yes	Yes
5.	Manage side effects and problems with use of family planning methods	Yes	-	Yes	Yes	Yes	Yes
6.	Refer infertile couples to hospital	Yes	Yes	Yes	Yes	Yes	Yes
7.	Female sterilization (tubal ligation)	Refer	Refer	Refer	Refer	Refer	Yes
8.	Male Sterilisation (vasectomy)	-	-	Refer to Hospital	Refer to Hospital	Refer to Hospital	Yes

6. Emergency preparedness and disaster management

For accidents and emergencies, all health providers at all levels and facilities will play an active role in alleviating suffering during any calamity. Table 15 provides the details of the services. The main focus for this service component will be on:

- Educating communities on prevention of accidents and injuries.
- First aid at community level, and referral for tetanus immunization and further management.
- Disaster preparedness measures at community and facility level, including community education, BLS, provision of relief, etc.
- Management of day to day emergencies by providers in the community and facilities according to their capacity; and appropriate referral.

Table 14: Emergency preparedness & management services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Health education on Accident/injury	Yes	Yes	Yes	Yes	Yes	Yes
2.	**Disaster Preparedness e.g. Earthquake, Flood**						
2.1.	Saving lives through BLS/CPR	Yes	-	Yes	Yes	Yes	Yes
2.2.	Educating people on coping with emergencies	Yes	Yes	Yes	Yes	Yes	Yes
3.	**Day to Day Emergency**						
3.1.	Maintain airway, circulation and breathing	Yes	Yes	Yes	Yes	Yes	Yes
3.2.	Diagnosis and management of common medical emergencies, e.g. bleeding, , choking and loss of consciousness	Yes	-	Yes	Yes	Yes	Yes
3.3.	Minor cuts/injuries	Yes	Yes	Yes	Yes	Yes	Yes
3.4.	Fractures/dislocations	-	Refer to hospital	Apply splint & refer to hospital	Apply splint & refer to hospital	Apply splint & refer to hospital	Apply splint & refer to hospital
3.5.	Sprains/strains	Refer	Refer	Refer	Treat or refer to RHC	Treat or refer to hospital	Treat or refer to hospital

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
3.6.	Accidents	-	Refer to hospital	Stabilize & refer to hospital	Stabilize & refer to hospital	Stabilize & refer to hospital	Stabilize & refer to hospital
3.7.	Wound dressing	Yes	Yes	Yes	Yes	Yes	Yes
3.8.	Management of Shock	Stabilize and refer to hospital	-	Stabilize and refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital	Stabilize and refer to hospital
3.9.	Snake bites	-	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital
3.10.	Dog bites	-	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital	First aid & refer to hospital

7. Prevention and management of endemic communicable diseases

7.1. Key interventions and providers

- Preventive services at the community level will be mostly targeted by LHWs, in addition to the CMWs, SHNSs, CDC supervisors and sanitary inspectors.
- CMWs and LHWs will help in identification and referral of cases.
- CMWs would refer and facilitate linkages with LHWs, and to BHUs, when any suspected case of communicable disease is encountered.
- For TB, LHWs will support in implementation of the DOTS strategy, and screening of case contacts .
- Malaria prevention through the use of bed nets will be promoted at the community and facility level. CMWs will advise pregnant women about the dangers of malaria.
- Unsafe practices and behaviours such as irrational use of injections that can cause transmission of HIV, Hepatitis B/C will be discouraged at all levels.
- Community perceptions and misperceptions regarding transmission of HIV will be targeted at all levels.

Table 15: Services for management and control of endemic communicable diseases

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	**Respiratory problems**						
1.1.	Common cold and cough	-	Yes	Yes	Yes	Yes	Yes
1.2.	Acute Bronchitis	-	Refer	Yes	Yes	Yes	Yes
1.3.	COPD	-	-	Refer	Refer	Yes	Yes
1.4.	Pneumonia	-	Refer	Yes	Yes	Yes	Yes
2.	**GI problems**						
2.1.	Acute diarrhoea	-	Yes	Yes	Yes	Yes	Yes
2.2.	Chronic diarrhoea	-	Refer	Yes. Refer if needed	Yes. Refer if needed	Yes. Refer if needed	Yes. Refer if needed
2.3.	Dysentery	-	Refer	Yes	Yes	Yes	Yes
3.	**Tuberculosis**						

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
3.1.	Health education:	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Identify suspects	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Get sputum test done	Yes	Yes	Yes	Yes	Yes	Yes
	▪ TB is curable	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Where TB services are available	Yes	Yes	Yes	Yes	Yes	Yes
3.2.	Sputum smear examination	-	-	Yes	Yes	Yes	Yes
3.3.	X-Ray for smear negative cases	-	-	Refer	Refer	Yes	Yes
3.4.	Treatment of registered/diagnosed cases	-	-	-	-	Yes	Yes
3.5.	Participate in TB-DOTS, including recording & reporting	-	Yes	Yes	Yes	Yes	Yes
3.6.	Screening/referral of contacts	-	Yes	Yes	Yes	Yes	Yes
4.	**Malaria**						
4.1.	Health education:	Yes	Yes	Yes	Yes	Yes	Yes
	▪Cleanliness of the surroundings	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Netting windows and doors	Yes	Yes	Yes	Yes	Yes	Yes
	▪Use bed nets	Yes	Yes	Yes	Yes	Yes	Yes
4.2.	Clinical diagnosis	Yes	Yes	Yes	Yes	Yes	Yes
4.3.	Laboratory diagnosis	-	-	Yes	Yes	Yes	Yes
4.4.	Treatment of uncomplicated case	Yes	Yes	Yes	Yes	Yes	Yes
4.5.	Treatment of complicated case	Stabilize & refer	Stabilize & refer	Stabilize & refer	Stabilize & refer	Stabilize & refer	Stabilize & refer
5.	**Dengue Fever**						
5.1.	Health education	Yes	Yes	Yes	Yes	Yes	Yes
5.2.	Diagnosis on history and examination	-	Yes	Yes	Yes	Yes	Yes
5.3.	Laboratory	-	-	Refer	Refer	Yes	Yes
5.4.	Treatment	-	-	Refer	Refer	Refer	Refer
6.	**Typhoid**						
6.1.	Diagnosis on history and examination	-	Yes	Yes	Yes	Yes	Yes
6.2.	Laboratory	-	-	Refer to RHC	Refer to RHC	Yes	Yes
6.3.	Treatment	-	-	Yes	Yes	Yes	Yes
7.	**Common infections (scabies, pediculosis, helminthiasis)**						
7.1.	Health Education on:	Yes	Yes	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
	▪ Hand washing/cleanliness ▪Washing infected cloths separately ▪ How infections are transmitted						
7.2.	Management of common infections and wounds	Yes	Yes	Yes	Yes	Yes	Yes
8.	**Hepatitis A and E**						
8.1.	Health education on transmission	-	Yes	Yes	Yes	Yes	Yes
8.2.	History	-	Refer	Yes	Yes	Yes	Yes
8.3.	Examination	-	Refer	Yes	Yes	Yes	Yes
8.4.	Laboratory	-	-	Refer	Refer	Yes	Yes
8.5.	Treatment	-	-	Yes	Yes	Yes	Yes
9.	**Hepatitis B and C**						
9.1.	Health education on transmission	Yes	Yes	Yes	Yes	Yes	Yes
9.2.	History	-	Refer	Refer	Yes	Yes	Yes
9.3.	Examination	-	Refer	Refer	Yes	Yes	Yes
9.4.	Laboratory	-	-	-	Refer	Yes	Yes
9.5.	Treatment	-	-	-	Refer to hospital	Refer to hospital	Refer to hospital
10.	**Sexually Transmitted Infections**						
10.1.	History	Yes	Yes	Yes	Yes	Yes	Yes
10.2.	Examination	Yes	Refer	Yes	Yes	Yes	Yes
10.3.	Laboratory	-	-	Refer	Refer	Refer	Refer
10.4.	Syndromic management of STIs	-	Refer	Yes	Yes	Yes	Yes
11.	**HIV/AIDS**						
11.1.	Health education on: ▪ Using safe syringes/blood ▪ Having safe sex ▪ How AIDS is transmitted and how it is not transmitted	Yes	Yes	Yes	Yes	Yes	Yes
11.2.	Suspicion/identification and referral	Yes	-	Yes	Yes	Yes	Yes

8. Prevention and management of endemic non-communicable diseases

8.1. Key interventions and providers

- Health education to discourage smoking and tobacco use will be promoted at all levels.
- Preventive services at the community level will be targeted by LHWs and CMWs.
- CMWs and LHWs will help in identification and referral of cases of pregnancy induced hypertension (PIH).
- CMWs would refer and facilitate linkages with LHWs, and to BHUs for suspected cases of diabetes, PIH and coronary artery disease amongst pregnant women.

Table 16: Services for control and management of endemic non-communicable diseases

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	**Hypertension**						
1.1.	Health education for control of BP and prevention of heart attack and strokes:	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Tobacco cessation						
	▪ Avoiding fats in diet						
	▪ Regular physical activity 30 minutes a day						
	▪ Reduced salt intake <5 gm per day						
	▪Regular use of antihypertensive						
	▪ Weight control						
1.2.	History and examination	Yes	-	Yes	Yes	Yes	Yes
1.3.	Treatment	Refer	Refer	Yes	Yes	Yes	Yes
2	**Diabetes Mellitus**						
2.1.	Health education on:	Yes	Yes	Yes	Yes	Yes	Yes
	▪ Diet and avoiding sugar						
	▪ Weight control						
	▪ Regular physical activity 30 minutes a day						
	▪Regularuseoforal hypoglycaemic agents/insulin						
2.2.	History and examination	-	-	Yes	Yes	Yes	Yes

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
2.3.	Laboratory	-	-	Yes	Yes	Yes	Yes
2.4.	Treatment	-	-	Yes	Yes	Yes	Yes
2.5.	Prevention/early detection of diabetic complications	-	-	Identify and refer	Identify and refer	Identify and refer	Identify and refer
3.	**Coronary Artery Disease & Stroke**						
3.1.	Provide Education on: ▪Treating Hypertension ▪Avoiding Use of tobacco ▪ Avoiding Fats & Salts ▪ Weight Control ▪Physical activity	Yes	-	Yes	Yes	Yes	Yes
3.2.	History	-	-	Refer	Refer	Yes	Yes
3.3.	Examination	-	-	Refer	Refer	Yes	Yes
3.4.	Treatment	-	-	Refer	Refer	Yes	Yes
3.5.	Referral for advanced care	-	-	Yes	Yes	Yes	Yes
4.	**Asthma**						
4.1.	History and examination	-	-	Yes	Yes	Yes	Yes
4.2.	Treatment	-	-	Yes	Yes	Yes	Yes
4.3.	Referral for severe cases	-	-	Yes	Yes	Yes	Yes
5.	**Acid Peptic Disease**						
5.1.	History and examination	-	-	Yes	Yes	Yes	Yes
5.2.	Treatment	-	-	Yes	Yes	Yes	Yes
6.	**Cancer**						
6.1.	History and examination	-	-	Yes	Yes	Yes	Yes
6.2.	Laboratory	-	-	Refer	Refer	Refer	Refer
6.3.	Treatment	-	-	Refer	Refer	Refer	Refer
6.4.	Self examination for breast cancer	Yes	Yes	Yes	Yes	Yes	Yes

9. Disability prevention and rehabilitation services

9.1. Key interventions

Service providers and facilities will primarily focus on early detection and seeking rehabilitation in case of any impairment. Any potential limitation in function that could be aggravate in the future will be targeted by CMWs and LHWs at the community level, while facilities will focus on prompt and appropriate referral. Table 17 enlists the specific services.

Table 17: Disability prevention and rehabilitation services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1	Health education on early examination of newborns						
2	Refer for seeking advice on Rehabilitation Services including physical and occupational therapy	Yes	Yes	Yes	Yes	Yes	Yes
3	Refer for making life of disabled productive/vocational therapy	-	-	Refer	Refer	Refer	Refer
4	Identification/referral for:						
4.1	▪ Physical disability	Yes	Yes	Yes	Yes	Yes	Yes
4.2	▪ Visual impairment	-	-				
4.3	▪ Hearing disability						
5	**Control of iodine deficiency**						
5.1	Health education about illnesses due to iodine deficiency	Yes	Yes	Yes	Yes	Yes	Yes
5.2	Identification of goitre and referral to DHQH	Yes	Yes	Yes	Yes	Yes	Yes

10. Eye and ENT care services

Eye care and ear, nose and throat (ENT) services will focus on prevention and early detection of any impairment such as reduced sight or hearing ability at the community level. Suspected cases will be referred to the BHU by CMWs and LHWs, and from there onwards as per need. Table 18 details the services under this component.

Table 18: Eye and ENT care services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1	**Primary eye care**						
1.1	Diagnosis and treatment of common eye diseases	-	-	Yes	Yes	Yes	Yes
1.2	Visual acuity using Snellen chart	-	-	-	-	Yes	Yes
1.3	Detection of cataract cases and referral for surgery	-	Yes	Yes	Yes	Yes	Yes
1.4	Referral for suspected glaucoma	-	-	-	-	Yes	Yes
1.5	Treatment of trachoma	-	-	Yes	Yes	Yes	Yes
2	**Ear conditions**	-	-				
2.1	Treatment of otitis media	-	-	Yes	Yes	Yes	Yes
2.1	Referral for complicated cases	-	-	Yes	Yes	Yes	Yes

11. Neurologic and psychological well being

11.1. Key interventions

- At the community level, LHWs will refer any suspected or reported case of neurologic or psychological issue[14] to the DHQH.
- BHUs will offer health education and referral services. Specific and severe psychological illness will be managed at the DHQH level, and at specialised centres as per need.
- Mild to moderate anxiety and depression, and its maintenance therapy will be offered at RHC level.
- CMWs and LHWs will offer support to mothers to prevent ante-partum and post-partum depression.

Table 19: Services for neurological and psychological well being

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Health education on:	-	Refer	Yes	Yes	Yes	Yes
1.1	▪ Acknowledging a mental problem						
1.2	▪ Actions to be taken						
2.	Attention deficit disorder	-	-	Refer to DHQH	Refer to DHQH	Refer to DHQH	Refer to DHQH
3.	Generalized anxiety disorder	-	-	Identify and refer to DHQH	Identify and refer to DHQH	Identify and refer to DHQH	Identify and refer to DHQH
4.	**Depression/Post Partum Depression**						
4.1	Support and counseling for ante-partum and post-partum depression	Yes	Yes	Yes	Yes	Yes	Yes
4.2	Referral for post-partum depression	Yes	Yes	Yes	Yes	Yes	Yes
5.	Drug abuse	-	-	Identify and refer to DHQH	Identify and refer to DHQH	Identify and refer to DHQH	Identify and refer to DHQH
6.	Treatment of epilepsy; referral for advanced management	-	-	Yes	Yes	Yes	Yes

[14] The term mental health is being replaced by psychological well being, to remove the stigma that the term carries.

12. Oral Health

12.1. Key interventions

- At the community level, oral hygiene will be promoted by the LHWs and SHNSs.
- Health education regarding oral hygiene will be promoted as part of the overall hygiene practices.
- Dental treatments will be offered at RHCs.

Table 20: Oral health services

S. no.	Services	CMW	LHW	SHNS	BHU	BHU-24h	RHC	RHC+
1.	Health education on dental care: ▪ Dental cleaning twice a day ▪ Using floss ▪ Healthy diet ▪ Seeking advice early ▪ Dental related diseases: Hepatitis, CV disorders, Diabetes	-	Yes	Yes	Yes	Yes	Yes	Yes
2.	**Dental Pain/Caries/other problems**							
2.1.	History	-	-	-	Yes	Yes	Yes	Yes
2.2.	Examination	-	-	-	Refer	Refer	Yes	Yes
2.3.	Treatment	-	-	-	Refer	Refer	Yes	Yes
3.	Tooth extraction	-	-	-	Refer	Refer	Yes	Yes
4.	Scaling	-	-	-	Refer	Refer	Yes	Yes
5.	Filling	-	-	-	Refer	Refer	Yes	Yes
6.	Management of gingivitis and oral ailments	-	-	-	Refer	Refer	Yes	Yes

13. Infection Control

13.1. Key interventions

Standard precautions to be observed by all providers at all levels, which are relevant for all procedures including maternal, neonatal and infant care are given in this section.[15] Detailed guidelines for infection control for CMWs, BHUs and RHCs are annexed.[16] The main focus of infection control activities, which are cross cutting across all services are:

- Hand hygiene between routine examination of clients, and before, during and after any procedure.
- Personal protective equipment (PPE) for protecting personnel against infections.
- Environmental management including cleaning and disinfection of surfaces, equipment and supplies.
- Waste handling, management and disposal, including for infectious and non-infectious waste.

Table 21: Standard precautions for infection control

S #	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1	**Wash hands**						
1.1	Wash hands with soap and water: ▪ Before ANY treatment procedure; before and after caring for a woman or newborn ▪ Whenever the hands (or any other skin area) are contaminated with blood or other body fluids ▪ After removing the gloves, because they may have holes ▪ After changing soiled bed sheets or clothing.	Yes	-	Yes	Yes	Yes	Yes
1.2	Keep nails short.	Yes	Yes	Yes	Yes	Yes	Yes
2	**Wear Gloves**						
2.1	Wear sterile or highly disinfected gloves when performing any procedure (vaginal examination, delivery, cord cutting, repair of episiotomy or tear, blood drawing).	Yes	-	Yes	Yes	Yes	Yes

[15] Standard Precautions and Cleanliness. P 19. Integrated Management of Pregnancy and Childbirth. Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice. World Health Organization. Geneva. 2006

[16] Infection Control and Environmental Management Guidelines (Volumes 1 to 13). TRF. Islamabad. 2011.

S #	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
2.2	Wear long sterile or highly disinfected gloves for manual removal of placenta; or use a cut glove to cover forearm and elbow, then wear handglove making sure hands are covered till elbow height.	Yes	-	Yes	Yes	Yes	Yes
2.3	Wear clean gloves when: ▪ Handling and cleaning instruments ▪ Handling contaminated waste ▪ Cleaning blood and body fluid spills	Yes	-	Yes	Yes	Yes	Yes
2.4	Drawing blood.	Yes	-	Yes	Yes	Yes	Yes
3	**Protect yourself from Blood and other Body Fluids during Deliveries**						
	▪ Wear a long apron made from plastic or other fluid resistant material, and shoes. ▪ If possible, protect your eyes from splashes of blood.	Yes	-	Yes	Yes	Yes	Yes
4	**Practice Safe Sharps Disposal**						
4.1	Keep a puncture resistant container nearby.	Yes	-	Yes	Yes	Yes	Yes
4.2	Use each needle and syringe only once.	Yes	-	Yes	Yes	Yes	Yes
4.3	Do not recap, bend or break needles after giving an injection.	Yes	-	Yes	Yes	Yes	Yes
4.4	Drop all used (disposable) needles, plastic syringes and blades directly into this container, without recapping, and without passing to another person.	Yes	-	Yes	Yes	Yes	Yes
4.5	Empty or send for incineration when the container is three-quarters full.	Yes	-	Yes	Yes	Yes	Yes
5	**Practice Safe Waste Disposal**						
5.1	Dispose off placenta or blood, or body fluid contaminated items, in leak-proof containers.	Yes	-	Yes	Yes	Yes	Yes
5.2	Burn or bury contaminated solid waste.	Yes	-	Yes	Yes	Yes	Yes
5.3	Wash hands, gloves and containers after disposal of infectious waste.	Yes	-	Yes	Yes	Yes	Yes
5.4	Pour liquid waste down a drain or flushable toilet.	Yes	-	Yes	Yes	Yes	Yes
5.5	Wash hands after disposal of infectious waste.	Yes	-	Yes	Yes	Yes	Yes
6	**Deal with Contaminated Laundry**						
6.1	Collect clothing or sheets stained with blood or body fluids and keep them separately from other laundry, wearing gloves or use a plastic bag. DO NOT touch them directly.	Yes	-	Yes	Yes	Yes	Yes
6.2	Rinse off blood or other body fluids before washing with soap.	Yes	-	Yes	Yes	Yes	Yes
7	**Sterilize and Clean Contaminated Equipment**						

S #	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
7.1	Make sure that instruments which penetrate the skin (such as needles) are adequately sterilized, or that single-use instruments are disposed of after one use.	Yes	-	Yes	Yes	Yes	Yes
7.2	Thoroughly clean or disinfect any equipment which comes into contact with intact skin (according to instructions).	Yes	-	Yes	Yes	Yes	Yes
7.3	Use bleach for cleaning bowls and buckets, and for blood or body fluid spills.	Yes	-	Yes	Yes	Yes	Yes
8	**Clean and Disinfect Gloves (Note: This produces disinfected gloves. They are not sterile. Good quality latex gloves can be disinfected 5 or more times.)**						
8.1	Wash the gloves in soap and water.	Yes	-	Yes	Yes	Yes	Yes
8.2	Check for damage: Blow gloves full of air, twist the cuff closed, then hold under clean water and look for air leaks. Discard if damaged.	Yes	-	Yes	Yes	Yes	Yes
8.3	Soak overnight in bleach solution with 0.5% available chlorine (made by adding 90 ml water to 10 ml bleach containing 5% available chlorine).	Yes	-	Yes	Yes	Yes	Yes
8.4	Dry away from direct sunlight.	Yes	-	Yes	Yes	Yes	Yes
8.5	Dust inside with talcum powder or starch.	Yes	-	Yes	Yes	Yes	Yes
9	**Sterilize Gloves**						
9.1	Sterilize by autoclaving or highly disinfect by steaming or boiling.	Yes	-	Yes	Yes	Yes	Yes

14. Referral Services

Figure 3 illustrates the referral mechanism, while salient points of the system are given in this section. The referral system will have four functional levels, which are detailed below.

14.1. First level: Household to LHW/CMW and BHU

The LHW, CMW and the BHU i.e., the primary functionaries of PHC system constitute the first level of the referral system. At the household level, community based staff members (LHW, CMW and LHS) will refer cases to the BHU and/or other levels as needed.

- Each household will be registered with the respective LHW, as well as with the BHU.
- Each LHW will be linked to CMW and the BHU in the area.
- Each CMW will be linked with LHS and the BHU in the area.
- Each LHW will have details of services being provided by the CMW and the BHU, displayed in a chart at the health house. Any change in services will be updated, even if that occurs for a short duration. Changes will be conveyed to LHS for communicating with LHWs and CMWs.
- LHWs will refer antenatal, natal and post natal cases to CMWs.
- LHWs will help CMWs establish their practices in the target areas.
- The LHW will refer cases to CMW or BHU that are beyond her capacity on the prescribed “LHW Referral Form.”
- On receiving a referral from the LHW, the CMW providing services will give feedback to LHW on the same referral form.
- Similarly the health care provider at BHU, on receiving referrals from LHWs or CMWs, will provide feedback to respective LHW or CMW.
- This communication between referring and referral facilities will be part of records at corresponding levels of the referral system.

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14.2. Second Level: BHU to RHC & THQH

The health care providers at BHU level, i.e., health officer, LHV, medical technicians/dispenser and health care providers at RHC and THQ constitute the second level of referral system. The patients presenting at/or referred at the BHU will be managed at the facility, and/or will be referred to RHC or THQH, depending upon the nature of the illness.

- The health care providers at BHUs will have detailed chart displaying services being provided at the RHC and THQH. This chart will be modified with any change in services, even if that is for a short duration. Such changes will be communicated to all relevant health facilities.
- BHU will refer patients to RHC or THQH on prescribed "BHU Referral Form." Providers at referral facility, after providing services will give feedback to the BHU on the same referral form.
- This communication between referring and referral facilities will be part of records at the corresponding levels of the referral system.

14.3. Third Level: RHC to THQH/DHQH

Providers at RHC that include the health officer, WMO, LHV, nurse, medical technician and dispenser; and providers at THQH and DHQH constitute the third level of the referral system.

- Patients presenting directly and/or referred at RHCs will be managed at the facility, and/or will be referred to THQH or DHQH, depending on the nature of the illness.
- RHCs will have detailed chart of services provided by THQH and DHQH, which will be modified with any change in service, even if that occurs for a short duration. Such changes will be communicated at all concerned levels.
- RHCs will refer patients to THQH and DHQH on the "RHC Referral Form." If the patient is already referred on a BHU Referral Form, that will be attached to the RHC form. Providers at THQH and DHQH will provide feedback to RHC on the same form, which will be part of records at corresponding levels of the system.

14.4. Fourth Level: THQH to DHQH and Tertiary Care Hospital/s

Providers at THQH and at DHQ and Tertiary Care Hospital constitute the fourth level of referral system.

- Patients presenting at or referred to THQH will be managed at the facility, and/or will be referred to DHQH or Tertiary Care Hospital/s, depending on the nature of illness.

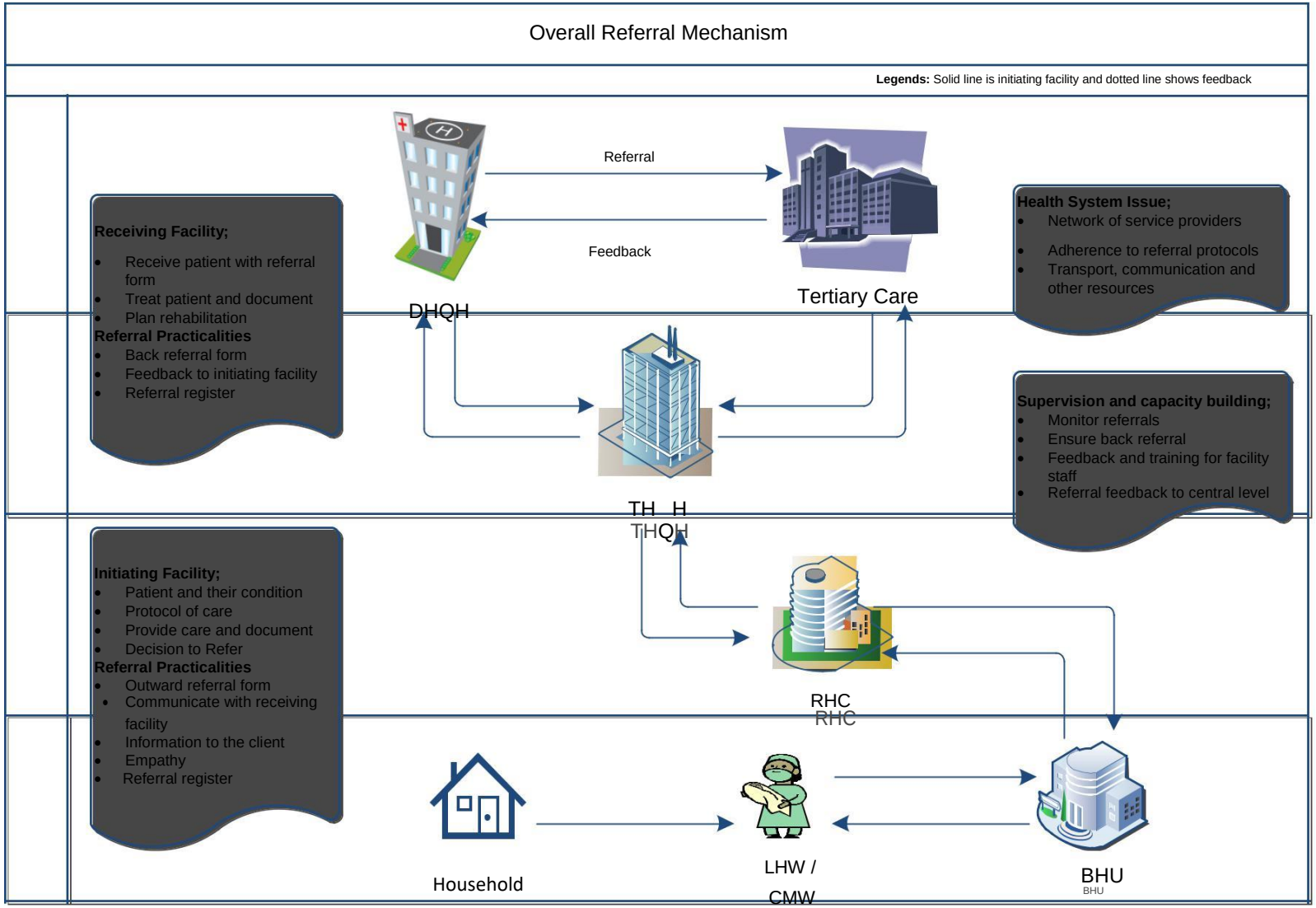
- THQHs will have detailed chart of services being provided by the facility and DHQH and Tertiary Care Hospital/s, displayed at a minimum of 2 sites. The chart will be modified with any change in services that takes place at DHQ or Tertiary Care Hospital, even if that occurs for short duration, and changes will be communicated to all concerned levels of health facilities.

- Patients will be referred to DHQH or Tertiary Care Hospital/s on prescribed "THQ Referral Form." If the patient is referred from BHU and/or RHC on Referral Form/s, those will be attached to the THQH referral form.

- Similarly, DHQH will refer patients to Tertiary Care Hospital on prescribed "DHQ Referral Form," and in case of a referred patient from any other facility, the pertinent documentation will be attached.

- DHQH and Tertiary Care Hospital will provide feedback to referring facility on the same referral form. This communication between the referring and referral facilities will be part of records at the corresponding levels of the system.

Figure 2: Referral Mechanism



16. Monitoring and reporting systems

16.1. Role of LHS to monitor CMW and LHW activities

The CMW monitoring and supervisory mechanism is illustrated in Figure 4. The main focus of the LHSs' work is below.

- Within the catchment area of a BHU, there will be a maximum of 1 LHSs to supervise a maximum of 24 LHWs and 3 CMWs.
- Each LHS will ensure support to each LHW and CMW at least once every month for the entire day.
- The LHS will provide follow-up training support and supportive supervision; evaluate knowledge and skills and identify training needs; Validate LHWs' and CMWs' records, progress, and the last month's report in the field.

16.2. Field Monitoring by Health Officers

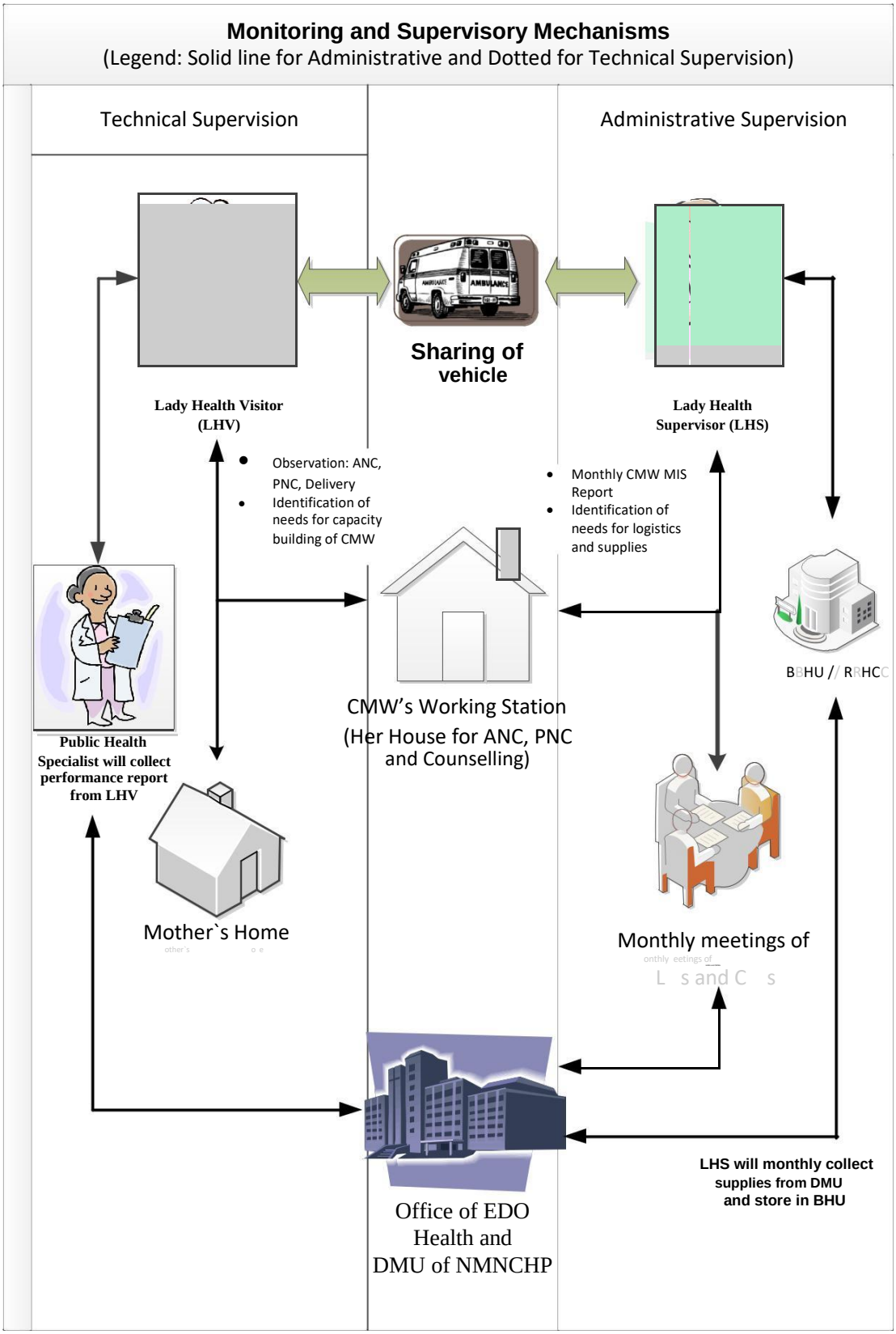
Each health officer will conduct a monitoring and supervisory visit in the field every week to provide support to field staff by:

- Validating progress reports of LHWs, LHS, CMW, vaccinator, health and nutrition supervisor, and male mobilizers.
- Provide follow-up training support and supportive supervision.

16.3. Monthly Meeting of BHU Health Team

Each member of the BHU health team will meet once every month to prepare monthly progress reports; discuss issues faced; and receive refresher training/Continuing Medical Education (as and when required), on the basis of findings of the field monitoring.

Figure 3: CMW Monitoring and Supervisory Mechanism



16.4. DHIS Reporting and Notifiable Diseases

All levels of workers are required to report conditions according to the District Health Information System (DHIS). Further, notifiable diseases should be reported as per protocol to the appropriate level of the system. List of these diseases is provided in Table 22, which will need to be updated as per need, and developments in the health sector such as emerging epidemics, and legislation. Tuberculosis is envisaged to be added to the list, as legislation is pending in the national assembly of Pakistan.

Table 22: DHIS reporting and notifiable diseases

S. no.	Items	CMW	LHW	BHU	BHU 24h	RHC	RHC+
1	Reporting on DHIS formats	Yes	Yes	Yes	Yes	Yes	Yes
2	Reporting on notifiable diseases (as per protocols)	Yes	Yes	Yes	Yes	Yes	Yes

16.5. Monitoring Indicators

Broad indicators for monitoring progress of implementation and effectiveness of service delivery, and main conditions are provided in table 23. These basic indicators will need to be made more precise according to the different levels of implementation. Indicators will also be updated in light of findings thereon.

Table 23: M&E Indicators and sources of verification[17]

Indicators	Source of verification
Fully Immunized (Measles 1) (By 12-23 months)	CES surveys DHIS
Drop-out rates by facility (Penta-3 and BCG)	
Two Doses of Tetanus Toxoid (TT2)	CES surveys DHIS
ANC attendance rates	DHIS/ LHW-MIS
Province: Skilled Birth Attendance	
CPR (modern methods); Number of FP Users	DHS, LHW-MIS
Stock outs of contraceptives	
% of SAM treated out of estimated	
Anaemia in pregnancy	

[17] Consultative Workshop Report, Essential Package of Health Services for Primary Level, TRF, 2012.

Institutional Delivery in Primary Care Institution	DHIS (yet to be added)
Referral (Delivery, Child)	DHIS
Essential Drugs; Stock outs of drugs in Index	DHIS
Health Facility Utilization Rate (Primary Care)	DHIS
%age of mothers with knowledge danger signs for the common child illnesses	DHIS

17. Diagnostic Services

Basic diagnostic services that will be offered at the community and facility level is given in the Table 24 below.

Table 24: Diagnostic services by type of facility

S. no.	Services	CMW	BHU	BHU-24h	RHC	RHC+
1.	**Laboratory Services**					
a.	**Haematology**					
i.	Haemoglobin	-	Yes	Yes	Yes	Yes
ii.	Red and white blood cell count	-	-	Yes	Yes	Yes
iii.	Differential cell count	-	-	Yes	Yes	Yes
iv.	ESR	-	Yes	Yes	Yes	Yes
v.	Haematocrit	-	-	Yes	Yes	Yes
vi.	Malaria parasite smear (MPS)	-	Yes	Yes	Yes	Yes
vii.	Bleeding time and coagulation time	-	-	-	Yes	Yes
viii.	Blood grouping	-	-	-	Yes	Yes
ix.	Hepatitis B and C	-	-	Yes	Yes	Yes
x.	HIV test	-	-	-	Yes	Yes
b.	**Bacteriology**					
i.	Ziehl-Nielsen staining for acid fast bacilli (AFB)	-	-	-	Yes	Yes
ii.	Direct smear for AFB	-	-	-	Yes	Yes
iii	Typhi dot	-	-	-	Yes	Yes
d.	**Clinical Pathology**					
i.	Urine analysis: physical exam	-	Yes	Yes	Yes	Yes
ii.	Chemical exam: Albumin (qualitative)	Yes	Yes	Yes	Yes	Yes
iii.	Chemical exam: Albumin (quantitative)	-	-	-	Yes	Yes
iv.	Chemical exam: Glucose (qualitative)	Yes	Yes	Yes	Yes	Yes
v.	Chemical exam: Glucose (quantitative)	-	Yes	Yes	Yes	Yes

S. no.	Services	CMW	BHU	BHU-24h	RHC	RHC+
vi.	Microscopic (stool test)	-	-	-	Yes	Yes
viii.	Pregnancy test kit	Yes	Yes	Yes	Yes	Yes
e.	**Biochemistry**					
i.	Blood-sugar	-	Yes	Yes	Yes	Yes
ii.	Urea	-	-	-	Yes	Yes
iii.	Total protein	-	-	-	Yes	Yes
2.	**Imaging Services**					
i.	X-rays	-	-	-	Yes	Yes
ii.	Ultrasound	-	-	Yes	Yes	Yes

18. Pharmacy Services

Basic pharmacy services that will be offered at the community and facility level is given in the table below.

Table 25: Pharmacy Services

S. no.	Services	CMW	LHW	BHU	BHU-24h	RHC	RHC+
1.	Dispensing	-	-	Yes	Yes	Yes	Yes
2.	Storage	-	-	Yes	Yes	Yes	Yes
3.	Record keeping	Yes	Yes	Yes	Yes	Yes	Yes

19. Infrastructure

This section outlines the infrastructure needs for effective service delivery of the components in the EPHS-PHC at different levels. Table 27 enlists the essential requirements for facilities.

19.1. LHW Health House

The LHW house is designated as a Health House. She will establish a corner in the house where she can give counselling or treat minor illnesses in privacy. If possible, this place should display relevant posters. She is provided with the necessary material equipment and registers for recording her performance. These will be safely stored in a separate cupboard.

In addition, LHW health house will also serve as a vaccination post.

19.2. CMW Work Station

A room in the house of CMW will be her Work Station, which is a place where pregnant mothers will contact a CMW for consultation, examination and delivery. The MNCH Programme promotes safe delivery either at the CMW Work Station or at the woman's home. The delivery venue will depend upon the woman's preference. The CMW should, ideally, offer both options i.e. to deliver either at the woman's home or at the CMW work station. The programme intends to gradually replace TBAs with trained CMWs, and it is very important that they compete with TBAs for socially acceptable practices for the place of birth without compromising quality of care.

A CMW needs a small place of not more than 5x6 feet in a room near the exit door in her house for establishing her Working Station. The need and importance of a Work Station should be mentioned to CMWs during their training so that she and her family are well prepared to make some arrangement. This is also very important that choice of the corner for Work Station should be made without disturbing family's privacy. MNCH Programme will provide an examination couch and delivery table for ANC and

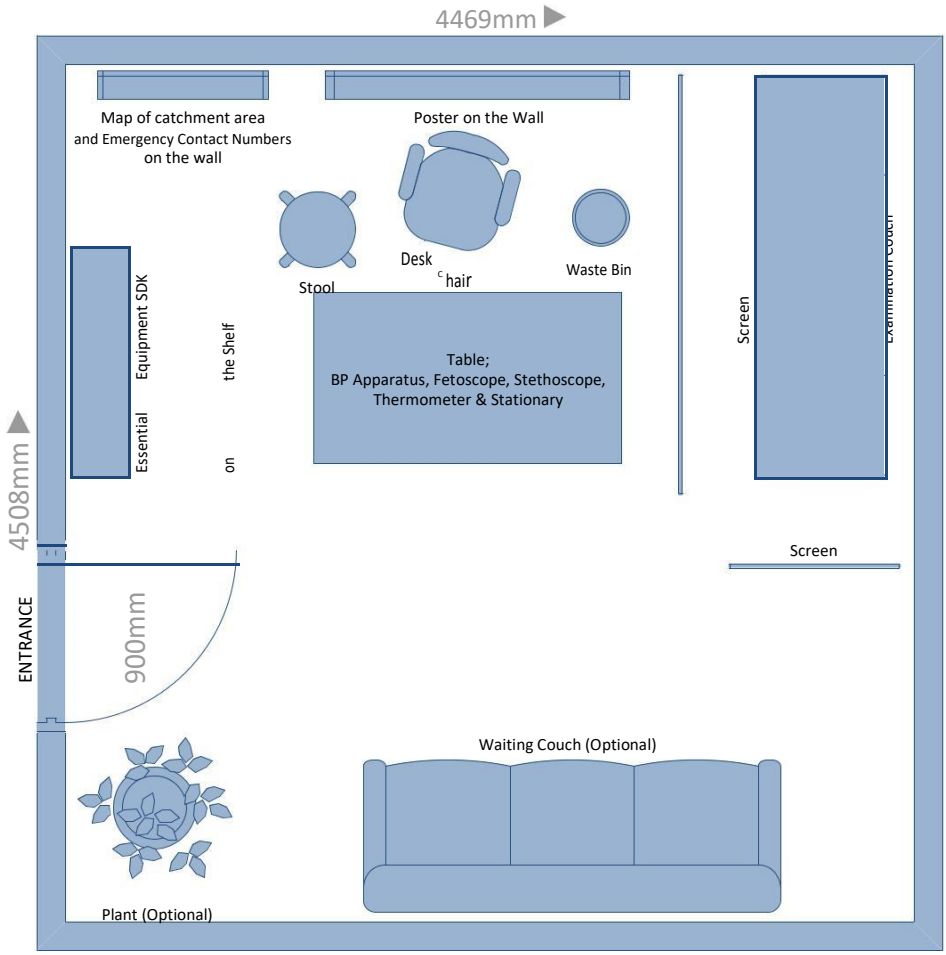
PNC check-ups and delivery. CMW will keep her equipment, medicines and supplies in a secure corner. A suggested layout of a typical Work Station is presented in Figure 5.

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

CMW will hang a signboard of 3x4 feet on the wall above the front door of her house. This pink board provided by the MNCH Programme is made up of tin, and displays her name, qualifications, affiliation with government, list of services; and if possible her telephone number.

Figure 4: Suggested layout of a typical Work Station of a CMW.[18]

[18]MNCH. 2010. CMW Deployment Guidelines



19.3. BHU and RHC

Although the infrastructure of BHUs and RHCs already exists, some improvements are proposed for future construction and renovation.

19.3.1. Location

It should be located in an easily accessible area. The area chosen should have the facility for electricity, all weather road communication, adequate water supply, telephone. The building should be well lit and ventilated with as much use of natural light and ventilation as possible.

19.3.2. Compound

The facility compound should have a boundary wall with gate and should be clean. The area should have a rubbish pit for disposal of refuse and medical waste. The surroundings should be kept clean with no water-logging in and around the centre and vector breeding places.

19.3.3. Entrance

It should be well-lit and ventilated with space for registration and record room, drug dispensing room, and waiting area for patients. The doorway leading to the entrance should also have a ramp facilitating easy access for handicapped patients, wheel chairs and stretchers.

A poster with listed services, opening times and emergency contacts during closing times should be displayed in a prominent place where the clients can view it. The text should be in an understandable format and in local and national language.

19.3.4. Waiting area

This should have adequate space and seating arrangements for waiting clients. It should protect clients/patients from the sun, rain and extremes of temperature. There should be designated separate male and female waiting areas with chairs or other seating arrangements. The walls and ceilings should be intact with no broken masonry, being free from dirt and stains. The floor should be clean of debris/trash.

The walls should carry posters imparting health education. Booklets/leaflets may be provided in the waiting area.

A list with all fees and possible exemptions should be displayed in a prominent area where the clients can view it. The text should be in an understandable format, in local and national language.

A locked complaint/suggestion box should be provided and it should be ensured that the complaints/suggestions are looked into at regular intervals and addressed.

19.3.5. Toilets

Toilets should exist within the facility or facility compound. Staff and clients/patients/attendants should have access to separate toilets. There should be separate and clean toilets for men and women.

19.3.6. Safe water supply

Safe drinking water should be available in the facility. Running water (pipe) should be available within the facility, or there should be a storage tank within the facility; or a protected water source within 200 metres of the facility (borehole, water tank, protected spring) with temporary storage containers e.g. jerry cans or drums.

19.3.7. Examination rooms

Separate examination rooms for men and women should be available and consultations and examinations should be performed behind curtains/screens to ensure privacy of clients.

19.3.8. Wards

In RHCs, there should be separate male and female wards. Clean linen should be provided and cleanliness should be ensured at all times. Cooking should not be allowed inside the wards for admitted patients. A suitable arrangement for provision of nutritious and hygienic food at reasonable rates should be made.

19.3.9. Operation Theatre

For surgical procedures at RHCs, there should be a changing room, sterilization area operating area and washing area. Separate storage area for storage of sterile and unsterile equipment/instruments should be available within the OT.

19.3.10. Labour Room

The LR should be well-lit and ventilated with an attached toilet and drinking water facilities, with a designated space for newborn care. There should be partitions for privacy.

19.3.11. Dressing Room/Injection Room

This should be well equipped with all the emergency drugs and instruments.

19.3.12. Laboratory

Sufficient space with workbenches and separate area for collection and screening should be available. The lab should have marble/stone table top for platform and wash basins.

19.3.13. General Store

Separate area for storage of sterile and common linen and other materials/ drugs/ consumables. The area should be well-lit and ventilated and should be rodent/pest free.

Besides the above, the health facility should have

1. Dispensing cum store area
2. Vaccine storage and immunisation area
3. BCC and family planning counsel area
4. Office room
5. Utility room for dirty linen and used items

Laundry: RHC should have its own arrangement for safe washing of bed linen, blankets, and sheets used in different areas.

Decent Residential Accommodation with all the amenities, like 24-hrs water supply, electricity, etc. should be available for medical officers, paramedical staff, support staff in RHCs, and for peon/*chowkidar* at BHUs.

Other Amenities:

- Electricity with back-up generator with POL.
- Adequate water supply
- Telephone: at least one direct line
- Wherever possible, a garden should be developed

19.4. Newborn Care Corner in the Labour Room at all levels

Labour rooms in every facility at every level are required to have appropriate facility for providing essential care to newborns and for resuscitating those who might require it.

Services at the corner

Newborn care corner provides an acceptable environment for all infants at birth. Services provided in the Newborn care corner include:

- Essential Care at birth.
- Resuscitation.
- Provision of warmth.
- Early initiation of breastfeeding.
- Weighing the neonate.
- Referral of sick newborns.

Configuration of the corner

- Clear floor area in the labour room, 20-30 sq ft in size, where a mobile radiant warmer is kept.

- Resuscitation kit should be placed in the radiant warmer. Availability of oxygen source is desirable, but not essential.
- The area should be away from draughts of air and should have appropriate power connection for plugging in the radiant warmer.

Mothers should be encouraged to be involved in care of their sick newborns at every level.

19.5. Infrastructure requirements at RHC+

The main requirements in include a functional labour room, an operating theatre and an inpatient ward. Minor repairs may be required at some sites. Most of the RHCs have provision for 20 beds for treatment of indoor patients, an operation theater, laboratory and an X-ray facility already. Beds will be allocated for Comprehensive EmONC services in the existing inpatient wards.

Table 26: Essential infrastructure at facilities

S. no.	Items	BHU	BHU 24h	RHC	RHC+
1	Warm and clean rooms	Yes	Yes	Yes	Yes
2	Delivery bed(s)	Yes	Yes	Yes	Yes
3	Clean bed linen	Yes	Yes	Yes	Yes
4	Curtains if more than one bed	Yes	Yes	Yes	Yes
5	Clean surface (for alternative delivery position)	Yes	Yes	Yes	Yes
6	Work surface for resuscitation of newborn near delivery bed(s)	Yes	Yes	Yes	Yes
7	Light source	Yes	Yes	Yes	Yes
8	Heat source	Yes	Yes	Yes	Yes
9	Room thermometer	Yes	Yes	Yes	Yes
10	Running water	Yes	Yes	Yes	Yes
11	Electricity with backup (generator)	Yes	Yes	Yes	Yes
12	Sewage system	Yes	Yes	Yes	Yes
13	Waste disposal (placenta pit)	Yes	Yes	Yes	Yes
14	Secure staff quarters	Yes	Yes	Yes	Yes
15	Toilets for patients/attendants	Yes	Yes	Yes	Yes
16	Toilets for staff	Yes	Yes	Yes	Yes
17	Designation of a Newborn Care Corner in the Labour Ward	Yes	Yes	Yes	Yes
18	SBA with EmONC skills present or on call 24 hours	-	Yes	Yes	Yes
19	Emergency team present or on call 24 hours	-	Yes	Yes	Yes
20	Outpatient area	Yes	Yes	Yes	Yes
21	Ante- and post-natal ward/area	Yes	Yes	Yes	Yes
22	Delivery room with visual and auditary privacy	Yes	Yes	Yes	Yes
23	Basic laboratory and pharmacy	Yes	Yes	Yes	Yes
24	Laboratory, including blood screening and cross-matching	-	-	-	Yes
25	Blood storage and transfusion arrangements	-	-	-	Yes
26	Medical store	-	-	-	Yes
	Infection Control				
27	Safe water, soap	Yes	Yes	Yes	Yes
28	Hand washing stations at appropriate sites	Yes	Yes	Yes	Yes
29	Disinfectants	Yes	Yes	Yes	Yes
30	Boiler/autoclave	Yes	Yes	Yes	Yes
31	Universal precautions to prevent the spread of HIV and other infections	Yes	Yes	Yes	Yes
32	Puncture resistant container for sharps disposal	Yes	Yes	Yes	Yes
33	Receptacle for soiled linen	Yes	Yes	Yes	Yes
34	Bucket for soiled pads and swabs	Yes	Yes	Yes	Yes
35	Bowl and plastic bag for placenta	Yes	Yes	Yes	Yes
	Sterilization				
36	Instrument sterilizer	Yes	Yes	Yes	Yes
37	Jar for forceps	Yes	Yes	Yes	Yes
	Referral				
38	Reliable referral system 24 hours a day, 7 days a week	Yes	Yes	Yes	Yes

S. no.	Items	BHU	BHU 24h	RHC	RHC+
39	Communication facilities: telephone/mobile phone	Yes	Yes	Yes	Yes
	Register and records				
40	ANC register	Yes	Yes	Yes	Yes
41	Delivery/maternity (including information on major obstetric complications)	Yes	Yes	Yes	Yes
42	OT register (for comprehensive EmONC facility)	Yes	Yes	Yes	Yes
43	Blood bank register (for comprehensive EmONC facility)	Yes	Yes	Yes	Yes
44	Referral register	Yes	Yes	Yes	Yes
45	ANC card	Yes	Yes	Yes	Yes
46	Individual patient record	Yes	Yes	Yes	Yes
47	Partograph	Yes	Yes	Yes	Yes
48	Others	Yes	Yes	Yes	Yes
	Others				
49	Staff quarters for core staff	Yes	Yes	Yes	Yes

20. Human resource requirements

The human resource requirements envisaged for effective service delivery at facility level is detailed in Table 27.

Table 27: Human resource for different levels

Sr. no.	Staff / Categories	BHU	BHU 24h	RHC	RHC+
A	**Manager**				
	Senior Medical Officer I/c	-	-	1	1
B	**Medical staff**				
1	MO/WMO	1	1	3	3
2	WMO	-	-	2	2
3	Dental surgeon	-	-	1	1
C	**Paramedics**				
1	School Health and Nutrition Supervisor	1	1	-	-
2	Medical Assistant / Health Technician	1	1	-	-
3	LHV	1	3	3	3
4	Dispenser	1	1	6	6
5	Midwife	2	2	4	4
6	Dental Technician	-	-	1	1
7	Laboratory Technician	-	-	2	2
8	Dresser	-	-	1	1
D	**Nursing staff**				
1	Charge Nurse (indoor)	-	-	6	6
E	**Support staff**				
1	Sanitary Inspector	1	1	-	-
2	Naib Qasid	1	1	2	2
3	Chowkidar	1	3	3	3
4	Aya	1	2	2	2
5	Sanitary Worker (M/F)	1	2	3	3
6	Store Keeper	-	-	1	1
7	Senior Clerk	-	-	1	1
8	Driver	-	2	2	2
9	Ward Servant (M/F)	-	-	4	4
10	Mali	-	-	2	2
11	Accountant/computer operator	-	-	1	1
12	Operation Theater Assistant	-	-	1	1
13	X-ray Attendant	-	-	2	2
14	Laboratory Assistant	-	-	2	2

20.1. Specific human resource requirement at BHU-24h

Some additional staff will be hired at the BHU-24h for provision of EmONC services, while the already appointed staff i.e., health officer, LHV, midwife and dispenser will be offered financial incentives to ensure 24/7 preventive and basic EmONC services. Detailed staffing is reflected in the table above. Each health facility will have at least 4 SBAs, one for each 8 hour shift, and an additional as a reliever.

20.2. Specific human resource requirement at RHC+

No additional staff will be hired for the Comprehensive EmONC services to be offered at RHC+ facilities. The lab technician will be trained in blood transfusion services, while the technicians will be trained in an anaesthesia short course. Medical officers will be trained in C-section surgery, and timely referral for complications.

For the SCFN, existing personnel would be trained in relevant areas of care to provide round the clock support, while specialists such as neonatologists will be recruited on a fee for service basis. Staff will be trained for NG insertion and feeding, IV access, the use of the equipment, the main focus being infection control and neonatal nursing. A neonatal intensive care unit (NICU) at the DHQH level will provide backup and referral support to the unit.

21. Equipment and supplies

21.1. Equipment and supplies for LHWs

Table 28: Items required for LHW Health House

S. no.	Items	Life of items
1	Salter Scale	1 for three years
2	Six Type Charts	1 set for 2 years
3	LHW kit bag	1 kit for 3 years
4	Health House Board	1 board for 3 years
5	Identity Card	One year/subject to conditions
6	MUAC Tape	1 for three years
7	Pencil torch with batteries	1 for 2 years
8	Thermometer	2 for 1 year
9	Scissors	1 for 2 years
10	Dressing tray	1 for 2 years
11	BP Apparatus	

Table 29: Items in LHW Kit per LHW per month

S. no.	Items	No.
1	Paracetamol Tablets (500mg blister strip)	100 tablets
2	Paracetamol Syrup (125mg/5ml Bottle of 60ml)	5 bottles
3	Tab Ferrous Fumarate + Folic Acid (150mg + .5 mg blister strip)	540 tablets
4	Amoxycillin Suspension 125 mg	5 bottles
5	Polyfax ointment	10 tubes
6	7.1% chlorhexidine digluconate (Eqv to 4% chx) in gel form, packing of 3g tube (for cord care)	2 tubes
7	Mebendazole Tablets	100 tablets
8	Cotton Roll	1 roll
9	Cotton Bandage	1 roll
10	Low Osmolality ORS (20.5 g Sachet)	20 sachets
11	Zinc Sulphate Suspension (20mg, bottle of 60 ml)	8 bottles
12	Condoms	100 pcs per month
13	Oral Pills	10 cycles/month
14	Depo Injection with syringe	3 injections/month
15	Health education material	
16	Data recording and reporting instruments	

21.2. Equipment and supplies for CMWs

Table 30: Equipment for CMWs

S. no.	Items	No.
1	Office table	1
2	Office chair	1
3	Client stool	1
4	Examination couch	1
5	Delivery table	1
6	Safety box with syringe cutting machine	1
7	Baby ambubag	1
8	Baby masks	
9	Baby bulb sucker	
10	Screen	1
11	Fetoscope	1
12	BP apparatus	1
13	Thermometer	1
14	Stethoscope	1
15	Baby weighing machine	1
16	Weighing machine adult	1
17	Delivery items (Forceps, Sponge Forceps, Kidney Tray, Steel Bowl, Speculum, Infusion with set, I/V Cannulae)	1
18	Kit box steel	1
19	Signboard	1
20	Plastic apron	2
21	Examination lamp	1
22	Nail brush	1
23	Episiotomy scissors	1

Table 31: Medicines and supplies, with estimated 20 clients per month per CMW

S. no.	Items	No.
1	Disposable delivery kit	50
2	Lignocaine Gel for catheterization	1
3	Inj. Lignocaine	
4	Suture materials	
5	Needle holder	
6	Artery forceps (small)	
7	Urine Dipsticks	Container of 50/100
8	Plastic sheet	1
9	Partograph chart	3
10	Urinary catheters 12G 1x use	3
11	Amoxicillin tablets (250 & 500 mg)	80
12	Cefaclor, if allergic to penicillin	20
13	Metronidazole tablets (200mg)	200
14	Metronidazole tablets (400 mg)	200
15	Metronidazole cream (vaginal)	
16	IV fluid Normal Saline or Ringers lactate IL	40
17	Injection Magnesium Sulphate	4

S. no.	Items	No.
18	Tablet Misoprostol 200 mcg	20
19	Tablet Paracetamol/Mefenamic acid	100
20	Pyodine Antiseptic solution	2
21	Injection Oxytocin	20
22	Disposable syringes 5cc	100
23	Iron, Folic acid (tablets)	3600
24	Tab Nifedipine	200
25	Vitamin A (capsule)	20
26	Contraceptives (Condoms, Pills, IUCD)	
27	IUCD Insertion Kit	
28	Mebendazole 100 mg	20
29	Cannula (18 and 20 size)	10
30	Cotton roll (400g)	1
31	Surgical gauze	Yes
32	Antiseptic cream (Polyfax)	Yes
33	Surgical tape	Yes
34	Antifungal vaginal tablets with applicator	20
35	Gloves	Yes
36	Eye wear/face visor	Yes
37	Mask	Yes
38	Caps	Yes
49	Soap	Yes
40	Glycerin and alcohol for hand rub	Yes
41	Chlorine powder/liquid for disinfection (HLD)	Yes
42	7.1% chlorhexidine digluconate (Eqv to 4% chx) in gel form, packing of 3g tube	Yes
43	Inj. Methyl ergometrine maleate	25
44	Red plastic bags for pathogenic/anatomic wastes	25
45	Needle cutter	1 per year
46	Sharps box	2
47	Health education materials	Yes
48	Data recording and reporting instruments	Yes

21.3. Equipment and supplies for facilities

Essential equipment and supplies are specified in Table 32. Additional requirements for RHC+ are outlined below.

21.4. Specific equipment and supplies required at RHC+

The equipment and supplies required to ensure comprehensive EmONC package at RHCs include laboratory support, blood transfusion services, and equipment for operation theatre and a functioning ambulance/vehicle. The supplies include contraceptives, medicines, IMNCI package of medicines, newborn care kit, clean delivery kits, and other basic equipment. Services such as 1122 Emergency Services will be used for referral of patients.

Table 32: Equipment and supplies by facility level

S. no.	Items	BHU	BHU 24h	RHC	RHC+
1	**For Infection Control and Environmental Management**				
1. 1	Soaps	1	1	1	1
1. 2	Spirit and glycerine for hand rub	Yes	Yes	Yes	Yes
1. 3	Limestone for spills	Yes	Yes	Yes	Yes
1. 4	Detergent	Yes	Yes	Yes	Yes
1. 5	Disinfectant (5% hypochlorite solution – common bleach)	Yes	Yes	Yes	Yes
1. 6	Latex gloves	Yes	Yes	Yes	Yes
1. 7	Utility gloves	Yes	Yes	Yes	Yes
1. 8	Masks surgical	Yes	Yes	Yes	Yes
1. 9	Masks N95	Yes	Yes	Yes	Yes
1. 10	Eye wear	Yes	Yes	Yes	Yes
1. 11	Head cover/ cap	Yes	Yes	Yes	Yes
1. 12	Footwear (closed shoes)	Yes	Yes	Yes	Yes
1. 13	Aprons/ Macintosh	Yes	Yes	Yes	Yes
1. 14	Gowns (non-sterile)	Yes	Yes	Yes	Yes
1. 15	Gowns (sterile)	-	-	Yes	Yes
1. 16	Mops and cloths for cleaning	Yes	Yes	Yes	Yes
1. 17	Green/white/blue buckets (non-infectious waste)	Yes	Yes	Yes	Yes
1. 18	Red buckets (infectious waste)	Yes	Yes	Yes	Yes
1. 19	Plastic bags – green/white/blue	Yes	Yes	Yes	Yes
1. 20	Plastic bags – red	Yes	Yes	Yes	Yes
1. 21	Leak proof laundry bags	Yes	Yes	Yes	Yes
1. 22	Pedal suction machine - manual	Yes	Yes	Yes	Yes

S. no.	Items	BHU	BHU 24h	RHC	RHC+
1. 23	Suction machine - electrical	Yes	Yes	Yes	Yes
1. 24	Relevant posters	Yes	Yes	Yes	Yes
1. 25	Container for 0.5% chlorine solution for decontamination	Yes	Yes	Yes	Yes
1. 26	Container for rinsing instruments	Yes	Yes	Yes	Yes
1. 27	Containers with tight-fitting lids or plastic bags for trash	Yes	Yes	Yes	Yes
1. 28	Containers with tight-fitting lids or plastic bags for used linen collection	Yes	Yes	Yes	Yes
1. 29	Leakproof containers with tight-fitting lids or plastic bags for disposing of contaminated items	Yes	Yes	Yes	Yes
1. 30	Puncture-proof container for sharps disposal	Yes	Yes	Yes	Yes
1. 31	Betadine/Savlon	Yes	Yes	Yes	Yes
1. 32	Chlorine for making decontamination solution	Yes	Yes	Yes	Yes
1. 33	Pans / trays / lids	Yes	Yes	Yes	Yes
1. 34	Plastic aprons/cover gowns	Yes	Yes	Yes	Yes
1. 35	Protective eyewear (face shields, goggles)	Yes	Yes	Yes	Yes
1. 36	Protective footwear (boots/shoe covers)	Yes	Yes	Yes	Yes
1. 37	Needle cutter/syringe destroyer	Yes	Yes	Yes	Yes
2	**OPD (including IMNCI related Eqt and supplies)**				
2. 1	Examination couch	2	2	3	3
2. 2	Chair for health worker	1	1	1	1
2. 3	Stethoscope	2	2	7	7
2. 4	Timing device/watch with second hand	1	1	1	1
2. 5	BP apparatus (mercury)	2	2	4	4
2. 6	Thermometer	12	12	48	48
2. 7	Examination torch	2	2	4	4
2. 8	Tongue depressor disposable	Yes	Yes	Yes	Yes
2. 9	ENT diagnostic set	1	1	2	2
2. 10	Linen sheets for couch/beds	10	10	40	40
2. 11	Revolving stool	2	2	3	3
2. 12	Tape measure for nutrition assessment	2	2	3	3
2. 13	Baby weighing scale	1	1	2	2
2. 14	Adult weighing scale	1	1	2	2
2. 15	Tuning fork	-	-	1	1
2. 16	Patella hammer	2	2	3	3
2. 17	Scissors	2	2	4	4
2. 18	Dressing trays	1	1	4	4
2. 19	Dressing scissors	1	1	4	4
2. 20	Kidney tray- large size	2	2	4	4
2. 21	Bowl large size	2	2	4	4
2. 22	Dressing drum	1	1	4	4
2. 23	Sterilizer	1	1	2	2

S. no.	Items	BHU	BHU 24h	RHC	RHC+
2. 24	IV stand	2	2	18	22
2. 25	Needle holder forceps	2	2	12	12
2. 26	Artery forceps straight	2	2	12	12
2. 27	Artery forceps curved	2	2	12	12
2. 28	Screen four fold	2	2	4	4
2. 29	Tissue forceps – plain	2	2	4	4
2. 30	Tissue forceps – toothed	2	2	4	4
2. 31	Cold box refrigerator for EPI	1	1	1	1
2. 32	Vaccine carrier and ice pack	2 + 6	2 + 6	2+6	2+6
2. 33	Breast pumps	1	1	2	2
2. 34	Stretcher	1	1	2	2
2. 35	Wheel chair	0	0	2	3
2. 36	Scalpel handle and blades	2	2	2	3
2. 37	Suture materials	Yes	Yes	Yes	Yes
2. 38	Nebulizer	2	2	3	4
2. 39	Ambubag for child and adult	2	2	2	2
2. 40	Oxygen Gas Cylinders	Yes	Yes	Yes	Yes
2. 41	Oxygen Tubing and Masks	Yes	Yes	Yes	Yes
2. 42	Pillows	4	4	6	6
2. 43	Blankets	4	4	6	6
2. 44	7.1% chlorhexidine digluconate (Eqv to 4% chx) in gel form, packing of 3g tube	Yes	Yes	Yes	Yes
2. 45	IMNCI chart booklet	2	2	2	2
2. 46	Mothers cards	Yes	Yes	Yes	Yes
2. 47	Patient record cards	Yes	Yes	Yes	Yes
2. 48	Clean delivery kits	Yes	Yes	Yes	Yes
	Immunization area				
2. 49	Disposable syringes	Yes	Yes	Yes	Yes
2. 50	Ice packs and cold boxes	Yes	Yes	Yes	Yes
2. 51	Table for vaccine supplies	Yes	Yes	Yes	Yes
2. 52	Refrigerator thermometer	Yes	Yes	Yes	Yes
2. 53	Vaccines	Yes	Yes	Yes	Yes
2. 54	TT vaccine	Yes	Yes	Yes	Yes
2. 55	Puncture-proof container for sharps disposal	Yes	Yes	Yes	Yes
2. 56	Vaccination cards	Yes	Yes	Yes	Yes
3	**Ward**				
3. 1	Bed with side table/locker	2	2	20	20
3. 2	Foot steps	-	-	10	10
3. 3	Baby cots	1	1	4	4
3. 4	Patient trolley	-	-	1	1
3. 5	Oxygen gas cylinder	-	-	2	2
3. 6	Nebulizer + Masks	-	-	1	1

S. no.	Items	BHU	BHU 24h	RHC	RHC+
3. 7	Spacers for inhalers	-	-	2	2
3. 8	Bedding clothing	-	-	20	20
3. 9	Foam pillows	-	-	20	20
3. 10	Bed sheets	-	-	40	40
3. 11	Vinyl sheets (rexin)	-	-	12	12
3. 12	Foam mattress	-	-	20	20
3. 13	Adult blankets	-	-	20	20
3. 14	Baby blankets	-	-	8	8
3. 15	Plastic chairs (for in-patient attendants)	-	-	10	10
3. 16	Benches for patient attendants	-	-	10	10
3. 17	Radiant warmer/heater for newborn	-	-	1	1
4	**MNCH Related Diagnostic Equipment**				
4. 1	Portable Ultrasound	-	1	-	**-**
4. 2	Static Ultrasound	-	-	1	1
5	**Labour Room**				
5. 1	Labour /Delivery Table with washable plastic cover	1	1	1	1
5. 2	Watch or clock with second hand that can be easily seen	1	1	1	1
5. 3	Macintosh/plastic apron	4	4	8	8
5. 4	Shadow less Lamps	1	1	1	1
5. 5	Normal delivery set	2	2	4	4
5. 7	Standard surgical set (for minor procedures like episiotomy stitching)	2	2	4	4
5. 8	CTG (cardiac tocography)	-	-	1	1
5. 9	Bulb Sucker	1	1	3	3
5. 10	Fetal Stethoscope	2	2	2	2
5. 11	Cord Clamp	Yes	Yes	Yes	Yes
5. 12	Outlet forceps	2	2	3	3
5. 13	Kocher`s forceps	-	-	1	1
5. 14	Vulsellum forceps	-	-	2	2
5. 15	Lane's tissue holding forceps	-	-	6	6
5. 16	Sponge Holder	4	4	6	6
5. 17	Uterine elevator	-	-	-	4
5. 18	Couscous specula (Small, Medium, Large for each category)	2	3	3	3
5. 19	Examination light	2	2	2	2
5. 20	Suction and Evacuation set (SNE)	1	1	3	3
5. 21	Sim's vaginal speculum – single & double ended - (each of small, medium and large size)	2	2	8	8
5. 22	Anterior Vaginal wall retractor	-	-	2	2
5. 23	Cheatle forceps	1	2	2	2
5. 24	Ayre's spatula	-	-	2	2

S. no.	Items	BHU	BHU 24h	RHC	RHC+
5. 25	IUD insertion kit	1	1	1	1
5. 26	Adult stethoscope	2	2	4	4
5. 27	Bedpans	1	1	4	4
5. 28	Blood pressure apparatus	2	2	4	4
5. 29	Pinard fetoscope	2	2	3	3
5. 30	Adult ambu bag and mask	2	2	2	2
5. 31	Thermometer	10	10	10	10
5. 32	Oxygen source (portable cylinder or central wall supply), with Mask or nasal cannula; Tubing; Flow meter	Yes	Yes	Yes	Yes
5. 33	Baby weighing scale	1	1	1	1
5. 34	Step stool	2	2	4	4
5. 35	Suture needles	2	2	4	4
5. 36	Vacuum extractor with different cup sizes, tubing, suction bottle.	-	-	2	2
5. 37	Partograph forms	Yes	Yes	Yes	Yes
	Adult weighing scale	1	1	1	1
	Manual Vacuum Aspirator (MVA)	Yes	Yes	Yes	Yes
5. 38	**Delivery Sets**				
5.38.1	Alcohol swab	Yes	Yes	Yes	Yes
5.38.2	Blanket for wrapping the newborn	Yes	Yes	Yes	Yes
5.38.3	Blankets and/or towels for drying the newborn	Yes	Yes	Yes	Yes
5.38.4	Cloths or drapes	Yes	Yes	Yes	Yes
5.38.5	Gauze/cotton wool	Yes	Yes	Yes	Yes
5.38.6	High-level disinfected or sterile surgical gloves	Yes	Yes	Yes	Yes
5.38.7	Episiotomy Scissors	2	2	5	5
5.38.8	Straight Scissors	2	2	5	5
5.38.9	Needle Holder	2	2	5	5
5.38.10	Non toothed tissue forceps 8 inches	2	2	5	5
5.38.11	Toothed tissue forceps 8 inches	2	2	5	5
5.38.12	Sims Speculum Single Blade	2	2	5	5
5.38.13	Sims Speculum Double Blade	2	2	5	5
5.38.14	Sponge holding forceps	2	2	5	5
5.38.15	Artery forceps	2	2	5	5
5.38.16	Straight Clamps (Cord)	4	4	8	8
5.38.17	Cord Clamp	2	2	5	5
5.38.18	Needle & Sutures	2	2	5	5
5.38.19	Towel Clip	2	2	5	5
5.38.20	Suction bulb/De Lee (single use/sterile re-usable)	-	-	5	5
5.4	**Maternal Resuscitation Trolley**				
5.39.1	Inj. Adrenaline	Yes	Yes	Yes	Yes

S. no.	Items	BHU	BHU 24h	RHC	RHC+
5. 39.2	Inj. Aminophylline	Yes	Yes	Yes	Yes
5. 39.3	Inj. Atropine sulfate	Yes	Yes	Yes	Yes
5. 39.4	Inj. Calcium gluconate	Yes	Yes	Yes	Yes
5. 39.5	Inj. Diphenhydramine	Yes	Yes	Yes	Yes
5. 39.6	Inj. Ephedrine	Yes	Yes	Yes	Yes
5. 39.7	Inj. Magnesium sulfate	Yes	Yes	Yes	Yes
5. 39.8	Inj. Naloxone	Yes	Yes	Yes	Yes
5. 39.9	Inj. Prednisolone	Yes	Yes	Yes	Yes
5. 39.10	Inj. Promethazine	Yes	Yes	Yes	Yes
5. 39.11	Inj. Oxytocin	Yes	Yes	Yes	Yes
5. 39.12	Inj. Diazepam	Yes	Yes	Yes	Yes
5. 39.13	Tab. Nifedipine	Yes	Yes	Yes	Yes
5. 39.14	Inj. Lignocaine hydrochloride	Yes	Yes	Yes	Yes
5. 39.15	Inj. Methyl ergometrine maleate	Yes	Yes	Yes	Yes
5. 39.16	Blood administration sets	-	-	Yes	Yes
5. 39.17	IV administration sets	Yes	Yes	Yes	Yes
5. 39.18	IV solutions: Ringer's lactate, normal saline, glucose	Yes	Yes	Yes	Yes
5. 39.19	IV Cannulae	Yes	Yes	Yes	Yes
5. 39.20	Needles, syringes	Yes	Yes	Yes	Yes
5. 39.21	Scissors	Yes	Yes	Yes	Yes
5. 39.22	Tape	Yes	Yes	Yes	Yes
5. 39.23	Tab Misoprostol	Yes	Yes	Yes	Yes
5. 39.24	Sterilised cotton and gauze	Yes	Yes	Yes	Yes
5. 39.25	Laryngoscope	-	-	2	2
5. 39.26	Endotracheal Tube	-	-	Yes	Yes
5. 39.27	BP Apparatus Anaeroid	1	1	2	2
5. 39.28	Chargeable Light	Yes	Yes	Yes	Yes
5.40	**ENC Corner with Neonatal resuscitation trolley**				
5. 40.1	Radiant warmer /Heater for newborn baby	1	1	2	4
5. 40.2	Weighing Scale, spring	1	1	2	2
5. 40.3	Room Thermometer	1	1	1	1
5. 40.4	Light examination, mobile, 220-12 V	1	1	2	2
5. 40.5	I/V Cannula 24 G, 26 G	Yes	Yes	Yes	Yes
5. 40.6	I/V sets (infant)	Yes	Yes	Yes	Yes
5. 40.7	Extractor, mucus, 20ml, ster, disp Dee Lee	2	2	2	2
5. 40.8	Towels for drying and wrapping the baby	4	4	8	8
5. 40.9	Sterile equipment for cutting and tying the cord	Yes	Yes	Yes	Yes
5. 40.10	Tube, feeding, CH07, L40cm, ster, disp	4	4	8	8

S. no.	Items	BHU	BHU 24h	RHC	RHC+
5. 40.11	Oxygen cylinder 8 F	-	-	Yes	Yes
5. 40.12	Sterile Gloves	Yes	Yes	Yes	Yes
5. 40.13	Baby Laryngoscope	-	-	-	4
5. 40.14	Endotracheal Tube	-	-	-	Yes
5. 40.15	Infant BP Apparatus	-	-	2	4
5. 40.16	Chargeable Light	Yes	Yes	Yes	Yes
5. 40.17	Ambubag for infant	2	2	3	4
5. 40.18	Masks - different sizes	Yes	Yes	Yes	Yes
6	**Secondary Care Facility for Newborns (SCFN) at RHC+**				
6. 1	Over Heat Radiant Warmer	-	-	-	1
6. 2	Baby cots	-	-	-	2
6. 3	Phototherapy Lights	-	-	-	2
6. 4	Infant Length Measuring Scale	-	-	-	2
6. 5	Infant Weighing Machine	-	-	-	1
6. 6	Nebulizer	-	-	-	2
6. 7	Nasal Probe Paed Size	-	-	-	2
6. 8	Suction machine/neonatal	-	-	-	2
6. 9	Suction tubing/disposable	-	-	-	Yes
6. 10	Cardiac monitor/blood pressure	-	-	-	2
6. 11	Pulse oximeter				2
6. 12	IV pump-neonatal	-	-	-	2
6. 13	Neonatal NG/feeding tubes	-	-	-	Yes
6. 14	Neonatal IV Cannulae, IV sets, IV fluids				Yes
6. 15	Neonatal resuscitation trolley	-	-	-	1
6. 16	Oxygen cylinders with flow meters; nasal cannulae	-	-	-	4
7	**Operating Theatre**				
7. 1	Operation table	-	-	1	1
7. 2	Shadow less Lamps	-	-	1	1
7. 3	Macintosh	-	-	4	4
7. 4	Patients Trolley	-	-	1	1
7. 5	Oxygen Cylinder (large size with regulator)	-	-	2	2
7. 6	Instruments Trolley	-	-	1	1
7. 7	Dressing Drum(large size)	-	-	2	2
7. 8	Stand for Dressing	-	-	2	2
7. 9	Scissors	-	-	4	4
7. 10	Dressing trays	-	-	2	2
7. 11	Dressing scissors	-	-	2	2
7. 12	Kidney tray- large size	-	-	4	4

S. no.	Items	BHU	BHU 24h	RHC	RHC+
7. 13	Bowl large size	-	-	4	4
7. 14	Sterilizer	-	-	1	1
7. 15	Needle holder forceps	-	-	4	4
7. 16	Artery forceps straight	-	-	8	12
7. 17	Artery forceps curved	-	-	8	12
7. 18	Tissue forceps – plain	-	-	4	12
7. 19	Tissue forceps – toothed	-	-	4	12
7. 20	Scalpel handle and blades	-	-	4	8
7. 21	Tourniquet	-	-	4	6
7. 22	Suture materials	-	-	Yes	Yes
7. 23	McGill Forceps	-	-	2	3
7. 24	Basin	-	-	2	2
7. 25	Basin Stands	-	-	2	2
7. 26	Towel Clips	-	-	12	12
7. 27	BP Handle	-	-	2	2
7. 28	BP Blades	-	-	3	3
7. 29	Dissecting Forceps (plain)	-	-	4	6
7. 30	Needle Holder(large size)	-	-	4	6
7. 31	Sponge Holding Forceps(large size)	-	-	2	6
7. 32	Metallic Catheter (1-12)	-	-	2	6
7. 33	Nose Speculum	-	-	2	2
7. 34	Proctoscope	-	-	2	2
7. 35	Arm Splint Different sizes	-	-	6	6
7. 36	Instruments Cabinet Large size	-	-	1	2
7. 37	Spot Light	-	-	1	2
7. 38	Nail Brush	-	-	2	2
7. 39	Thermometer	-	-	4	4
7. 40	Container for thermometer	-	-	2	2
7. 41	Stand for Drip	-	-	4	4
7. 42	Aircushion Rubber	-	-	2	2
7. 43	Hot Water Bottles	-	-	10	12
7. 44	Stomach Tube	-	-	2	2
7. 45	Urine Collecting Bags	-	-	Yes	Yes
7. 46	Instrument trolley	-	-	1	1
7. 47	Nebulizer	-	-	-	2
7. 48	Pulse Oximeter	-	-	-	2
7. 49	Defibrillator	-	-	-	1
7. 50	Air Way Oral and Nasal	-	-	-	2
7. 51	Tracheostomy tube (adults & Paeds)	-	-	-	2
7. 52	Ambu Bag Adult	-	-	2	4
7. 53	Ambu Bag Paeds	-	-	2	2
7. 54	Red Rubber nasal tubes (all sizes without cuff)	-	-	4	4

S. no.	Items	BHU	BHU 24h	RHC	RHC+
7. 55	Face masks of all sizes	-	-	-	Yes
8	**Caesarean Section**				
8. 1	Scalpel	-	-	-	2
8. 2	Artery forceps Straight 6 Inches	-	-	-	4
8. 3	Artery forceps Curved 6 Inches	-	-	-	4
8. 4	Artery forceps 8 inches	-	-	-	4
8. 5	Myoma Scissors Straight 7 inches	-	-	-	2
8. 6	Dissecting Scissors (curved) 7 inches	-	-	-	2
8. 7	Green Armtage forceps 8 inches	-	-	-	2
8. 8	Obstetric outlet forceps (pair)	-	-	-	1
8. 9	Doyene`s Retractors	-	-	-	2
8. 10	Small Retractors	-	-	-	3
8. 11	Towel Clippers	-	-	-	6
8. 12	Sponge & Towels	-	-	-	6
8. 13	Cord Clamp	-	-	-	4
8. 14	Suction Nozzle	-	-	-	2
8. 15	Needle holders	-	-	-	3
8. 16	Sponge holding forceps	-	-	-	4
9	**Laboratory**				
9. 1	Sputum and blood specimen bottles	Yes	Yes	Yes	Yes
9. 2	Centrifuge machine	-	-	1	1
9. 3	Stop watch	1	1	2	2
9. 4	Refrigerator	1	1	1	1
9. 5	Compound microscope (with illuminator)	-	-	1	1
9. 6	Urine meter.	1	1	1	1
9. 7	Haemoglobinometer	1	1	1	1
9. 8	Haemocytometer	1	1	2	2
9. 9	ESR Racks.	-	-	2	2
9. 10	ESR Pipettes	-	-	2	2
9. 11	Glass rods	2	2	4	4
9. 12	Glass slides	Yes	Yes	Yes	Yes
9. 13	Cover slips	Yes	Yes	Yes	Yes
9. 14	Centrifuge Tubes (Glass)	-	-	12	12
9. 15	Glass Pipettes various sizes corrected	-	-	12	12
9. 16	Jester Pipettes Fixed -various sizes	-	-	2	2
9. 17	Jester pipettes adjustable- various sizes	-	-	2	2
9. 18	Test tubes	10	10	20	20
9. 19	Pipette stands	1	1	2	2
9. 20	Table lamp.	1	1	1	1
9. 21	Lancets (pack)	2	2	6	6
9. 22	Surgical Blades	Yes	Yes	Yes	Yes

S. no.	Items	BHU	BHU 24h	RHC	RHC+
9. 23	Test Tube Holder	2	2	4	4
9. 24	Reagent Bottles	4	4	4	4
9. 25	Gas Burner	1	1	1	1
9. 26	Stainless Steel Test Tube Racks	1	1	1	1
9. 27	Glucometer	1	1	1	1
9. 28	Haematology Analyzer	-	-	1	1
9. 29	Biochemistry Analyzer	-	-	1	1
9.30	**Blood Transfusion Facility (within the Laboratory)**				
9. 30.1	Blood Storage Cabinet (upto 50 bag capacity)	-	-	-	1
9. 30.2.	Blood Bag Shaker	-	-	-	1
9. 30.3.	Micro Pipette	-	-	-	1
9. 30.4.	Blood Thawing Bath	-	-	-	1
9.30.5.	Cross matching kit	-	-	-	Yes
9.30.6.	8.5 g/l Sodium Chloride solution	-	-	-	Yes
9.30.7.	Pipettes Volumetric (1, 2, 3, 4, 5, 10 & 20ml)	-	-	-	Yes
9.30.8.	0.9% sodium Chloride solution	-	-	-	Yes
9.30.9.	20% Bovine albumin	-	-	-	Yes
9.30.10	37C Water bath (or incubator)	-	-	-	1
9.30.11	Plastic/glass tubes	-	-	-	Yes
	Blood collection and screening	-	-	-	1
9. 30.12	Sphygmomanometer cuff	-	-	-	1
9. 30.13	Airway needle for collecting blood	-	-	-	Yes
9. 30.14	Ball (for donor to squeeze)	-	-	-	1
9. 30.15	Artery forceps	-	-	-	1
9. 30.16	Scissors	-	-	-	1
9. 30.17	Pilot bottles (containing 1ml ACD solution)	-	-	-	Yes
9. 30.18	Blood bags - JMS - single cell	-	-	-	Yes
9. 30.19	Malaria screening test kit	-	-	-	Yes
9. 30.20	Syphilis screening TPHA kit	-	-	-	Yes
9. 30.21	Hepatitis B-HBSAg screening kit	-	-	-	Yes
9. 30.22	Hepatitis C-Anti-HCV Ab screening kit	-	-	-	Yes
9. 30.23	HIV screening-Rapid and ELISA kit	-	-	-	Yes
9. 30.24	Copper sulphate solution for donor Hb				
9. 30.25	Medical history forms				
	Donor reaction response kit				
9. 30.26	Inj. N/S 1000 ml	-	-	-	1
9. 30.27	Inj. Dextrose 1000 ml	-	-	-	1
9. 30.28	Tab Calcium	-	-	-	1
9. 30.29	Tab Metoclopramide (antiemetic)	-	-	-	1
9. 30.30	Inj. Diclofenac Sodium	-	-	-	1
10	**Vaccine storage**				
10. 1	ILR/Deep Freezer	1	1	1	1
10. 2	Ice box	1	1	1	1
10. 3	Ice packs	10	10	10	10

S. no.	Items	BHU	BHU 24h	RHC	RHC+
11	**Equipment for eye care and vision testing**				
11. 1	Illuminated vision testing drum	-	-	1	1
11. 2	Snellen and near vision charts	-	-	1	1
11. 3	Battery operated torch	-	-	1	1
12	**Dental unit**				
12. 1	Dental unit (complete with chair, light, hand piece unit with hand pieces, suction and compressor	-	-	1	1
12. 2	Dental hand instruments (set)	-	-	2	2
12. 3	Aseptic Trolley	-	-	1	1
12. 4	Dental Autoclave	-	-	1	1
12. 5	Amalgamator	-	-	1	1
12. 6	Dental X-ray unit	-	-	1	1
12. 7	Intraoral X-ray film processor	-	-	1	1
12. 8	X-ray view box	-	-	1	1
12. 9	Lead apron	-	-	1	1
12. 10	Ultrasonic scaler	-	-	1	1
12. 11	Dental operating stool	-	-	1	1
13	**Furniture**				
13. 1	Office Table with 3 Drawers	4	4	7	7
13. 2	Office Chairs	4	4	7	7
13. 3	Office Rack Wooden	4	4	7	7
13. 4	Patient’s stool	3	3	5	5
13. 5	Bench fibre glass	2	2	4	4
13. 6	Steel Almirah	6	6	8	8
14	**Others**				
14. 1	Pressure cooker autoclaves	1	1	-	-
14. 2	Autoclaves	-	-	1	1
14. 3	Generator with POL	-	-	1	1
14.4	UPS for uninterrupted electricity supply	1	1	1	1
14. 5	Computer with accessories, including internet access	1	1	1	1
14. 6	Gas stove/ cylinder	1	1	1	1
14. 7	Ambulance	-	1	1	1
15	**X-ray room**				
15. 1	X-ray unit	-	-	1	1

S. no.	Items	BHU	BHU 24h	RHC	RHC+
16	**Health education material**				
16. 1	FP/Spacing related education materials	Yes	Yes	Yes	Yes
16. 2	ENC health education material	Yes	Yes	Yes	Yes
16. 3	IMNCI Health education material	Yes	Yes	Yes	Yes
16. 4	Maternal health education material	Yes	Yes	Yes	Yes
16. 5	Nutrition related health education material	Yes	Yes	Yes	Yes
16. 6	STI/HIV related health education material	Yes	Yes	Yes	Yes
16. 7	Hygiene/common infections related material	Yes	Yes	Yes	Yes
16. 8	Infection control measures including standard precautions and waste management materials	Yes	Yes	Yes	Yes
	Clinical Management Protocols (SMPs/SOPs)				
17	**Registers and forms**				
17. 1	Data recording and reporting instruments	Yes	Yes	Yes	Yes

21.5. Essential Medicines

Table 33: Essential Medicines by facility and provider levels

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
A	**Analgesics, antipyretics, non-steroidal anti-inflammatory drugs**						
1	Tab. Aspirin (Soluble) 300mg.	-	-	Yes	Yes	Yes	Yes
2	Tab. Ibuprofen 400mg.	-	-	Yes	Yes	Yes	Yes
3	Susp. Ibuprofen 100mg/5ml.	-	-	Yes	Yes	Yes	Yes
4	Syp/Susp/Elixir. Paracetamol 120mg/5ml.	-	Yes	Yes	Yes	Yes	Yes
5	Tab. Paracetamol 500mg	Yes	Yes	Yes	Yes	Yes	Yes
6	Inj. Diclofenac Sodium 75mg/3ml.	-	-	Yes	Yes	Yes	Yes
7	Tab. Diclofenac Sodium 50mg	-	-	Yes	Yes	Yes	Yes
B	**Antibacterial drugs/ Antiprotozoal**						
8	Inj. Ampicillin 250mg	-	-	Yes	Yes	Yes	Yes
9	Inj. Gentamycin 10 mg	-	-	Yes	Yes	Yes	Yes
10	Inj Chloramphenicol IM 1g sodium succinate in vial	-	-	Yes	Yes	Yes	Yes
11	Cap. Amoxicillin 250mg.	Yes	-	Yes	Yes	Yes	Yes
12	Cap. Amoxicillin 500mg.	Yes	-	Yes	Yes	Yes	Yes
13	Inj. Amoxicillin 250mg.	-	-	Yes	Yes	Yes	Yes
14	Inj. Amoxicillin 500mg.	-	-	Yes	Yes	Yes	Yes
15	Susp. Amoxicillin 250mg/5ml.	-	Yes	Yes	Yes	Yes	Yes
16	Tab. Amoxicillin + Clavulanic acid 500 mg + 125 mg	-	-	Yes	Yes	Yes	Yes
17	Syp. Amoxicillin + Clavulanic acid 125+31.25 mg	-	-	Yes	Yes	Yes	Yes
18	Inj. Benzyl Penicillin 5,00,000 units.	-	-	Yes	Yes	Yes	Yes
19	Inj. Benzyl Penicillin 10,00,000 units.	-	-	Yes	Yes	Yes	Yes
20	Tab. Ciprofloxacin 250mg.	-	-	Yes	Yes	Yes	Yes
21	Tab. Ciprofloxacin 500mg.	-	-	Yes	Yes	Yes	Yes
22	Inf Ciprofloxacin 100 mg/ 50 ml	-	-	-	-	Yes	Yes
23	Inf Ciprofloxacin 200 mg/ 100 ml	-	-	-	-	Yes	Yes
24	Syp/Susp. Ciprofloxacin 125 mg/5 ml	-	-	-	-	Yes	Yes
25	Syp/Susp. Ciprofloxacin 250 mg/5 ml	-	-	-	-	Yes	Yes
26	Tab. Metronidazole 200 mg and 400mg	Yes	-	Yes	Yes	Yes	Yes
27	Metronidazole vaginal cream	Yes	-	-	-	-	-
28	Tab. Diloxanide Furoate 500mg.	-	-	Yes	Yes	Yes	Yes
29	Susp. Metronidazole 5 ml/200mg	-	-	Yes	Yes	Yes	Yes
30	Tab. Diloxanide Furoate 250 mg.	-	-	Yes	Yes	Yes	Yes
31	Tab. Erythromycin 250 mg	-	-				
32	Susp. Erythromycin 200mg/5ml	-	-	Yes	Yes	Yes	Yes
33	Cap. Tetracycline 250 mg	-	-	Yes	Yes	Yes	Yes
34	Tab. Azithromycin 1g.	-	-	Yes	Yes	Yes	Yes
35	Tab. Doxycycline cap 100 mg	-	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
36	Tab. Sulfamethoxazole + Trimethoprin (400 mg +80 mg)	-	-	Yes	Yes	Yes	Yes
37	Susp. Sulfamethoxazole + Trimethoprim 200mg+40mg/5ml	-	-	Yes	Yes	Yes	Yes
38	Inj. Ceftriaxone 250mg and 500mg	-	-	-	-	Yes	Yes
39	Syp. Piperazine	-	-	Yes	Yes	Yes	Yes
40	Cap. Cefaclor 250/500 mg	-	-	-	-	Yes	Yes
C	**Antiallergics and drugs used in anaphylaxis**						
41	Tab. Chlorpheniramine Maleate 4mg.	-	-	Yes	Yes	Yes	Yes
42	Syp Chlorpheniramine Maleate 2mg/5ml	-	-	Yes	Yes	Yes	Yes
43	Inj. Dexamethasone 4mg/ml.	-	-	Yes	Yes	Yes	Yes
44	Inj Adrenaline 1 in 1000 (0.1%)/1mg/ml	-	-	Yes	Yes	Yes	Yes
45	Hydrocortisone Powder for inj.250mg (assodium succinate)in vial	-	-	Yes	Yes	Yes	Yes
46	Hydrocortisone Powder for injection , 100mg(as sodium succinate)in vial	-	-	Yes	Yes	Yes	Yes
D	**Oxytocics**						
47	Inj. Methyl Ergometrine 0.2mg/ml.	Yes	-	Yes	Yes	Yes	Yes
48	Inj. Oxytocin 10 IU/ml.	Yes	-	Yes	Yes	Yes	Yes
49	Tab Misoprostol 200 mcg	Yes	-	Yes	Yes	Yes	Yes
E	**Anti-oxytocic/tocolytic**						
50	Tab Nifedipine 20mg	Yes	-	-	-	Yes	Yes
F	**Contraceptives**						
51	Male Condoms	Yes	Yes	Yes	Yes	Yes	Yes
52	Contraceptives (IUCD)	Yes	-	Yes	Yes	Yes	Yes
53	Medroxyprogesterone acetate (12 weekly) Inj. 150mg	-	-	Yes	Yes	Yes	Yes
54	Norethisterone + ethinyl oestradiol Tab. 1mg + 35mcg	Yes	Yes	Yes	Yes	Yes	Yes
55	Levonorgestrel + ethinyl oestradiol Tab. 150mg + 30mg	-	-	Yes	Yes	Yes	Yes
56	Contraceptive emergency: Levonorgestrel Tab 30mcg, 750mcg, 1.5mg	-	-	Yes	Yes	Yes	Yes
G	**Oral Rehydration**						
57	Low osmolarity ORS (20.5 g sachet)	-	Yes	Yes	Yes	Yes	Yes
58	Zinc Sulphate Suspension (20mg, bottle of 60 ml)	Yes	Yes	Yes	Yes	Yes	Yes
59	Tab. Zinc Sulphate	Yes	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
H	**Parasitic Infections**						
60	Tab. Mebendazole 100 mg	Yes	Yes	Yes	Yes	Yes	Yes
61	Syp. Mebendazole 100mg/5ml in 30ml	-	-	Yes	Yes	Yes	Yes
I	**Antimalarial (Malaria Control Program)**						
62	Syp. Chloroquine Sulphate/Phosphate equivalent to 50mg base/5ml.	-	-	Yes	Yes	Yes	Yes
63	Tab. Chloroquine Sulphate/Phosphate 250 mg	-	-	Yes	Yes	Yes	Yes
64	Tab. Sulfadoxin 500mg+ Pyrimethamine 25mg	-	-	Yes	Yes	Yes	Yes
65	Syp. Sulfadoxin500mg+ Pyrimethamine 25mg/5ml	-	-	Yes	Yes	Yes	Yes
66	Tab Artesunate 50mg	-	-	Yes	Yes	Yes	Yes
67	Tab Primaquine phosphate 15 mg base	-	-	Yes	Yes	Yes	Yes
J	**Antituberculosis drugs (TB program)**						
68	Tab Ethambutol 400 mg Strip/blister	-	-	Yes	Yes	Yes	Yes
69	Tab Rifampicin+Isoniazid 150 mg + 100 mg strip/blister	-	-	Yes	Yes	Yes	Yes
70	Tab Rifampicin+Isoniazid 300 mg + 150 mg Strip/blister	-	-	Yes	Yes	Yes	Yes
71	Tab. Isoniazid+Ethambutol 150 mg + 400 mg strip/blister	-	-	Yes	Yes	Yes	Yes
72	Tab. Rifampacin+Isoniazid+ Pyrazinamide+Ethamutol 150mg+75mg+400mg+275mg strip/blister	-	-	Yes	Yes	Yes	Yes
73	Inj. Streptomycin (powder) 1g (as sulfate) in vial	-	-	Yes	Yes	Yes	Yes
74	Tab. Isoniazid 100mg	-	-	Yes	Yes	Yes	Yes
K	**Antifungal Drugs**						
75	Vaginal cream Clotrimazole 2%	-	-	Yes	Yes	Yes	Yes
76	Skin cream Clotrimazole 1%.	-	-	Yes	Yes	Yes	Yes
77	Ointment or Cream Benzoic Acid +Salicylic Acid 6% + 3%	-	-	Yes	Yes	Yes	Yes
78	Tab. Nystatin 500,000 iu	-	-	Yes	Yes	Yes	Yes
79	Oral drops Nystatin 100,000 iu/ml	-	-	Yes	Yes	Yes	Yes
L	**Antianemia drugs**						
80	Tab. Ferrous sulphate	-	-	Yes	Yes	Yes	Yes
81	Tab. Ferrous Fumarate + Folic Acid (150mg+0.5 mg blister strip)	Yes	Yes	Yes	Yes	Yes	Yes
M	**Scabicides and pediculicides**						
82	Lotion/Emulsion Benzyl Benzoate 25%	-	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
83	Cream Permethrin 5%	-	-	Yes	Yes	Yes	Yes
N	**Antipruritic**						
84	Lotion Calamine 15%	-	-	Yes	Yes	Yes	Yes
O	**Anticonvulsant**						
85	Tab. Phenobarbitone 30mg.	-	-	Yes	Yes	Yes	Yes
86	Syp. Elixir Phenobarbitone 20mg/ 5ml	-	-	Yes	Yes	Yes	Yes
87	Inj. Magnesium Sulphate 500mg/ml	Yes	-	Yes	Yes	Yes	Yes
P	**Diuretics**						
88	Tab. Furosemide 40 mg Strip/blister	-	-	Yes	Yes	Yes	Yes
89	Inj. Furosemide 20 mg /2ml	-	-	Yes	Yes	Yes	Yes
90	Tab. Hydrochlorthiazide 25 mg	-	-	Yes	Yes	Yes	Yes
91	Tab. Spironolactone 25mg	-	-	Yes	Yes	Yes	Yes
Q	**Antihypertensive/ cardiovascular drugs**						
92	Tab. Atenolol 50mg.	-	-	Yes	Yes	Yes	Yes
93	Tab. Atenolol 100 mg.	-	-	Yes	Yes	Yes	Yes
94	Tab. Isosorbide Dinitrate 10mg	-	-	-	-	Yes	Yes
95	Tab. Dispirin CV/Loprin 75mg	-	-	-	-	Yes	Yes
96	Tab. Glyceryl Trinitrate Sublingual 0.5 mg	-	-	Yes	Yes	Yes	Yes
97	Tab. Propranolol 40mg Strips/blister	-	-	Yes	Yes	Yes	Yes
98	Tab. Amlodipine Tab 5mg	-	-	-	-	Yes	Yes
99	Tab. Enalapril maleate 5mg	-	-	-	-	Yes	Yes
100	Tab. Methyl Dopa 250mg	-	-	-	-	Yes	Yes
R	**Antacids and other anti-ulcer**						
101	Tab. Aluminium Hydroxide 250mg + Magnesium Trisilicate 500mg	-	-	Yes	Yes	Yes	Yes
102	Cap. Omeprazole 20mg	-	-	Yes	Yes	Yes	Yes
103	Tab. Ranitidine 150mg.	-	-	Yes	Yes	Yes	Yes
104	Tab. Ranitidine 300mg.	-	-	Yes	Yes	Yes	Yes
105	Inj. Ranitidine 50mg/2ml.	-	-	-	-	Yes	Yes
S	**Anti-emetic drugs**						
106	Tab. Metoclopramide 10mg.	-	-	Yes	Yes	Yes	Yes
107	Syp. Metoclopramide 5mg/5ml.	-	-	Yes	Yes	Yes	Yes
108	Inj. Metoclopramide 5mg/ml.	-	-	Yes	Yes	Yes	Yes
109	Tab. Dimenhydrinate 50mg	-	-	Yes	Yes	Yes	Yes
110	Syp. Dimenhydrinate 12.5mg/4ml	-	-	Yes	Yes	Yes	Yes
111	Inj. Dimenhydrinate 10mg/2ml	-	-	Yes	Yes	Yes	Yes
T	**Antispasmodic drugs**						
112	Tab. Hyoscine butyl bromide 10 mg	-	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
113	Inj. Hyoscine butyl bromide 20mg/2ml	-	-	Yes	Yes	Yes	Yes
U	**Laxatives**						
114	Ispaghol Husk	-	-	Yes	Yes	Yes	Yes
115	Glycerine Suppository	-	-	Yes	Yes	Yes	Yes
116	Enema-small and large	-	-	Yes	Yes	Yes	Yes
V	**Antidiabetic**						
117	Tab. Metformin 500mg	-	-	Yes	Yes	Yes	Yes
118	Tab. Glibenclamide 5mg	-	-	Yes	Yes	Yes	Yes
119	Inj. Insulin 100 IU/ml (regular)	-	-	Yes	Yes	Yes	Yes
120	Inj. Insulin 100 IU/ml (70:30)	-	-	Yes	Yes	Yes	Yes
W	**Ophthalmic preparation**						
121	Eye Drops Chloramphenicol 0.5%	-	-	Yes	Yes	Yes	Yes
122	Eye ointment Tetracycline 1%	-	-	Yes	Yes	Yes	Yes
123	Eye drops 10% Sulphacetamide	-	-	Yes	Yes	Yes	Yes
124	Eye ointment PolymyxinB+Bacitracin Zinc 10,000iu+500iu	Yes	-	Yes	Yes	Yes	Yes
X	**Ear drops**						
125	Ear Drops Chloramphenicol 1%	-	-	Yes	Yes	Yes	Yes
126	Ear drops Soda glycerine	-	-	Yes	Yes	Yes	Yes
127	Ear drops Chloramphenicol	-	-	Yes	Yes	Yes	Yes
128	Ear drops PolymyxinB+LignocaineHCl 10,000iu+ 50mg	-	-	Yes	Yes	Yes	Yes
Y	**Antiasthmatic drugs**						
129	Inj. Salbutamol 0.5mg/ml.	-	-	-	-	Yes	Yes
130	Salbutamol Inhalation 100mcg/dose for use in nebuliser	-	-	Yes	Yes	Yes	Yes
131	Tab. Salbutamol 2mg.	-	-	Yes	Yes	Yes	Yes
132	Tab. Salbutamol 4mg.	-	-	Yes	Yes	Yes	Yes
133	Syp. Salbutamol 2mg/5ml.	-	-	Yes	Yes	Yes	Yes
134	Inj. Aminophyllin 250mg	-	-	Yes	Yes	Yes	Yes
135	Tab. Theophyllin SR 200mg	-	-	Yes	Yes	Yes	Yes
136	Tab. Prednisolone 5mg	-	-	Yes	Yes	Yes	Yes
Z	**Antitussives**						
137	Cough Syrup-5ml: TriprolidineHCl. 1.25mg + Pseudoephedrine HCl . 30mg +Dextromethorphan HBr. 10mg.	-	-	Yes	Yes	Yes	Yes
AA	**Antidepressants/ Anxiolytics**						
138	Tab. Diazepam 2mg	-	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
139	Tab. Diazepam 5mg	-	-	-	-	Yes	Yes
140	Cap Fluoxetine 20mg	-	-	Yes	Yes	Yes	Yes
BB	**Vitamins and minerals**						
141	Tab. Calcium Carbonate	-	-	Yes	Yes	Yes	Yes
142	Tab Ascorbic Acid 100mg	-	-	Yes	Yes	Yes	Yes
143	Cap. Vitamin A 50,000 IU, 100,000 IU, 200,000 IU	-	-	Yes	Yes	Yes	Yes
144	Tab. Pyridoxin 50mg	-	-	Yes	Yes	Yes	Yes
145	Syp. Multivitamin	-	-	Yes	Yes	Yes	Yes
146	Inj. Vitamin K 10mg/1ml	-	-	Yes	Yes	Yes	Yes
147	Cap. Vitamin A&D	-	-	Yes	Yes	Yes	Yes
148	Syp Vitamin B		Yes				
CC	**Antidotes and other substances used in poisonings**						
149	Inj Naloxone 400mcg/ml	-	-	Yes	Yes	Yes	Yes
DD	**Disinfectants, antiseptics and anti-infectives**						
150	Sol Povidone-Iodine 10 %	Yes	-	Yes	Yes	Yes	Yes
151	Surgical Scrub Povidone-Iodine 7.5%.	-	-	Yes	Yes	Yes	Yes
152	Sol Hydrogen peroxide 6%	-	-	Yes	Yes	Yes	Yes
153	Paint Gentian violet 0.5%, 1%,	-	-	Yes	Yes	Yes	Yes
154	Sol Methylated spirit			Yes	Yes	Yes	Yes
155	7.1% chlorhexidine digluconate (Eqv to 4% chx) in gel form, packing of 3g tube	Yes	-	Yes	Yes	Yes	Yes
EE	**Parenterals**						
156	Infusion Normal Saline.	Yes	-	Yes	Yes	Yes	Yes
157	Infusion Dextrose in water 5%.	Yes	-	Yes	Yes	Yes	Yes
158	Infusion Hartman's solution.	-	-	-	-	Yes	Yes
159	Infusion dextrose saline			Yes	Yes	Yes	Yes
160	Infusion Ringer Lactate	Yes	-	Yes	Yes	Yes	Yes
161	Inf Haemaccel 3%, 5%	-	-	-	-	-	Yes
FF	**Topical antibiotics/ antibacterials**						
162	Silver sulphadiazene 1% cream	-	-	Yes	Yes	Yes	Yes
163	Tetracycline Oint. 1%	-	-	Yes	Yes	Yes	Yes
164	Skin Ointment/Cream Miconazole Nitrate 2 %, Gentamicin 0.1%	-	-	-	-	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
165	Skin Ointment Polymyxin B Sulphate 10000 Units Zinc Bacitracin 500 Units.	-	Yes	-	-	Yes	Yes
GG	**Anesthetics**						
166	Inj. Lignocaine Solution 2%.	-	-	Yes	Yes	Yes	Yes
167	Inj. Lignocaine Solution 4%.	-	-	Yes	Yes	Yes	Yes
168	Inj. Ketamine HCl 50 mg/ml.	-	-	-	-	Yes	Yes
169	Oxygen					Yes	Yes
170	Inj Lidocaine 1%, 2%, 5% solution/2ml ampoule	-	-	-	-	-	Yes
HH	**Preoperative/postoperative medication**						
171	Inj. Diazepam Inj 2ml/5mg	-	-	Yes	Yes	Yes	Yes
172	Inj Atropine Sulphate 1mg (sulphate) in 1 ml ampule	-	-	Yes	Yes	Yes	Yes
173	Inj Tramadol 100mg	-	-	-	-	Yes	Yes
II	**Vaccines**						
174	Tetanus Toxoid	-	-	Yes	Yes	Yes	Yes
175	BCG vaccine	-	-	Yes	Yes	Yes	Yes
176	OPV vaccine	-	-	Yes	Yes	Yes	Yes
177	Pentavalent vaccine	-	-	Yes	Yes	Yes	Yes
178	Measles vaccine	-	-	Yes	Yes	Yes	Yes
179	Pneumococcal vaccine	-	-	Yes	Yes	Yes	Yes
JJ	**Other medical/surgical supplies**						
180	Cotton roll	Yes	Yes				
181	Absorbent Cotton Bandage BPC 6.5cmx6m.	-	Yes	Yes	Yes	Yes	Yes
182	Cotton Crepe Bandage	-	-	Yes	Yes	Yes	Yes
	Surgical Gauze BPC cloth	Yes	-	Yes	Yes	Yes	Yes
183							
184	Surgical Hypoallergenic Latex Free Breathable Paper Tape	Yes	-	-	-	Yes	Yes
185	Bandage Plaster of Paris BPC.	-	-	-	-	Yes	Yes
186	Gloves (polyethene)	-	-	-	-	Yes	Yes
187	Surgical Gloves (all sizes), sterilized	Yes	-	Yes	Yes	Yes	Yes
188	Utility Gloves (all sizes, non-sterilized))	Yes	-	Yes	Yes	Yes	Yes

S. No.	Class/Name	CMW	LHW	BHU	BHU 24/7	RHC	RHC+
189	Disposable Insulin Syringe 1ml with needle	-	-	Yes	Yes	Yes	Yes
190	Disposable Syringe 3ml with needle	-	-	Yes	Yes	Yes	Yes
191	Disposable syringe 5ml with needle	Yes	-	Yes	Yes	Yes	Yes
192	Disposable syringe 10ml with needle	-	-	Yes	Yes	Yes	Yes
193	IV Cannula with Injection Port and Integrated Closing Cone Size 20	-	-	Yes	Yes	Yes	Yes
194	IV Cannula with Injection Port and Integrated Closing Cone Size 24	-	-	Yes	Yes	Yes	Yes
195	IV set (Sterile)	Yes	-	Yes	Yes	Yes	Yes
196	Urine Bag (Adult) with no return valve	-	-	Yes	Yes	Yes	Yes
197	LP/Spinal Anaesthesia Needles (All Sizes)	-	-	-	-	-	Yes
198	Foley's Catheters Two way Silicon Coated (All Sizes)	Yes	-	Yes	Yes	Yes	Yes
199	Black Silk size 1, 30mm, 3/8 Circle Curved Cutting needle.	Yes	-	Yes	Yes	Yes	Yes
200	Poly Propylene size 1, 40mm, Straight Cutting needle,	-	-	Yes	Yes	Yes	Yes
201	Catgut Chromic Size 1, with 45/50mm Intestinal Eye less RB Needle,	Yes	-	Yes	Yes	Yes	Yes
202	Endotracheal Tubes without Cuff (Size 3.0, 3.5, 4.0, 4.5, 7.0 and 7.5)	-	-	-	-	Yes	Yes
203	Stomach Tube (Size 12, 14, 16 and 18)	-	-	Yes	Yes	Yes	Yes
204	Sterile water for injection	-	-	Yes	Yes	Yes	Yes
205	Xylocain Gel for catheterization	-	-	Yes	Yes	Yes	Yes

22. Scopes of work of providers

22.1. Scope of work of CMW

Community midwife certified by PNC is expected to perform duties in the community she has been selected from as per her Scope of Work. This SoW has been drawn from an agreed set of skills and competencies developed for community midwives in Pakistan that has been adapted from International Confederation of Midwives (ICM) competencies 2010.

The major areas of her SoW are: assessment and management of pregnant women and the newborn independently during the antenatal, natal, postnatal and neonatal period; identification of danger signs of antenatal, natal, postnatal and neonatal periods and refer timely; and health promotion through education, motivation and counseling. In order to accomplish her SoW she therefore has to be a good team member of the public health team and communicator. She should provide midwifery care in line with professional ethics respecting women's right to information, health and life. For provision of quality midwifery care, she should keep her educational and professional knowledge up-to-date by actively seeking support from appropriate sources.

CMWs detailed SOW is given below:

Pre-Natal

- Assess nutritional status of women and give appropriate advice and treatment to women with micronutrient deficiency e.g. iron deficiency anaemia
- Describe signs of pregnancy
- Identify pregnant women in the community
- Persuade and register pregnant women to receive Ante-Natal Care (ANC).
- Manage normal pregnancy that includes managing minor discomforts and infections (Moniliasis, Trichomoniasis, Urinary Tract Infections) of pregnancy and refer to appropriate personnel/facility for immunization
- Identify danger signs of pregnancy and manage complications as per protocols that include appropriate and timely referral.

- Assess for selected acute and chronic communicable (Tuberculosis, Malaria, Hepatitis B and C, Gonorrhea, Chlamydia, Syphilis, Human Immunodeficiency Virus, Dengue) and non-communicable (hypertension, heart diseases, Diabetes Mellitus and Asthma) conditions that could put mother and baby at risk and manage these as per protocols.

- Guide and facilitate pregnant women and their families to get prepared for birth keeping in view three delays.

- Educate pregnant women regarding: care during pregnancy including guidance on diet, rest, hygiene, exercise, suitable clothing and sexual practices; breastfeeding and the importance of colostrum and initiating breast feeding as early as possible after delivery; and birth spacing.

Intranatal

- Identify when a woman is in true labour

- Prepare the environment and materials to ensure clean and safe delivery following the infection prevention protocols

- Regularly monitor progression of labour by using partograph

- Provide midwifery care including physical and emotional support to the mother throughout labour and delivery

- Identify danger signs in the first, second or third stages of labour, manage

- complication as per protocols that includes appropriate and timely referral

Post-natal

- Provide post natal care immediately and in first 6 weeks post partum, particularly during the first 28 days.

- Help mother initiate breast feeding and manage any feeding or breast related problems.

- Identify danger signs of post-natal complications and manage these as per protocols that includes appropriate and timely referral

- Educate women regarding: self and baby care including guidance on diet, rest, hygiene, exercise, suitable clothing and sexual practices; exclusive breastfeeding and weaning; immunization of the newborn; and birth spacing

- Counsel for birth spacing and provide family planning supplies

- Register births and deaths.

Newborn care

- Provide immediate care to the newborn according to the protocol
- Manage minor disorders of the newborn.
- Identify danger signs in newborn and manage these as per protocols that includes appropriate and timely referral
- Educate mothers regarding care of the newborn including clean cord care, eye care, warmth, immunization, nutrition, breast feeding, clothing and hygiene.

Community Based Midwifery Care

- Assess her community using rapid assessment techniques
- Build linkages with existing health care providers, facilities, leaders and influential people of the community
- Accurately collect record, interpret and use essential information and submit reports monthly to the Lady Health Supervisor (LHS).
- Regularly interact with health providers of public health system (Lady Health Worker, Lady Health Visitor, Women Medical Officer) for rapport building and two way feedback
- Function as an effective member of health systems team to ensure continuity of care to mother and newborn
- Practice midwifery within the legal and ethical framework

Miscellaneous

- Identify and manage infertility and sexually transmitted infections as per protocols that includes appropriate and timely referral
- Provide appropriate support to parents who have lost a baby
- Provide education and counseling to women on sexual health, ill effects of smoking, chewing tobacco, beetle nuts, alcohol abuse and illicit drugs and violence
- Actively seek support for improving midwifery related competencies.

22.2. Scope of work of LHW

The scope of work of LHW will be to provide PHC services to the communities in her catchment area. These include:

- Register all eligible couples for child spacing interventions i.e., a man married to a woman of age between 15-49 years, and maintain up to date information of eligible couples;
- Form women group in her area. She will arrange meetings of these women groups on fortnightly basis to discuss family planning, immunization, antenatal and post natal examination, growth monitoring of children, diarrhoea, ARI, iodized salt, tuberculosis, etc. Preferably one topic will be discussed in one meeting.
- Keep close liaison with influential women of her area including lady teachers, community midwives, traditional birth attendants and satisfied clients.
- Visit 7-10 households every day to ensure that all registered households are visited once every month; discuss importance of family planning, immunization, growth monitoring of children, iodized salt, personal hygiene, better nutrition, sanitation, antenatal and post natal examination, prevention from hepatitis and tuberculosis, etc.;
- Coordinate with community midwives and other skilled birth attendants and local health facilities for referrals.
- Register all pregnant women in her area and will conduct antenatal care as described in her training and will refer the women to CMW for antenatal care and preparations for delivery.
- Act as a liaison between formal health system and her community;
- Undertake nutritional interventions such as anemia control, growth monitoring, assessing common risk factors causing malnutrition and nutritional counselling. They will treat iron deficiency anemia among all women especially pregnant and lactating mothers as well as anaemic young children.
- Promote nutritional education with emphasis on early initiation of breastfeeding i.e., within one hour after birth, exclusive breastfeeding for six months, adequate weaning practices, improving maternal nutrition and preventing macronutrient malnutrition.

- Establish vaccination post and to vaccinate children and women in coordination with area vaccinator.

- Participate in various campaigns for immunization against EPI target diseases e.g. polio, MNT, measles etc. in her catchment area only. The LHWs will also be involved in surveillance activities.

- Motivate and counsel clients for adoption and continuation of family planning methods, she will provide condoms, oral pills and administer injectable contraceptives (second dose), to eligible couples in the community and refer them to CMW and health facility.

- Refer clients needing IUD insertions, contraceptive surgery to the nearest Government health facility preferably to CMW, BHU and RHCs.

- Carry out prevention and treatment of common ailments e.g. diarrheal disease, acute respiratory infections, tuberculosis, intestinal parasites, malaria, primary eye care, scabies. First aid for injuries and other minor diseases using essential drugs. She will refer cases to nearest centres as per given guidelines. For this purpose a kit of certain inexpensive basic medicines will be provided to LHW.

- LHWs will also be involved in TB, AIDS, Hepatitis and Malaria prevention and control.

- Attend monthly continuing education session at her base facility to share progress regarding all activities carried out by her including the home visits, number of family planning acceptors by methods and stock position of contraceptives. She will also attend education session, submit her monthly report and collect one month supplies from the FLCF.

- LHWs will not be involved in any other activity without the prior permission from the DMU who will seek guidance from PMU if not already issued on case to case basis.

22.3. Scope of work of School Health Nutrition Supervisor (SHNs)[19]

- SHNS will be an outreach person, based at the BHU.

[19] Roles and responsibilities of government functionaries. School health program. Punjab Health Sector Reforms Program. Government of the Punjab.

- He / she would be working under the supervision & guidance of Health Officer I/C BHU.
- He/she will implement the School Health & Nutrition Program in the catchment area of the BHU.
- He/she should have complete list and record of Primary & Elementary schools in the area of jurisdiction.
- He/she will be responsible to train the school teacher for health screening of the students. SHNS along with teachers, will also be conducting health screening in the schools regularly.
- SHNS will also train the LHVs/female paramedics of the BHU, for health screening of the girls students. They will accompany the male SHNS for girls school at the time of half yearly screening of students.
- The SHNS should be working in the field, at least three days a week. All office work will be completed in the remaining days, including the management of referred patients/students. He/she would try to arrange appointments of the students with the doctors in his/her presence.
- Schools falling in the catchment area and the visit program of SHNS duly approved by the Health Officer I/C should be displayed in the BHU.
- SHNS will establish communication channels with the schools, coordinating his/her activities with them and duly informing in advance the visit schedule.
- SHNS should be present in each school at the time of screening. The time table should be prepared in a manner that screening is not done in two schools on the same day.
- SHNS will submit monthly report and post screening report on prescribed format to the Health Officers for comments and signature. The screening report should be submitted not later than two months after screening.
- After signature of Health Officer, SHNS will submit these reports to the Program Director, DHDC. Where there is no PD DHDC, the report will be submitted to DO(H).
- In coordination with the schools, SHNS would impart health education, to create awareness amongst teachers & students about common health problems.
- He/she would ensure that the students referred for medical attention by the teachers are seen by concerned health professionals.

- He/she would provide the feed back to the concerned teachers about the outcome of referral.
- SHNS will collect the referred slip from the teachers after Medical Officer has given the advice and the slip is signed by the parents.
- The SHNS will be responsible for keeping the record of all the students referred to the medical facility i.e. BHU/RHC.
- The SHNS will also keep a close liaison with parents of the referred children and inform them of the doctor's advice.
- In case of referral to the RHC he/she will coordinate the visit of students with the doctors in the health facility and ensure treatment at RHCs.
- SHNS will attend the meetings of School Councils and brief the members about his / her activities.
- These responsibilities of SHNS are only with respect to the School Health Program. They will be assigned roles and responsibilities separately for other activities as per their job description.

22.4. Scope of work of Sanitary Inspector [20]

- Sanitary inspector will be an outreach team member of the BHU/RHC.
- He will move in the villages, with fellow members of the out reach team according to the pre announced master plan.
- He shall, along with the fellow out reach workers, establish an active link with the village based health workers/traditional birth attendants and village activists, interested in human welfare and community development.
- He shall conduct sessions on health and nutrition education, sanitation practice and clean environment including use of latrines, clean water for drinking and washing and safe disposal of excreta. In case of non compliance and when the individual/family action, in this regard, is hazardous to the environment and community, the sanitary inspector shall report in writing to the Medical Office/Health Officer (BHU/RHC) for legal action by the DO(H).

[20] Adapted from the Training Manual for MOs and WMOs (July 2013), Dept of Health, Punjab

- He shall himsleof and with the help of sanitary patrol (where posted) conduct campaign to kill stray dogs, flies, insects, etc. in the villages
- He shall chlorinate/disinfect the wells and pounds of drinking water.
- He shall, with the help of the village based health workers, TBAs and local activitsts, collect information on the epidemicity or endemicity of diseases in areas under his jurisdiction. Upon finding such cases he shall immediately inform the MO of his health facility and at the same time, take appropriate action with the assistance of fellow out reach workers to combat such menaces.
- He shall keep the diary of his movements and daily activities counter signed by the MO in charge of his respective health facility.
- He shall maintain and keep stock of various items in his use, updated in all respects.
- He shall collect sample of food items, stocked or displayed for sale, suspected of adulteration. The MO incharge of the health facility shall then dispatch such sample for analysis by the public analyst and subsequent action, if required, by the DO(H).

22.5. Scope of work of CDC Supervisor [21]

- CDC Supervisor will be an outreach team member of the BHU/RHC.
- He will move in the villages, with fellow members of the out reach team according to the pre announced master plan.
- He shall be responsible for numbering the houses (geographical renaissance) and keep record of the number of rooms in the houses.
- He shall, along with the fellow out reach workers, establish an active link with the village based health workers/traditional birth attendants and village activists, interested in human welfare and community development.

[21] Adapted from the Training Manual for MOs and WMOs (July 2013), Dept of Health, Punjab

- He shall get information from the village based health workers and TBAs about the patients in their locality suffering from fever and other communicable diseases.

- He shall visit and assess such patients. In case of suspected malaria, he shall:
    - Prepare the thick blood slides for examination of malarial parasite and
    - Administer radical anti malarial treatment to the malaria positive cases.

- However, in case of long standing low grade fever i.e. suspected TB, he shall collect sputum for AFB detection at BHU/RHC by the microscopist/medical technician.
- He shall arrange spray of insecticides on pons, drainage channels and other sites suspected of mosquito breeding.
- He shall conduct and ensure that the insecticidal spray is done in the area according to the instruction by the tehsil supervisors.
- He shall maintain and keep the instruments, insecticides, stock register, etc. up to date and periodically counter signed by the MO in charge of the health facility.
- He shall maintain a diary of his movement and activities counter signed by the MO in charge on daily basis
- He shall assist and cooperate with the fellow out reach workers and other health workers in his area
- He shall ensure that the items on stock with him are consumed before expiry and any situation otherwise is brought in the notice of the MO in charge immediately.
- He shall conduct health education sessions and deliver talks to the individuals and communities on how to prevent and control communicable diseases in their localities.

22.6. Scope of work of Vaccinator

- Vaccinator will be an outreach person, based at the BHU/RHC.

- He would be working under the supervision & guidance of Health Officer I/C BHU.
- He will implement the EPI Program in the catchment area of the BHU.

- He should have complete list and record of children under one year of age in his catchment area and ensure that immunization is complete before reaching one year of age for each of the registered child

- He will perform vaccination of children and pregnant women in the center and in the field; in his catchment area
- He will maintain the list of children who are fully immunized, those who are up to date with their immunization schedules, those who are due and those who are defaulter.
- He will work in liaison with the LHWs and CMWs for follow up with the defaulter children and complete their immunization course.
- He will motivate people during outreach vaccination visits to the villages
- He will spend at least five days of the week in the field and one day at the BHU for the weekly immunization services at the BHU.
- The vaccinator will maintain all immunization record on the permanent immunization register. He will also maintain the daily register and keep both of the registers up to date.
- He will maintain stock register and accounting of vaccines, medicines, refrigerator, vaccine carrier, ice cubes, radial thermometer, etc.
- He will ensure that the equipment is in working order and that they are not used for purposes other than the EPI program.
- He will assess monthly requirements of the center and ensure that sufficient stock of vaccines is always available. He shall keep the vaccine and other items of stock at optimal conditions and ensure that the items are consumed before their expiry and the situation is brought to the notice of the MO incharge in case of any disruption.
- He will attend any trainings / refresher courses planned for the vaccinators by the provincial health department or district health management team.
- He will prepare monthly EPI disease surveillance reports
- He will prepare outreach program at the start of each month and display it in the center. He will send a copy of it for information to the DSV through proper channel
- He will display charts, maps, graphs and tables in the center showing the area and monthly/annual progress reports of the center.
- He will submit the monthly report containing vaccine consumption and immunization report on prescribed format to the Health officer I/C BHU or the

SMO RHC for onward submission to the office of the EDOH and the provincial EPI Program.

22.7. Scope of work of Sanitray Patrol

- Sanitary Patrol will be an outreach team member of the BHU/RHC.
- He will move in the villages, with fellow members of the out reach team according to the pre announced master plan.
- He shall, along with the fellow out reach workers, establish an active link with the village based health workers/traditional birth attendants and village activists, interested in human welfare and community development.
- He shall chlorinate/disinfect the wells, pounds and tanks of drinking water
- He shall drive a campaign to kill stray dogs
- He shall assist and motivate people for environmental sanitation, clean water for drinking and washing, building and keeping the VIP latrines clean and appropriate disposal of excreta
- He collects samples of food items; stored or displayed for sale, suspected of adulteration and carry these to the laboratory/pubic analyst for analysis under a written authority of the medical officer incharge of the BHU/RHC
- He shall report, for legal action, to the MO regarding health hazard environmental factors in the area of his jurisdiction
- He shall keep diary of all his activities performed as member of the out reach team, for counter signature by the sanitary inspector / MO incharge
- He shall keep the stock and items on his stock well maintained and functional
- He shall carry out the equipment in use by the out reach team and assist them in performance of their duties.

22.8. Scope of work of Lady Health Supervisor [22]

- She will be responsible for supervision of all LHWs (15-20) and CMWs (3-5) attached to her respective health facility. She will provide only administrative

[22] Adapted and updated from PC-1 LHWs Program

supervision to the CMWs in her catchment areas while both administrative and technical supervision to the LHWs.

- She will attend the refresher programme arranged by the programme management on managing Lady Health Workers and Community Midwifes for their performance monitoring.

- She will provide performance feedback to her LHWs and CMWs using the prescribed checklists; having visited the LHWs and CMWs and their households (with and without them) at least once a month.

- She will carry out extensive supervision and monitoring of the field activities of LHWs and CMWs. She should visit the Health House of LHWs under her supervision at least once a month. She should also visit the Work Station of CMWs under her supervision at least once a month.

- She will provide supportive supervision and on job training to LHWs and CMWs under her supervision and provide verbal and written feedback to them.

- She may act as trainer in the refresher training as and when required by the district program management unit.

- She will attend the continued education session in all the relevant health facilities.

- She will carry out verbal Autopsy of Infant Death reported by her LHWs and CMWs.

- She will assist the district management unit in the preliminary scanning for verification of LHWs and CMWs.

- She will attend the monthly Maternal Mortality conferences at district level.

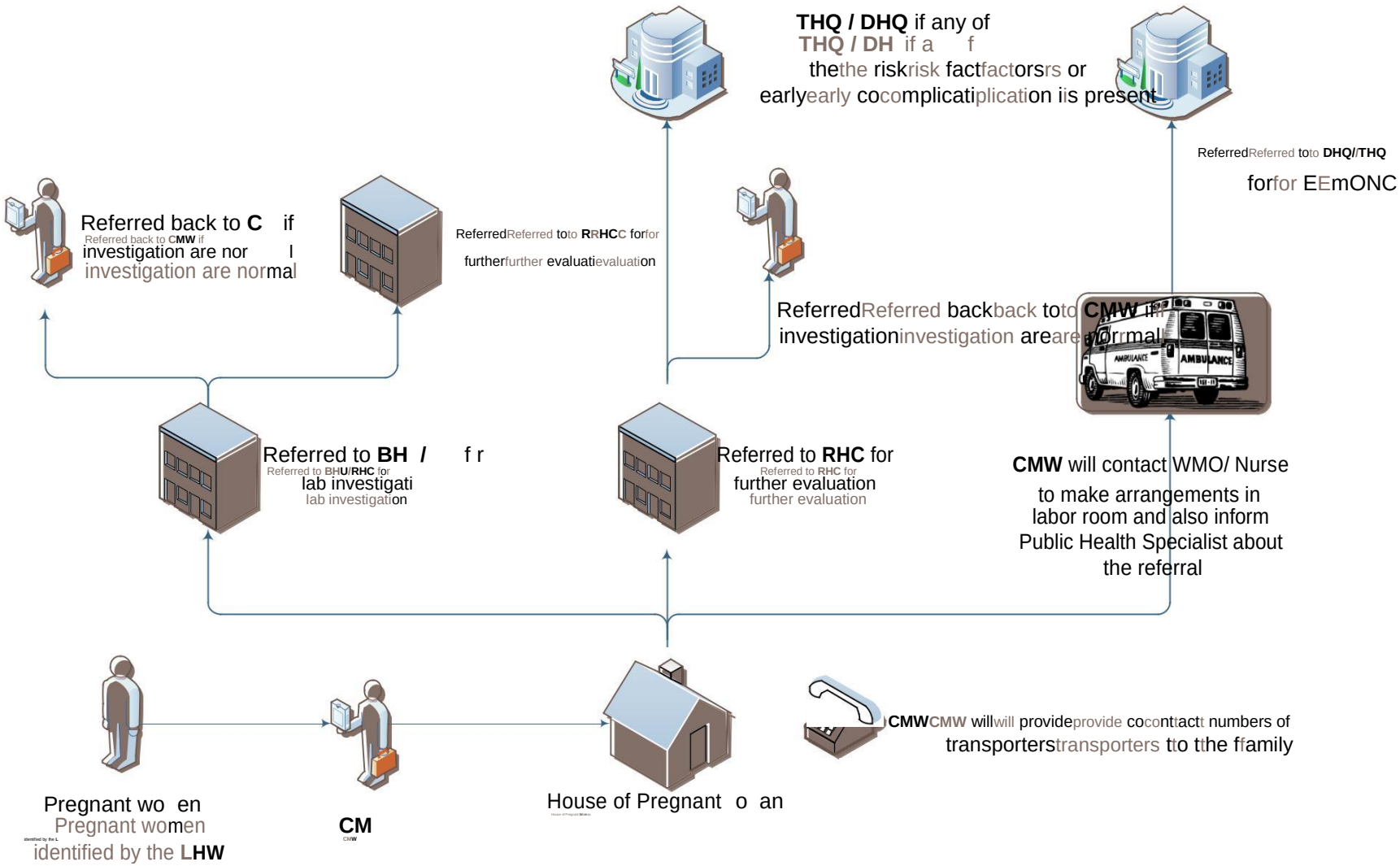
- She will liaise between district and the health facility for the effective coordination of the activities of the program.

- She will execute the above duties and functions under the supervision and technical guidance of district management unit, FPO and health facility in charge.

- She will ensure regular maintenance of vehicle and its movement register.

- She will compile and prepare the facility based monthly report of the LHWs and CMWs and submit it to the district management unit.

Figure 5: Referral Mechanism for CMWs[23]



[23]Adapted from CMW Deployment Guidelines. TRF. 2011. Islamabad.

23. Role of Health Managers in Implementation of EPHS

The implementation of EPHS is dependent on effective role of health managers at both provincial and district levels.

23.1. Role of Provincial Health Mangers

The office of the Director General Health Services, Punjab should take the lead role in implementation of the EPHS across the province by

1. In depth orientation of the EDOs (H) and DHOs on the EPHS document and steps needed to be taken at district level to ensure effective implementation of the essential package of services
2. Training need assessment at provincial level to develop a pool of provincial master trainers to conduct refresher trainings on various services described in the EPHS
3. Capacity building of the DHMT
4. Strengthening of the existing monitoring and evaluation system to track the implementation of EPHS at health facility and community level
5. Annual review of implementation status of the EPHS and revision of EPHS if required
6. Monitoring of the health facilities and field workers using the checklists derived from the services described in the EPHS and the standards set in the MSDS document

23.2. Role of District Health Managers

The office of the EDO Health of each district should take the lead role in implementation of the EPHS at each health service delivery point (RHC+, RHC, BHU+, BHU, Vaccinators, CMWs, and LHWs) by:

1. Orientation of all members of DHMT on the EPHS document
2. Training need assessment within the district to identify gaps in the capacity of service providers at each level
3. Development of a pool of district master trainers who would conduct further trainings of service providers within the district on a regular basis
4. Development of a capacity building plan for the service providers, ensuring refresher trainings of the staff at appropriate intervals
5. Monitoring of the health facilities and field workers using the checklists derived from the services described in the EPHS and the standards set in the MSDS document

24. COST ESTIMATES SUMMARY

In order to estimate the overall cost implications of implementing the EPHS at BHU and RHC, an estimation exercise was carried out. This exercise used the estimates that had been already developed under unit costing for medicines, vaccines, supplies and lab investigations. Standard staffing and equipment were taken as proposed under the EPHS for each of the facility. For detailed note on methodology and other technical details please refer to the full costing report.

24.1. COST ESTIMATES: RHC

Table below presents the cost estimates for RHC.

Table 34: Cost Estimates RHC

Catchment Population	40,000	75,000	125,000	175,000	225,000
Expenditure Categories	PKR	PKR	PKR	PKR	PKR
Salaries	23,753,502	23,753,502	23,753,502	23,753,502	23,753,502
Medicines, Supplies, Lab	927,883	1,739,781	2,899,635	4,059,489	5,219,343
Immunisation	700,881	1,314,153	2,190,254	3,066,356	3,942,458
Operating Expenditure	2,830,115	2,872,115	2,932,115	2,992,115	3,052,115
Total	**28,212,381**	**29,679,550**	**31,775,506**	**33,871,462**	**35,967,418**
Sensitivity: +7.5%	**30,328,310**	**31,905,517**	**34,158,669**	**36,411,822**	**38,664,974**
Sensitivity: -7.5%	**26,096,453**	**27,453,584**	**29,392,343**	**31,331,102**	**33,269,862**

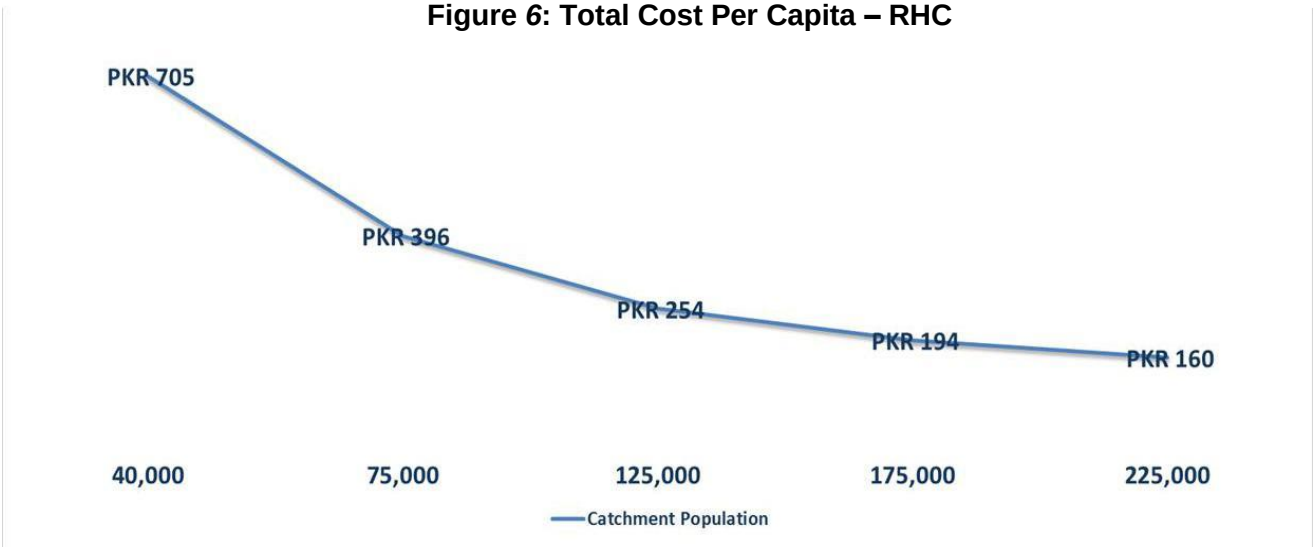
Cost estimates were also analyzed by fixed and variable costs, in order to determine the behaviour of overall costs with the increase in catchment population. Table below presents the breakdown of overall cost by fixed and variable.

Table 35: Cost Estimates by Variable and Fixed Cost – RHC

Catchment Population	40,000	75,000	125,000	175,000	225,000
Variable Cost (PKR)	1,676,765	3,143,934	5,239,890	7,335,846	9,431,801
Fixed Cost (PKR)	26,535,617	26,535,617	26,535,617	26,535,617	26,535,617

Figure below presents the total cost per capita, which is showing a decline with the increase in catchment population.

Figure *6*: Total Cost Per Capita – RHC



24.2. COST ESTIMATES: BHU

Table below presents the cost estimates for BHU.

Table 36: Cost Estimates BHU

Catchment Population	10,000	15,000	20,000	25,000
Expenditure Categories	**PKR**	**PKR**	**PKR**	**PKR**
Salaries	4,837,116	4,837,116	4,837,116	4,837,116
Medicines, Supplies, Lab	333,009	499,513	666,017	832,522
Immunisation	438,051	657,076	876,102	1,095,127
Operating Expenditure	627,986	633,986	639,986	645,986
Total	**6,236,161**	**6,627,691**	**7,019,221**	**7,410,751**
Sensitivity: +7.5%	**6,703,874**	**7,124,768**	**7,545,663**	**7,966,557**
Sensitivity: -7.5%	**5,768,449**	**6,130,614**	**6,492,779**	**6,854,945**

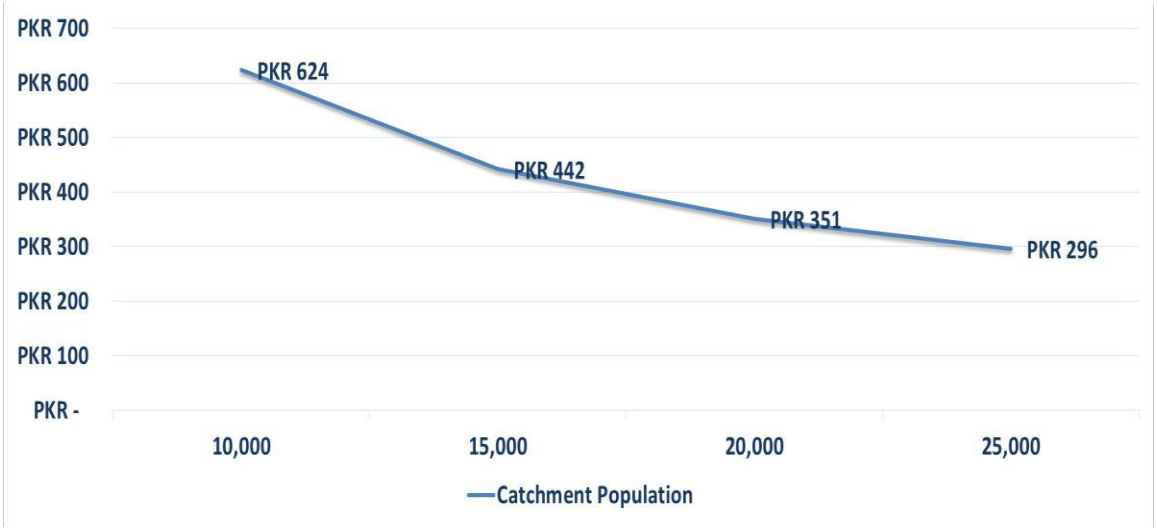
Cost estimates were also analyzed by fixed and variable costs, in order to determine the behaviour of overall costs with the increase in catchment population. Table below presents the breakdown of overall cost by fixed and variable.

Table 37: Cost Estimates by Variable and Fixed Cost – BHU

Catchment Population	10,000	15,000	20,000	25,000
Variable Cost (PKR)	783,060	1,174,589	1,566,119	1,957,649
Fixed Cost (PKR)	5,453,102	5,453,102	5,453,102	5,453,102

Figure below presents the total cost per capita, which is showing a decline with the increase in catchment population.

Figure 7: Total Cost Per Capita – BHU



24.3. UNIT COST OF SERVICES

This section presents the unit cost of services as defined under the EPHS at RHC+, RHC, BHU 24h, BHU, LHW and CMW. These estimates have been prepared in accordance with the methodology as defined under section **Error! Reference source not found.** of the costing eport. Table below presents the services for which unit cost exercise was carried. Service with (✘)symbol means that the particular service is not being provided (as per EPHS) at that level of health care.

Table 38: Services Included for Unit Costing

Services	CMW	LHW	BHU	BHU 24h	RHC	RHC+
Antenatal Care	✓	✓	✓	✓	✓	✓
Delivery Care	✓	×	✓	✓	✓	✓
Caesarian Section	×	×	×	×	×	✓
Postpartum Care	✓	✓	✓	✓	✓	✓
Postpartum Hemorrhage	×	×	×	×	×	✓
Newborn Care	✓	×	✓	✓	✓	✓
Neonatal Complications	×	×	×	×	×	✓
Child: Pneumonia	×	×	✓	✓	✓	✓
Child: Wheeze	×	×	✓	✓	✓	✓
Child: Ear infection	×	×	✓	✓	✓	✓
Child: Diarrhea (no dehydration)	✓	✓	✓	✓	✓	✓
Child: Diarrhea (some dehydration)	×	✓	✓	✓	✓	✓
Child: Dysentery	×	×	✓	✓	✓	✓
Child: Fever	×	✓	✓	✓	✓	✓
Fully Immunised Child	×	✓	✓	✓	✓	✓
Family Planning: Condoms	×	✓	✓	✓	✓	✓
Family Planning: Pills	×	✓	✓	✓	✓	✓
Family Planning: Injection	×	✓	✓	✓	✓	✓
Family Planning: IUD	×	×	✓	✓	✓	✓
Family Planning: Female Sterilisation	×	×	×	×	×	✓
Common cold and cough	×	✓	✓	✓	✓	✓
Acute Bronchitis	×	×	✓	✓	✓	✓
Pneumonia	×	×	✓	✓	✓	✓
GI Problems	×	×	✓	✓	✓	✓
TB Diagnosis	×	×	✓	✓	✓	✓
TB Treatment	×	×	✓	✓	✓	✓
Malaria	×	✓	✓	✓	✓	✓
Typhoid	×	×	×	×	✓	✓
Sexually Transmitted Infections	×	×	✓	✓	✓	✓
Trachoma	×	×	✓	✓	✓	✓
Urinary Tract Infection	×	×	✓	✓	✓	✓
Vitamin A Supplementation (children)	×	×	✓	✓	✓	✓

Table below presents the summary of unit costs of services as detailed in **Error! Reference ource not found.**5.

Table 39: Summary of Unit Costs

Services	PKR					
	CMW	LHW	BHU	BHU 24h	RHC	RHC+
Antenatal Care	526	1,085	1,398	1,726	1,457	1,597
Delivery Care	310	-	1,458	1,962	1,479	1,633
Caesarian Section	-	-	-	-	-	12,431
Postpartum Care	245	539	657	839	663	743
Postpartum Hemorrhage	-	-	-	-	-	11,411
Newborn Care	-	-	413	973	418	470
Neonatal Complications	-	-	-	-	-	7,047
Child: Pneumonia	-	-	350	468	354	405
Child: Wheeze	-	-	164	228	166	194
Child: Ear infection	-	-	221	285	223	251
Child: Diarrhea (no dehydration)	37	156	182	238	184	208
Child: Diarrhea (some dehydration)	-	203	222	278	224	248
Child: Dysentery	-	-	183	248	186	214
Child: Fever	38	118	207	287	210	245
Fully Immunised Child	-	4,720	3,878	3,957	3,880	3,876
Family Planning: Condoms	129	201	215	259	216	236
Family Planning: Pills	129	244	260	325	263	291
Family Planning: Injection	94	209	249	321	252	283
Family Planning: IUD	-	-	253	337	256	292
Family Planning: Female Sterilisation	-	-	-	-	-	1,904
Common cold and cough	-	146	121	167	122	143
Acute Bronchitis	-	-	121	167	122	143
Pneumonia	-	-	312	412	316	359
GI Problems	-	-	173	238	176	204
TB Diagnosis	-	-	205	281	251	283
TB Treatment	-	-	4,741	5,182	4,805	4,995
Malaria	-	-	481	571	484	523
Typhoid	-	-	389	529	482	543
Sexually Transmitted Infections	-	-	355	454	369	412
Trachoma	-	-	516	598	519	554
Urinary Tract Infection	-	-	231	293	233	260
Vitamin A Supplementation (children)	-	-	31	37	31	31

FOR DETAILS ON THE COSTING METHODOLOGY AND INDEPTH ANALYSIS OF UNIT COSTS PLEASE REFER TO THE FULL COSTING REPORT.

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Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Health Sector of Pakistan and its Challenges

Part 5:
Monitoring & Evaluation

Part 6:
Modern Management Theories & Practices

Part 2
MSDS REFERENCE MANUAL FOR BASIC HEALTH UNITS (BHUs)

(Weightage 10%)

MINIMUM SERVICE
DELIVERY STANDARDS

BASIC HEALTH UNITS

MSDS

BHUs

REFERENCE MANUAL

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1.2 Development Methodology 10
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Ind 1. The BHU is identifiable with name, and PHC registration / license number on sign board/s.
Ind 2. Location of the BHU is easily accessible to the people.

Standard 2. ROM-2: The Staff on duty is identifiable. 16
Ind 3. Door plates at offices/rooms clearly display name, qualification(s), designation(s) of the staff on duty, as well as the pertinent services.
Ind 4. The staff on duty uses the provided identity badge.

Standard 3. ROM-3: The responsibilities of all the staff are defined. 17
Ind 5. In-charge displays organogram of BHU.
Ind 6. In-charge displays are sanctioned vs filled posts of BHUs.
Ind 7. There are arrangements for monitoring the attendance, presence and punctuality of the staff.
Ind 8. The BHU's mission statement is displayed
Ind 9. BHU in-charge is responsible to monitor and measure the performance of the BHU against the given targets
Ind 10. The BHU staff addresses the BHU's social and community responsibilities

Standard 4. ROM-4: BHU premises support the scope of work / services. 19
Ind 11. The BHU space is in accordance with the minimum requirement.
Ind 12. BHU has adequate facilities and civic amenities for the comfort of the patients and attendants.
Ind 13. BHU has adequate arrangements for the privacy of patients during consultation / examination /procedures etc.

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Ind 14. The BHU in-charge is conversant with the relevant by-laws and regulations.
Ind 15. The In-charge ensures implementation of these requirements.

Standard 6. FMS-2: The BHU has a system for clinical and support service equipment management. 22
Ind 16. The BHU in-charge ensure maintaining inventory, periodic inspection & service and proper functioning of equipment.

Standard 7. FMS-3: The BHU has arrangements to cater for fie and non-fie emergencies within the facilities. 23

Ind 17. The BHU has arrangements and provisions for i. Early detection and ii. Management of Fie and non-fie emergencies.

Ind 18. The BHU has safe exit (evacuation) arrangements in case of fire and non-fire emergencies.

Ind 19. Simulation exercise is held at least once in a year and staff members are trained for their role in case of such emergencies.

2.3 Human Resource Management (HRM) 24

Standard 8. HRM-1: The staff joining the BHU are oriented to the environment, respective sections and their individual jobs. 24

Ind 20. Each regular / contract based / short term employee, is appropriately oriented to the BHU's mission and goals as well as relevant section / service / program policies and procedures.

Ind 21. Each regular / contract based/ short term employee is made aware of their Job Description.

Ind 22. Each regular / contract based / part time employee is made aware of his / her rights /responsibilities and patient's rights / responsibilities.

Standard 9. HRM-2: An appraisal system for evaluating the performance of the employees exists at BHU. 26

Ind 23. Performance appraisal is carried out at pre-defined intervals and is regularly documented in their Ile.

Standard 10. HRM-3: There is a documented personnel record for each staff member and process for verification of credentials. 27

Ind 24. The employees' record/information regarding posting, qualification/ education, in-service training, disciplinary background, job description, performance appraisal and health status is maintained at the BHU.

Ind 25. There is an evidence of verification of the credentials (education, registration, training and experience) of medical professionals including doctors and paramedics permitted to provide patient care without supervision

2.4 Information Management Systems (IMS) 28

Standard 11. IMS-1: The BHU has a complete and accurate medical record of every patient/client. 28

Ind 26. Every medical record has a Unique Number / Identity.

Ind. 27. Only authorized person/s make entries in the record.

Ind 28. Every record entry is legible, dated, timed and signed.

Ind 29. The record contains information regarding patient/client identity, presenting complaints, diagnosis, action taken and details if shifted / referred / died as the case may be

Ind 30. Weekly reports of notifiable/ Vaccine Preventable Diseases are submitted regularly

Ind 31 Monthly DHIS reports are submitted regularly.

Ind 32. The medical records are reviewed regularly / periodically.

2.5 Quality Assurance (QA)/ Quality Improvement (QI) 31

Standard 12. QA-1: The BHU has Quality Assurance / Improvement system in place. 31

Ind 33. A quality assurance and internal monitoring system is in place.

Standard 13. QA-2: Sentinel events are assessed and managed. 32
Ind 34. The BHU has defined sentinel events.
Ind 35. Sentinel events are intensively analysed when they occur.

2.6 Access, Assessment, and Continuity of Care (AAC) 33

Standard 14. AAC-1: Services are provided as portrayed. 33
Ind 36. The services being provided at the BHU are displayed.

Standard 15. AAC-2: The HCE has a well-established Patient Management System. 34
Ind 37. There is a well-established registration and guidance process.
Ind 38. There is a well-established patient assessment process.
Ind 39. Health Education is provided as per guidelines.
Ind 40. The Preventive Services are provided as per guidelines.

2.7 Care of Patients (COP) 36

Standard 16. COP-1: Essential arrangements for emergency care exit 36
Ind 41. The BHU has essential arrangements to cater for emergency care.
Ind 42. Emergency services also address handling of medico-legal cases.
Ind 43. The BHU has referral SOPs.
Ind 44. The BHU has list of contact numbers of the referral facilities, medico legal authorities, concerned police stations, Ambulance/Rescue Services and the Social Services Organizations.
Ind 45. Discharge to home or transfer to another HCE/ organization is documented
Ind 46. The Policy regarding home visit/ domiciliary services is portrayed and accordingly practiced.

Standard 17. COP-2: Policies and procedure guide the care of obstetrical patients 38
Ind 47. The BHU defines and displays the type of obstetric cases along with their neonates cared for or not; and also displays definition of the high risk obstetric cases with referral guidelines.
Ind 48. Staff caring for obstetric cases is competent and available.
Ind 49. Obstetric patients / clients and children under fe are also assessed for nutritional status.
Ind 50. The BHU caring for obstetric cases has the facilities and technically competent staff to take care of neonates of such cases.
Ind 51. No treatment is administered until the identity of the patient is guaranteed.

2.8 Management of Medications (MOM) / Dispensing 40

Standard 18. MOM-1: Policies and procedures exist for the prescription of medications. 40
Ind 52. Policy on verbal orders is documented and implemented.
Ind 53. The BHU should follow the prescribed policy as to who can write medication orders/prescriptions.
Ind 54. Prescriptions are clear, legible, dated, timed, named / stamped and signed.

Standard 19. MOM-2: Policies and procedures guide the safe storage and dispensing of medications. 41
Ind 55. The BHU has the list of Essential Drugs to treat common diseases, as defined and notified by the Government.
Ind 56. The BHU maintains appropriate stock of Essential Drugs to treat common diseases.
Ind 57. The BHU defines a list of high-risk medication.

Ind 58. High-risk medication orders are verified prior to dispensing.
Ind 59. Medicines are stored as per guidelines.
Expiry dates / shelf life is monitored and checked prior to dispensing, as applicable
Ind 61. Medicines / drugs are dispensed as per the prescription plan

Standard 20. MOM-3: There are de defined procedures for medication administration. 43
Ind 62. Medications are administered (dispensed) by those who are permitted by law and authorized to do so.
Ind 63. Patient is identified prior to dispensing /administration of a drug.
Ind 64. Medication is verified from the order prior to dispensing /administration.
Ind 65. Adverse drug reaction/s (ADR) are reported.

2.9 Patient Rights and Education (PRE) 45

Standard 21. PRE-1: A system for obtaining consent for treatment is practiced at the BHU. 45
Ind 66. The MO or other healthcare service provider obtains consent from a patient before examination.
Ind 67. The situations where SpeciQcInformed Consent is required are listed as per prescribed policy*.
Ind 68. The policy to give consent when patient is incapable of independent decision-making is present and practiced.

Standard 22. PRE-2: Patient and families have a right to information on expected costs. 46
Ind 69. The patient/family is informed about the cost of treatment.
Ind 70. The charges list is available to patients.

Standard 23. PRE-3: Patients and families have a right to refuse treatment and lodge a complaint. 47
Ind 71. Patients and families have a right to refuse the treatment
Ind 72. HCE Charter is displayed and patients / families are guided.
Ind 73. Patients and families have a right to complain and there is a mechanism to address the grievances.
Ind 74. The BHU in charge uses the results of complaints investigations as part of the quality improvement process.

2.10 Infection Control (IC) 49

Standard 24. IC-1: An infection control system is in place at the BHU. 49
Ind 75. There are arrangement for infection control aiming at prevention and reducing risk of infections.

3- MSDS Development Team 50

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List of Acronyms and Abbreviations

AAC	Access, Assessment and Continuity of care
ARI	Acute Respiratory Infections
ASA	American Society of Anesthesiologists
ANC	Ante Natal Care
BHU	Basic Health Unit
BOD	Burden of Disease
CDC	Communicable Disease Control
CHC	Community Health Center
COP	Care of Patients
CQI	Continuous Quality Improvement
DDOH	Deputy District Officer Health
DFID	Department for International Development
DGHS	Director General Health Services
DHIS	District Health Information System
EDL	Essential Drugs List
EDO-H	Executive District Officer Health
CEMONC	Comprehensive Emergency Obstetric and Newborn Care
EPHS	Essential Package of Health Services
EPI	Expanded Program of Immunization
FGD	Focus Group Discussion
FLCFs	First Level Care Facilities
FMS	Facility Management and Safety
FP	Family Planning
HCE	Healthcare Establishment
HIC	Hospital Infection Control
HIS	Health Information Systems
HMIS	Health Management Information System
HRD	Human Resource Development
HRM	Human Resource Management
PHSRP	Punjab Health Sector Reform Program
IRMNCH	Integrated Reproductive Maternal Newborn Child Health
ICU	Intensive Care Unit
IMS	Information Management Systems

IND or Ind	Indicator
JCAHO	Joint Commission for Accreditation of Healthcare
JCI	Joint Commission International
Kcl	Potassium Chloride
LHV	Lady Health Visitor
LHW	Lady Health Worker
MCH	Maternal and Child Health
MOM	Management of Medication
MSDS	Minimum Service Delivery Standards
OH&S	Occupational Health and Safety
OPD	Out Patient Department
PDSSP	Punjab Devolved Social Sector Services Programme
PHC	Punjab Healthcare Commission
PNAC	Pakistan National Accreditation Council
PNRA	Pakistan Nuclear Regulatory Authority
PRE	Patient Rights/Responsibilities and Education
PSPU	Policy and Strategic Planning Unit
PMU	Project Management Unit
QA	Quality Assurance
QHA	Quality Holistic Accreditation
RHC	Rural Health Center
ROM	Responsibilities of Management
SEPP	Society of Emergency Physicians Pakistan
SHC	Secondary Health Care
SMPs	Standard Medical Protocols
SOPs	Standard Operating Procedures
TAC	Technical Advisory Committee
TAMA	Technical Assistance Management Agency
THQ	Tehsil Head Quarter
TRF	Technical Resource Facility
UAH ACT	Unani/Ayurvedic and Homeopathic Practitioners ACT, 1965
VPD	Vaccine Preventable Diseases
WMO	Woman Medical Officer
WHO	World Health Organization

PART

1

Introduction

1. Introduction

The Government of Punjab has established an elaborate system of healthcare facilities including a network of Basic Health Units (BHUs). As per policy of the government one BHU is provided at every rural union council to provide access to affordable and equitable primary healthcare facilities to the rural population in the province. The Rural Health Centers (RHCs) are provided at the Markaz or Thana level union councils and provide basic indoor facilities in addition to all the functions related to the primary healthcare provided at the BHUs. The network of primary healthcare has been complemented through the outreach field force of sanitation, immunization and communicable disease control programs and further expanded through placement of community based workforce of Lady Health Workers (LHWs), Community Midwives (CMWs) and the school Health & Nutrition Supervisors. Tehsil headquarter (THQ) and district headquarter (DHQ) hospitals provide an avenue of referral from primary healthcare in all the 36 districts of the province.

With the objective to improve quality of healthcare services delivery, the Government of the Punjab promulgated the Punjab Healthcare Commission (PHC) Act 2010 to provide for establishing the Punjab Healthcare Commission (PHC). The Commission is legally mandated to regulate all Healthcare Establishments (HCEs) in the public and private sectors through registration, to prescribe minimum service delivery standards (MSDS) for all categories of healthcare establishments1 for quality assurance of the healthcare services and to license all categories of HCEs on the basis of implementation of the respective set of MSDS.

Accordingly, the Commission prioritized its work for prescribing MSDS for the three recognized systems of treatment i.e. Allopathic, Homoeopathic and Tibbi. The PHC in the first phase developed MSDS for category- I Healthcare Establishments (hospitals having more than 50 beds) and providing specialized healthcare followed by the MSDS for category-II HCEs (hospitals having up to 50 beds. These standards are being implemented in all category-I and category-II HCEs in the public and private sector in Punjab. Similarly, the MSDS for homoeopathic clinics have also been developed and are being implemented. The MSDS for other types of category-III HCEs including clinical laboratories, dental clinics, radiological diagnostic facilities, clinics of family physicians & general practitioners, and Matabs have also been nalied.

The MSDS for BHUs providing all the eight components of primary healthcare, have to be consistent with the essential package of health services (EPHS) prescribed in terms of these government sector facilities and would not exactly be the same as for other category III HCEs like clinics of the general practitioners and single specialty clinics providing narrow range of services. The PHC has therefore ensured to prescribe the MSDS for BHUs which can cater for regulating the delivery of services related to all the areas of primary healthcare. There has been extensive consultation with stakeholders throughout the process of drafting and finalization of the MSDS.

1- Preamble, Section-1 and Section 20 of Punjab Healthcare Commission (PHC) Act 2010 in particular refer.

1.1 Service Delivery Standards

Setting service delivery standards and indicators is an established practice for continuously improving the provision of quality healthcare services. Joint Commission International (JCI) in the USA is one such organization that sets standards to improve the quality of healthcare services against set standards. Similarly, the Quality Care Commission in the UK enforces clinical governance by setting a system of standard and facilitating their compliance. The 'Indian Public Health Standards' were introduced in 2005 and subsequently the Quality Council of India expanded its scope by launching of 'Standards for the Health and Wellness Industry' in 2008. The Australian Council on Healthcare Standards was initiated in 1974 that has facilitated the development of the New Zealand and Singapore Councils whereas La Haute Autorite de Sante is its French counterpart. Accreditation Canada (formally the Canadian Council on Health Services Accreditation) became independent from the Joint Commission for Accreditation of Hospitals (JCAH) in 1953.The Quality Holistic Accreditation (QHA) Trent Accreditation Scheme is based in the UK and Europe and has also served hospitals in Asia. Regional Internationally accredited hospitals can be found in Pakistan, India, Bangladesh, Kazakhstan, China and Iran.

Improving quality of healthcare services by prescribing Standardization of Healthcare Services by developing and implementing MSDS is a newer concept in Pakistan and Punjab has taken a lead amongst the provinces by establishing the Punjab Healthcare Commission and other provinces are now following its foot prints.

1.2 Development Methodology

In late 2012 the MSDS for hospitals were developed with the understanding that these will be implemented at all types of hospitals including Cat-I HCEs (50+ beds) and category-II HCEs (up to 50 beds). Soon after rolling out MSDS for implementation at Cat-I HCEs in the first phase, (November 2012 to March 2013) the issues of understanding and capacity constraints became very obvious and hampered their implementation. The PHC therefore, strategized facilitating the HCEs in implementation of MSDS through building their capacity by training the core staff members. The 3 day capacity building session conducted by the PHC for training the staff from HCEs provided an opportunity to firmly conclude that it will be required to develop category specific sets of MSDS for all major types of HCEs, so as to facilitate their implementation at each level of healthcare services delivery. The feedback from the stakeholders during the Erst16 training sessions including 426 participants from 152 hospitals, 81 public and 61 private was gathered and optimally utilized in the process of developing upcoming MSDS in line with the scope of services at each level and type of HCE. Keeping in view the ground realities, these MSDS have been kept dynamic for incorporating improvement on as and when required bases.

The MSDS for BHUs were therefore, developed keeping in view the scope of services generally applicable to this level and in line with the essential package of health services (EPHS) prescribed by the government for these HCEs. The enhanced scope of activities introduced by the government for the suitable BHUs to function on 24/7 bases for providing improved maternal and neonatal care was duly considered while developing the set of MSDS for BHUs.

The draft so developed was later shared with a larger group of stakeholders mainly the experts from the medical fraternity involved in providing services at primary and secondary level healthcare, and those managing the system on ground to ensure wider ownership before presenting for scrutiny to the Technical Advisory Committee (TAC) and for approval by the Board of Commissioners (BOC) of PHC and the Government of the Punjab.

1.3 MSDS and Indicators for BHUs (Cat-III HCEs)

The PHC is pleased to present the MSDS for BHUs (Cat-III HCEs) comprising **24** standards and **75** indicators, organized in **10** universally accepted functional areas relevant to such services. The document has been finalized by the PHC team of experts in thorough consultations with the stakeholders. Compliance to the applicable standards on the basis of the declared / given scope of services offered at a particular BHU would be required to qualify for the regular license from the PHC and the standards or indicators that are not applicable to a particular HCE would be excluded during the assessment process.

In order to facilitate the BHU staff in implementing the MSDS and the experts in assessment of the compliance a uniform color coding scheme has been introduced. The indicators marked red **(48)** required full compliance and have been ascribed **100%** weightage while in the case of indicators coded as yellow **(27)** a partial compliance at least to the extent of **80%** is acceptable and accordingly have been ascribed **80%** weight-age in terms of qualifying for a license from PHC. It is however, highly desirable to achieve **100%** scoring in all areas as these are already the minimum service delivery standards.

PART

2

Standards & Indicators

2. Standards and Indicators

2.1 Responsibilities of Management (ROM)

Standard 1. ROM-1: BHU is identifiable as an entity and easily accessible.

Indicators (1-2):

Ind 1. **The BHU is identiLable with name, and PHC registration / license number on sign board/s.**

Survey Process:
The indicator requires that any one approaching the BHU is able to locate it with the help of direction/ sign board(s2) with the name of the BHU and the Registration/License number3 (as applicable) issued by PHC clearly written on the board/s. Surveyor is required to assess this indicator while approaching the BHU from a distance of about 30-40 Meters[4].

Scoring:
- If there is a direction / sign board(s) with clearly written name of the BHU and the PHC Registration / License number , then score as **fully met** OR If there is a main direction / sign board(s) with clearly written name of the BHU and the PHC Registration / License number displayed on a board inside[5] the BHU, then also score as **fully met.**
- If there is no direction / sign board or there are non-conformities to above, then score as **not met.**

Ind 2. **Location of the BHU is easily accessible to the people.**

Survey Process:
Surveyors should ascertain that the location of the BHU is easily accessible to the patient. Main entrance is free from encroachment as far as possible[6] and preferably has separate IN and OUT gates[7] to facilitate smooth access to the Ambulances/Transport/Fire Fighting Vehicles. The entrance of the HCE should also provide an easy access to the old and disabled people with a RAMP or stairs.

Scoring:
- If the location of the BHU is accessible as described above, then score as **fully met.**
- If the location of the BHU is not easily accessible as above but there are visible efforts by the management to improve the situation, then score as **partially met.**
- If the location of the BHU is not easily accessible to a common patient/in emergency and there are no efforts on record by the management to improve the situation, then score as **not met.**

2- Registration/license number can be on the main sign board or on separate smaller board or Plate as considered feasible and the detailed list of services as per Essential Primary Healthcare Services of the Health Department is prominently displayed inside the BHU.
3- Under Section 13 of PHC ACT 2010 all HCEs are required to get registered with the PHC.
4- Minimum 3x4 ft. size of the board is recommended.
5- Relaxation in terms of displaying PHC Registration/License number on the main sign board is for initial ONE year.
6- A BHU should preferably be located in an area having easy access. The District Health Administration will be responsible to coordinate in writing with the relevant authorities to keep the approach road/gate cleared.
7- All new constructions/conversions will be responsible to cater for this requirement.

Standard 2. ROM-2: The Staff on duty is identifiable

Indicators (3-4):

Ind 3. **Door plates at offices/rooms clearly display name, qualification(s), designation(s) of the staff [8]on duty, as well as the pertinent services.**

Survey Process:

Observe the placement of the door-plate(s), qualification(s)and designation(s) of the staff, as well as the door-plates indicating the designated service areas and conformity of the text on the plates with the prescribed / ethical guidelines. It generally requires that the name, designation, authorized qualification(s)in full or with permissible abbreviations and the door plates indicating service areas/sections as the case may be, are written clearly.

Scoring:

- If all the door-plates are according to the above, then score as **fully met.**
- If about 80% of the door-plates are present and display full information as above, then score as **partially met.**
- If less than 80% of the door-plates exist/display full information as above, then score as **not met.**

Ind 4. **The staff on duty uses the provided identity badge[9]**

Survey Process:

The essence of the indicator is to ascertain that every employee of the BHU10who is on duty can be identified by means of official identity badge with clearly written name and designation, duly signed & stamped by the issuing authority11.

Scoring:

- If the staff is using an identification badge which clearly identities the BHU staff as above, then score as **fully met.**
- If the authorized identification badge is not in use or there are non-conformities to above, then score as **not met.**

8- Medical OfGcer, Health Technician, SH&NS, LHV, Dispenser, Midwife, Vaccinator, CDC Supervisor etc., posted at the BHU duly supported by BHUs noti cations / duty roaster/daily orders.

9- Means a full identity card with photo and signatures to be issued by the designated / authorized Of cer of the District Health Department.

10- Photograph on the identity badge is optional for the female staff who may not like their photos to be displayed and in such case a modi ed system having designation on the badge may be suf cient.

11- EDO (H)/DOH/DDOH.

Standard 3. ROM-3: The responsibilities of all the sta ffarre de n .

Indicators (5-10):

Ind 5. In-charge displays the organogram of BHU.

Survey Process:
The indicator requires displaying the organogram of the BHU on a notice board or a chart. The surveyor should review the notice board / chart that displays organizational structure of the BHU prominently depicting the static and outreached services.

Scoring:
- If the notice board /chart depicts the organogram indicating all the static and outreach services then score as **fully met.**
- If not as above, then score as **not met.**

Ind 6. In-charge displays sanctioned vs \lled posts of BHU.

Survey Process:
Review the notice board / chart that depicts the status of sanctioned vs filled positions of static and outreach staff at the BHU in terms of the approved yard stick.

Scoring:
- If all the sanctioned vs filled positions are displayed and updated then score as **fully met.**
- If not as above, then score as **not met.**

Ind 7. There are arrangements for monitoring the attendance, presence and punctuality of the staff.

Survey Process:
The intent of this indicator is to ensure that once the staff marks their attendance, then they are not permitted to leave the place of duty without taking permission so that management is able to make some other staff responsible for leaving persons job. This is done by first taking permission and then entering the details into the movement register which is then signed by the leave sanctioning authority/in charge.

Scoring:
- If the movement register is maintained as above, then score as **fully met.**
- If the movement register is not maintained as above, then score as **not met.**

Ind 8. The BHU's mission statement is displayed.

Survey Process:
Observe that the mission statement developed and approved by the appropriate authority is displayed and it correlates with the scope of services. Interview the key staff members if they are aware of their mission.

Scoring:

- If the mission statement is displayed and key staff members are aware of the mission, then score as **fully met.**
- If there is no mission statement, or if the staff is not aware of it, then score as **not met.**

Ind 9. BHU in-charge is responsible to monitor and measure the performance of the BHU against the given targets.

Survey Process:

There should be objective indicators that allow monitoring of progress toward meeting the BHU's targets set by the relevant supervisory tiers and the BHU in-charge monitors the performance accordingly. Review DHIS record, monthly reports and minutes of prescribed meetings.

Scoring:

- If there is documented evidence of monitoring the progress toward the BHUs given targets, then score as **fully met.**
- If there is no documentation, then score as **not met.**

Ind 10. The BHU staff addresses the BHU's social and community responsibilities.

Survey Process:

Look for documents that demonstrate that the BHU staff is aware and has shown sensitivity towards its community's healthcare needs as per the scope of services. Also look for mandatory as well as voluntary out-reach activities catering for community's health needs such as Health Education Sessions, health awareness campaigns, routine and special Immunization campaigns, School Health Services, and providing aid to people hit by calamities/epidemics etc.

Scoring:

- If there is documented evidence that the BHU is responding to the social and community needs mentioned as above, then score as **fully met.**
- If there is no evidence of compliance, then score as **not met.**

Standard 4. ROM-4: BHU premises support the scope of work / services.

Indicators (11-13):

Ind 11. The BHU space is in accordance with the minimum requirement[12].

Survey Process:

Observe that the clinical and non-clinical areas have space sufficient to cater for the minimum requirements and to allow performing the functions related to patient care and support services. The space allows comfortable sitting and movement for patients and the staff between various areas13. Observe availability of residential area for the essential staff that support the scope of work.

Scoring:

- If the BHU has well demarcated portions to cater for the portrayed clinical and related support services and there is residential area for the essential staff, then score as **fully met.**
- If the BHU has well demarcated portions to cater for the portrayed clinical and related support services but no residential area for the essential staff, then score as **partially met.**
- If the BHU does not have well demarcated portions to cater for the portrayed services, then score as **not met.**

Ind 12. BHU has adequate facilities and civic amenities for the comfort of the and attendants.

Survey Process:

Observe the presence of the following during survey at the BHU:

I. Intact main gate and boundary wall
II. Internal roads
III. General Cleanliness/sanitation
IV. Sitting arrangement in OPD, waiting areas for patients and attendants.
V. Alternate arrangements of electricity in all patient care areas particularly the site for handling patient and in Labor Room.
VI. Waste container /receptacle/s14.
VII. Proper ventilation.
VIII. Mosquito and fly proof(wire gauze).
IX. Clean drinking water.
X. Toilets with adequate hand washing facilities.

Scoring:

- If the BHU has facilities from I to X, then score as **fully met.**
- If at least 80% of the above requirement are fulfilled then score as **partially met**
- If more than 20% of the facilities stated at I to X are not existing, then score as **not met.**

12- As provided in the Standard Design/Blue print of the BHU by the Government {Ten kanals (45000 sq ft) including 2263 sq ft service area}.
13- Comfortable sitting may include a comfortable posture and not touching each other. Comfortable movement may include not hitting / touching each other when crossing each other. Minimum 10 patients at a time may be considered to be there in the BHU's waiting area.
14- As per EPA, Punjab Hospital Waste Management Rules 2014.

Ind 13. BHU has adequate arrangements for the privacy of patients during consultation / examination / procedures etc.

Survey Process:

Observe that arrangements for patient's privacy during consultation/examination and performing procedures are available and the privacy of the patients is respected15.It is unethical / undesirable to even take history when other unrelated persons are sitting close by and overhearing. The history taking and examination should not be visible to any unrelated person by any means.

Scoring:

- If adequate arrangements for patient's privacy during consultation/ examination/ performing procedures are available and the privacy of the patients is respected, then score as **fully met.**
- If privacy arrangements are not available, then score as **not met.**

15- Female patient and minors are not examined alone. In such an event another female should be requested to remain present. Conversation during history taking not audible and interview/examination place not visible to others not concerned. (Details to be seen in Reference Manual—during or for examination patient Consent (VCO) is obtained)

2.2 Facility Management and Safety (FMS)

Standard 5. FMS-1: The BHU in-charge is aware of and complies with the relevant regulations and bylaws.

Indicators (14-15):

Ind 14. The BHU in-charge is conversant with the relevant by-laws and regulations.

Survey Process:
Check to see that the BHU in-charge is conversant with the relevant by-laws and regulations including e safety requirements, handling of contaminated material, clean water supply, sanitation, ventilation and safe food etc.

Scoring:
- If there is clear evidence that the in-charge is conversant with the relevant by-laws and regulations etc. then score as **fully met.**
- If the in - charge is not conversant with relevant regulatory requirements, then score as **not met.**

Ind 15. The In-charge ensures implementation of these requirements.

Survey Process:
Check to see if the concerned sta ffis aware of the compliance requirements and the documentation supports implementation and that this is con rmedwith observable examples.

Scoring:
- If the concerned sta ffis aware of the requirements of prevailing by - laws and regulations and there is evidence of compliance, then score as **fully met.**
- If the concerned sta ffis aware of the requirements of prevailing by-laws and regulations but the compliance is inconsistent, then score as **partially met.**
- If the concerned sta ffis not aware of the requirements of prevailing by-laws and regulations and / or there is no compliance, then score as **not met.**

Standard 6. FMS-2: The BHU has a system for clinical and support service equipment management.

Indicators (16-16):

Ind 16. **The BHU in-charge ensures maintaining inventory, periodic inspection & service and proper functioning of equipment.**

Survey Process:
There should be a documentary evidence such as stock register/ equipment log book/lists of condemned items duly maintained and updated by the concerned sta ffshowing entries and the functional status of all available equipment. The surveyors should review the documentation.

Scoring:

- If ALL the above requirements are documented, then score as **fully met.**
- Since this is a signifcant patient safety issue, if any of the requirements are not documented, then score as **not met.**

Standard 7. FMS-3: The BHU has arrangements to cater for fie and non-f e emergencies within the facilities.

Indicators (17-19):

Ind 17. **The BHU has arrangements and provisions for i. Early detection and ii.**

Survey Process:
Review the arrangements to ensure that it addresses early detection and management in case of any e and non-e emergency. Determine by observation and interview that all the necessary arrangements are available.

Scoring:
- If the arrangement are available according to the requirements and key sta ffis aware of these arrangements, then score as **fully met.**
- If not as above, then score as **not met.**

Ind 18. **The BHU has safe exit (evacuation) arrangements in case of Wre and non-dre emergencies**

Survey Process:
Observe that the safe exit and evacuation arrangements are in place and the sta ffis aware of that.

Scoring:
- If the safe exit and evacuation arrangements are in place and the sta ffis aware of the same, then score as **fully met.**
- If the safe exit and evacuation arrangements are in place but about 20% sta ffare not aware of the same, then score as **partially met.**
- If not as above, then score as **not met.**

Ind 19. **Simulation exercise is held at least once in a year and staff members are for their role in case of such emergencies.**

Survey Process:
The idea of this indicator is to ensure control / minimize the damage to human lives and the property in case of e and non-fe emergencies. Look for documentation that simulation drills involving different areas and different sta ffhave been done at least once in the past year. The activity report should depict date, time, the sta ff involved, activities carried out, major observations and any subsequent recommendation for improvement..

Scoring:
- If the arrangement are available according to the requirements and key sta ffis aware of these arrangements, then score as **fully met.**
- If not as above, then score as **not met.**

2.3 Human Resource Management (HRM)

Standard 8. HRM-1: The staff[16] joining the BHU are oriented to the environment, respective sections and their individual jobs.

Indicators (20-22):

Ind 20. Each regular / contract based / short term employee, is appropriately oriented to the BHU's mission and goals as well as relevant section / service / program policies and procedures.

Survey Process:

There should be a process for orientation of the sta ffand should cover three areas: i. Orientation to the BHU (overall scope of services, infection control, e and general safety and CQI/QA), ii. Orientation to the assigned section /service/program, and iii. Orientation to the speci cjob. The content of each level of orientation should be written to ensure that whoever provides the orientation always covers the same topics.

Scoring:

- If there is documented orientation process covering all three areas, then score as **fully met.**
- If the orientation process covering the three areas is there but no details of what is to be covered or if it is partially conducted (two out of three areas), then score as **partially met.**
- If there is no orientation process, then score as **not met.**

Ind 21. Each regular / contract based/ short term employee is made aware of their Job Description.

Survey Process:

The spirit of the indicator is to stress upon the importance of developing and enforcing the post speciQcjob descriptions (JDs) of all the employees for performing the assigned duties effectively. Each individual employee should be provided detailed Job descriptions and made fully aware of requirements given therein. The record should bear the signatures of the employees certifying that it has been read and fully understood.

Scoring:

- If the JDs are available and signed by all employees17, then score as **fully met.**
- If the JDs are available but not signed by any one employee, then score as **not met.**

16- Staff include all full time/regular/short term employees or staff members.

17- The Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff 2008-09 developed by the PDSSP and noti ed by the Government of the Punjab may be taken as a guideline and may be adapted as per requirement for developing JDs of all employees.

Ind 22. Each regular / contract based / part time employee is made aware of his / her rights / responsibilities and patient's rights / responsibilities.

Survey Process:
This standard requires that written job description (JDs)18of each sta ffmember points to his/her responsibilities towards patients and others as well as his / her rights. Sta ffmember's rights are detailed in the employee's JDs or other such documentation. The rights and responsibilities of the patients are available as Patient Charters and HCE's Charters. There should exist an evidence that each employee has been provided orientation to make him / her aware of the same.

Scoring:
- If there is evidence of orientation of each sta ffmember as above, then score as **fully met.**
- If evidence of orientation of any of the sta ffmember as above does not exists, then score as **not met.**

18- Job descriptions as in Ind. 27 and 28 to include responsibilities particularly towards patients and the HCEs

Standard 9. HRM-2: An appraisal system for evaluating the performance of the employees existing at BHU.

Indicators (23-23):

Ind 23. **Performance appraisal is carried out at pre-de ned intervals and is regularly documented in their les.**

Survey Process:

The Administrative Department has de nedthe system and the frequency of performance appraisals of the staff. Customarily this is carried out annually for all employees. The surveyors should ascertain two things: i. Is the BHU in-charge/sta ffaware about the system of appraisal and the frequency of appraisal deMne by the Department and ii. What percent of employees have had their appraisal on time. It is common that a BHU in-charge / sta ffis aware of the schedule for periodic appraisals, but does not follow it consistently. Select a representative sample of the record and determine if the performance appraisal was carried out and if it was done “on time”.

Scoring:

- If the in-charge /sta ffis aware of the de nefrequency of employees’ appraisal and appraisals are carried out timely, then score as **fully met.**
- If the frequency of employees’ appraisal is de ned and thee is evidence that appraisals of more than 80% employees have been completed timely, then score as **partially met.**
- If appraisal of more than 20% sta ffare still pending, then score as **not met.**

Standard 10. HRM-3: There is a documented personnel record for each staff member and process for verification of credentials.

Indicators (24-25):

Ind 24. **The employees' record/information regarding posting, quali cation / education, in-service training, disciplinary background, job description, performance appraisal and health status is maintained at the BHU.**

Survey Process:

Although the personal lesof the sta ffemployed at the BHU are maintained at the district level in the office of the DOH / EDO (H), some personal information about the employees is also required to be maintained at the BHU. This may include the employee's posting orders and information regarding quali cation/ education, in-service training, disciplinary background, record of performance appraisal as applicable, health status and job description. Randomly select representative sample of employees (either from a list of all employees, or by name of the personnel identi edduring visits to different sections of the BHU). Then determine if personal record of all of them are maintained and are available.

Scoring:

- If the record regarding all the above mentioned information is maintained at the BHU, then score as **fully met.**
- If the record is not complete or any ledoes not contain all the required information, then score as **not met.**

Ind 25. **There is an evidence of veri cation of the credentials (education, registration, training and experience) of medical professionals including doctors and paramedics permitted to provide patient care without supervision.**

Survey Process:

Only medical professionals permitted by law, regulation and the noti cationof the health department are authorized to provide patient care without supervision as per the job description. The EDO (H) /DOH office has to ensure that the medical sta ffposted at the BHU has the appropriate and required qualiRcatio and documents demonstrating their legal permit to care for the patients. The EDO (H)/DOH office has a process to ensure validation of the accuracy of these documents (there are multiple examples locally as well as internationally of fraudulent credentials). The EDO (H) /DOH office has to ensure that the documents are v veriSed from the primary source – such as the university or the training organization either by itself or by the Health Department and all professionals are currently registered with their respective councils etc. The evidence in this regard is to be kept at the BHU also.

Scoring:

- If there is an evidence that the credentials of all sta ffmembers have been duly vveriS , by the relevant authority then score as **fully met.**
- If there is no evidence regarding validation of the credentials, then score as **not met.**

2.4 Information Management Systems (IMS)

Standard 11. IMS-1: The BHU has a complete and accurate medical record of every patient/client.

Indicators (26-32):

Ind 26. Every medical record has a Unique Number/IdentiVer.[19]

Survey Process:
The requirement of the indicator is to allocate a unique identiVcation number to the record of each patient/client. The record of the patient/client can be traced through this number even if BHU is using different numbers for different services e.g. immunization, antenatal care (ANC), outpatient department (OPD) etc. Surveyor needs to identify that medical record each patient/client has a unique identiUe.

Scoring:
- If there is a clear mechanism to positively identify each patient/client record, then score as **fully met.**
- If not as above, then score as **not met.**

Ind 27. Only authorized person/s make entries in the record.

Survey Process:
The BHU in-charge will assign the task of maintaining record to the concerned sta ffaccording to their job description as per policy and authorization by Health Department. Name and designation of the doctor/healthcare provider writing the prescriptions and the person making entries in other record must be mentioned therein, in pen or by stamp and signed20.

Scoring:
- If the person writing prescription or maintaining patient records can be identi edby name and designation from the record checked, then score as **fully met.**
- If the person writing prescription or maintaining patient records can be identi edas above in 80% of the record checked, then score as **partially met.**
- If the person writing prescription or maintaining patient records can be identi edas above but in less than 80% of the record checked, then score as **not met.**

Ind 28. Every record entry is legible, dated, timed and signed.

Survey Process:
This is a difficult standard to meet since the timing of all entries especially in the OPD and preventive services record may be difficult to achieve. However all entries in the record are required to be legible, dated and signed by the authorized person making the entries. Check the entries in the record of OPD, anti-natal, vaccination, preventive programs and the expense register etc. for the last one quarter.

19- An alpha/numeric system that gives each patient their own code number

20- Doctor in-charge of the BHU himself; such as "The person responsible to prescribe medications & advise the proper use of medication, dosage, etc." uses stamp under signatures. The LHV has to ll the record of relevant section/ registers, the Vaccinator record related to immunization and the Dispenser has to write expense of medicines/ store items. Details are given in the Reference Manual.

Scoring:

- If all entries are legible, dated, timed and signed then score as **fully met.**
- If all entries are legible, dated and signed but not timed, then score as **partially met.**
- If any entry is not legible, dated or signed then, score as **not met.**

Ind 29. The record contains information regarding patient/client identity, presenting complaints, diagnosis, action taken and details if shifted[21]/referred/died as the case may be.

Survey Process:

Review DHIS registers and record of other preventive services in order to ensure compliance of record keeping regarding patient/client identity, presenting complaints, provisional diagnosis, action taken and details if shifted /referred to other facility /died as the case may be. Record should be accurate, legible, and complete in all respect.

Scoring:

- If all the required elements mentioned above are documented in all the records, then score as **fully met.**
- If any of the required elements is missing in any record, then score as **not met.**

Ind 30. Weekly reports of notiUable/Vaccine Preventable Diseases are submitted regularly

Survey Process:

Review OPD registers and record/report of other preventive services in order to ascertain compliance regarding noti ableand vaccine preventable diseases (VPDs) as noti e by the department from time to time. Even if no case is registered/recorded during the week, Zero reporting for VPDs is required to be submitted by the in-charge. Copies of the same should be available at the BHU record.

Scoring:

- If weekly reports for notiOableand VPDs are prepared & submitted regularly as per BHU record, then score as **fully met.**
- If any report is missing in record, then score as **not met.**

Ind 31. Monthly DHIS reports are submitted regularly.

Survey Process:

Review BHU record/reports in order to ascertain compliance regarding submission of monthly reports under District Health Information System (DHIS) as per requirement of the department. Record/ copies of the monthly reports must be available for each month at the BHU.

Scoring:

- If the BHU record shows that the monthly DHIS reports are prepared & submitted regularly, then score as **fully met.**
- If report for any month is missing in record, then score as **not met.**

21- Ask for the medical record of 3 or more patients who were transferred to another health facility /HCE. The date of shifting, the reason for the shifting and the name of the receiving HCE is recorded.

Ind 32. The medical records are reviewed regularly/periodically.

Survey Process:

The in-charge BHU should ensure regular periodic review of the representative sample of the record pertaining to the curative and different preventive services in order to identify any de ciey / error in record keeping. The review should focus on accuracy, legibility, timeliness and completeness of the record by different service providers and duly documented by putting date of review and signatures on the margin of the reviewed record or by keeping formal minutes.

Scoring:

- If the BHU has a record of review process and a schedule complying the above, then score as **fully met.**
- If the BHU has a record of review process, but it is inconsistent, then score as **partially met.**
- If the BHU does not have a medical record review process, then score as **not met.**

2.5 Quality Assurance (QA) / Quality Improvement (QI)

Standard 12. QA-1: The BHU has Quality Assurance / Improvement system in place.

Indicators (33-33):

Ind 33. **A quality assurance and internal monitoring system is in place.**

Survey Process:

This indicator is to ensure that activities performed by the sta ffand the services/ facilities portrayed to be provided are delivered to the patients according to the minimum required standards and as per the portrayal. The BHU in-charge should use a prescribed checklist to periodically monitor the performance of static and outreach sta ffand assess how the patients are being received and managed. He should also check that the facilities for the comfort of patients like sitting arrangements, drinking water, ventilation etc., are intact. He/she shall assure quality of services through prescheduled monitoring by using checklist to ascertain that the services provided at the BHU conform to the minimum standards. The Fndingsof the monitoring shall be compiled on weekly/monthly/yearly basis as the case may be, and corrective actions taken/ recommended and documented accordingly.

Scoring:

- If there is a written record of periodical monitoring using prescribed checklist as per given schedule and corrective actions taken/ recommended are documented then score as **fully met.**
- If there is no record, then score as **not met.**

Standard 13. QA-2: Sentinel events are assessed and managed.

Indicators (34-35):

Ind 34. The BHU has de ned sentinel events.

Survey Process:

Review the written de nition of a sentinel e ent and the list of likely sentinel events, which should include at least: i. All unexpected deaths including infants and mothers, ii. Serious adverse patient events that caused, or could have caused, harm to the patient, e.g. wrong patient, wrong-site, wrong-procedure, medication error, iii. Patient violence against staff, iv. Violence against patients, and v. Infant abduction etc. and the possible preventive strategies. Although not speci callyrequired, it is good practice to also include near misses.

Scoring:

- If there is a list of deJnedsentinel events with possible preventive strategies/actions, then score as **fully met.**
- If the above is not there, then score as **not met.**

Ind 35. Sentinel events are intensively analysed when they occur.

Survey Process:

Ask for any documentation of analysis of any sentinel event that has occurred in the past 12 months. (It is highly unlikely that none have occurred). If none were reported, the surveyors should explore the reporting process. Determine the corrective actions taken as a result of the analysis.

Scoring:

- If there was a reported sentinel event and it was intensively analyzed, including corrective action to prevent or reduce the likelihood of reoccurrence, then score as **fully met** OR If no sentinel event was reported, but if one would have occurred it would have been reported and analyzed, then also score as **fully met.**
- If there was a sentinel event, but there was either no analysis or the analysis was super cial such as limited to assigning blame to an individual, then score as **not met.**

2.6 Access, Assessment, and Continuity of Care (AAC)

Standard 14. AAC-1: Services are provided as portrayed.

Indicators (36-36):

Ind 36. **The services being provided at the BHU are displayed.**

Survey Process:

This will require knowledge of the scope of services provided at the BHU and observation of the provision of displayed services both, on and o ffsite. The Menu board should clearly display the scope of services as per the Essential Package of Health Services (EPHS) noti edby the Health Department22 which the patient should expect from a BHU.

BHUs being primary health care centers should be providing preventive and promotive services including Health Education, MCH Services, Immunization, Nutrition, Control of Communicable Diseases, Sanitation etc., besides OPD based curative care regarding treatment of minor illnesses, conducting normal deliveries and provision of drugs included in the level speci cessential drug list (EDL).

Scoring:

- If the displayed services match the services being actually delivered, then score as **fully met**
- If there is super uous / misleading inormation or no information about the scope of services is displayed, then score as **not met.**

22- An example/format provided in the Reference Manual.

Standard 15. AAC-2: The HCE has a well-established Patient Management System.

Indicators (37-40):

Ind 37. There is a well-established registration and guidance process.

Survey Process:

Observe as well as check from the record that there is a well-established patient registration and guidance23 process with written SOPs to cater for the needs of the patients. Patients should be able to access the reception desk comfortably and the reception sta ffis to be polite and guide the patients to the healthcare service provider as per SOPs where they are examined, assessed and managed or are explained such other requirements.

Scoring:

- If there are written SOPs for registration and guidance of patients and same are practiced, then score as **fully met.**
- If there are non-conformances to the above then, score as **not met.**

Ind 38. There is a well-established patient assessment process.

Survey Process:

Observe and check the records if patients are assessed by the doctor / designated healthcare services provider by documenting the presenting complaints, signs, symptoms, provisional diagnosis and relevant diagnostic evaluations24, where applicable with the objective of providing quality care at outdoor or for referral within the facility or outside the facility, in accordance with the prescribed Code of Ethics25.Check documented evidence by reviewing the record of few patients or by observation while the patients are being examined.

Scoring:

- If all checked records of the patients show documentation of patient's assessments according to the above, then score as **fully met.**
- If less than 20% of the record is deTcienton the above, then score as **partially met.**
- If the record shows more than 20% de cieny on the above, then score as **not met.**

Ind 39. Health Education is provided as per guidelines.

Survey Process:

The surveyors are required to look for the display of relevant health educational messages on prevention of disease and promotion of health. The surveyors should also see that the information, education & communication (IEC) material / written instructions are available and are delivered to the patients by the care provider at health facility as applicable.

Scoring:

- If there is a display of relevant health educational messages and IEC material is available and consistent evidence that patients are guided on it, then score as **fully met.**

23- Disposal means directing/guiding the patients regarding further actions in connection with their medical needs and its management i.e. OPD or Laboratory or medical store/dispensary etc.
24- Clinical Methodology to be adopted while examining the patients. Records must be completed once the examination/emergency is over.
25- Available at the PM&DC website.

- If there is a display of relevant health educational messages/IEC material but inconsistent evidence that patients are guided on it, then score as **partially met.**
- If there is neither display of relevant health educational messages/IEC material nor any evidence that patients are guided on it, then score as **not met.**

Ind 40. The Preventive Services are provided as per guidelines[26].

Survey Process:

The surveyors are required to look for the display of list of preventive services like Immunization, Family Planning, Health Education, Nutrition, TB DOTS, Malaria Control etc. being provided. The specialized preventive services if being provided should conform to the guidelines prescribed under the relevant program.

Scoring:

- If the services being provided are displayed and the services being provided conform to the prescribed guidelines, then score as **fully met.**
- If the services being provided are not displayed or if the display is not complete but the services being provided conform to the guidelines prescribed by the programs then score as **partially met.**
- If there is no display of services being provided and any one of the services being provided does not conform to the prescribed guidelines, then score as **not met.**

26- Applicable only when portrayed.

2.7 Care of Patients (COP)

Standard 16. COP-1: Essential arrangements for emergency care exist.

Indicators (41-46):

Ind 41. The BHU has essential arrangements to cater for emergency care.

Survey Process:
Check for the availability of list of emergencies portrayed to be managed and the required arrangements to cater for emergency care i.e. SOPs, guidelines & emergency / rstaid kits27etc.

Scoring:
- If BHU has arrangements to manage the portrayed/listed emergencies, then score as **fully met.**
- If there is any de cien y in the arrangements described above, then score as **not met.**

Ind 42. Emergency services also address handling of medico-legal cases.

Survey Process:
As per the system notiOedand currently practiced by the Health Department regarding Medico legal reporting/ certi cation,BHUs do not issue medico legal reports. However, in view of the provisions of the **Injured Persons (Medical Aid) Act 2004,** the SOPs should deVnehow rsaid will be provided to medico-legal cases and also de nethe referral path for such cases. The sta ffshould also be conversant with the medico legal reporting system and SOPs noti edby the Health Department. Surveyors should review the record of reported cases, as well as interview the sta ffto assess how such cases have been managed.

Scoring:
- If there are SOPs that deBnewhat types of cases are medico-legal and how to handle/refer such cases, then score as **fully met.**
- Since this is a legal requirement, if there are no SOPs, then score as **not met.**

Ind 43. The BHU has referral SOPs.

Survey Process:
Check the availability and practice of written standard operating procedures (SOPs) for safe and speedy transfer of patients/victims in emergency which describe (i) Whom to be referred and (ii) how a patient is guided to be cared, during transportation and there is no confusion and delay in taking over at the receiving facility.

Scoring:
- If the BHU maintains and practices the Referral SOPs as described above, then score as **fully met.**
- If the BHU does not maintain or practice the Referral SOPs as described above, then score as **Not met.**

27- List of Standard First Aid Kits/boxes/trays/trollies with guidelines/SOPs and listing of the types of emergencies portrayed to be managed as the case may be are to be maintained. Arrangements to manage; 1. Respiratory distress, 2. Anaphylactic shock, 3. Control of bleeding and 4. Splinting of fractures of at least ten patients each at a time should be available at the BHU. Additional portrayal will be checked accordingly as an optional binding of the service provider.

Ind 44. The BHU has list of contact numbers of the referral facilities, medico legal authorities, concerned police stations, Ambulance/Rescue Services and the Social Service Organistaions

Survey Process:
Check the availability of list of different referral hospitals /centers with their contact numbers for transfer of patients/victims in emergency to obviate confusion and delay in transfers. The BHU should also maintain the address and contact numbers of medico legal authorities, concerned police stations, ambulance / Rescue services and social service organizations.

Scoring:
- If the BHU maintains the list with contact numbers as described above, then score as **fully met.**
- If the BHU does not maintain the list with contact numbers as described above, then score as **not met.**

Ind 45. Discharge to home or transfer to another HCE/organization is documented.

Survey Process:
Review relevant medical records/registers or any other documentation (emergency services log book) of patients who were provided emergency service. Observe the records and determine the discharge process. Review the advice and information provided to the patient or referral facility and determine if it is adequate to ensure support, recovery and continuity of care and follow-up treatment that is clinically required.

Scoring:
- If this is 100 percent documented, then score as **fully met.**
- If only up to 20% cases fail to meet this requirement, then score as **partially met.**
- If more than 20% of the cases reviewed do not document this, then score as **not met.**

Ind 46. The Policy regarding home visit/ domiciliary services is portrayed and accordingly practiced.

Survey Process:
As per policy of the Health Department, some of the sta ffposted at the BHUs is required to carry out home visits to provide domiciliary care to the people in the catchment area particularly related to the Mother & Child Health (MCH). The objective of this indicator is to see whether the policy regarding home visits /domiciliary care is displayed and practiced or not.

Scoring:
- If the BHU portrays provision of home based/ domiciliary care and the same is practiced, then score as **fully met.**
- If the BHU does not portray provision of home based care but arrangements for the same exist, then score as **partially met.**
- If the BHU portrays provision of home based care but the same is not practiced or arrangements for the same do not exist, then score as **not met.**

Standard 17. COP-2: Policies and procedures guide the care of obstetrical patients.

Indicators (47-51):

Ind 47. **The BHU de nes and displays the type of obstetric cases along with their neonates that can be cared for or not; and also displays deUnition of the high risk obstetric cases with referral guidelines.**

Survey Process:

Since many obstetric patients /clients will not be aware of whether they are high risk or not, it is important that the BHU staff informs its obstetrical patients about the deenition of high risk cases and its capability/competence to provide services for such cases and their neonates. The second important issue is that the BHU should inform those practitioners/CMWs / LHWs and the health facilities which might refer such patients, about the BHU's capability to provide care to obstetric cases and their neonates. There must be documentation of this information such as letters to referring practitioners and meetings with CMWs/LHWs. BHU must provide information to its own obstetric patients regarding availability of facilities and competent sta ffas per prevailing policy of the Government28--29regarding the care BHU can provide to the obstetric cases.

Scoring:

- If the BHU has informed its own obstetric patients and its referring practitioners/CMWs / LHWs about the type of obstetric cases it is capable to care for then score as **fully met.**
- If the BHU has informed its own patients, but not the referring practitioners/CMWs / LHWs, then score as **partially met.**
- If the BHU has neither informed its own patients nor referring practitioners/CMWs / LHWs, then score as **not met.**

Ind 48. **Staff caring for obstetric cases is competent and available.**

Survey Process:

Surveyors should look for the availability of arrangements for obstetrical care services30 relevant to the scope of work of the BHU and the sta ffwho are accordingly quali e and trained in obstetrics care and having documented experience. In addition, there should be evidence that the assisting sta ffhas also documented experience in handling such cases under supervision31.

Scoring:

- If the sta ffis competent and available as per working hours prescribed by the policy of the Government regarding BHUs to provide care to obstetric patients then score as **fully met.**
- If not as above, then score as **not met.**

28- Availability of 24 hours/day, 7 days/week coverage by the staff who are fully quali ed trained in obstetric care and who have advanced training in high-risk obstetrics and documented experience at the HCEs which function round the clock and 7 days a week. In addition, there should be evidence that the support staff who care for such patients have advanced training quali cations and documented experience where applicable.

29- Dissemination of information contrary to availability of required services is equally important.

30- There should be on call arrangement of Key staff members after the working hours at HCEs which function round the clock and 7 days a week.

31- Quali4cation and experience as per the JDs for ALL clinical staff in the Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff, developed under the Punjab Devolved Social Sector Services Program (PDSSP), and noti ed by the Health Department Government of Punjab, 2008-09. R elevant JDs are added as Part-4 in this document.

Ind 49. **Obstetric patients / clients and children under ve are also assessed for nutritional status.**

Survey Process:
This will be assessed by reviewing the record (Antenatal /Obstetric register/ Child Health Register/ growth monitoring card and prescription etc.) of the obstetric patients / clients and children under Oe visiting at BHU for seeking health care.

Scoring:
- If all records document assessment of nutritional status of the obstetric patients / clients and children under e including corrective measures/advice (if needed), then score as **fully met.**
- If all records document assessment of nutritional status of the obstetric patients / clients and children under e but corrective measures/advice is inconsistent then score as **partially met.**
- If not as above, then score as **not met.**

Ind 50. **The BHU caring for obstetric cases has the facilities and technically competent staff to take care of neonates of such cases.**

Survey Process:
Relevant to the scope of services to be provided at the BHU, technically competent sta ffwith the following minimum supplies should be present in order to resuscitate neonates of such cases: i. Ambu bag with ii. Appropriate neonatal size oxygen masks, iii. An oxygen cylinder iv. Bulb sucker/suction machine v. Emergency neonatal resuscitation drugs etc. for use by the sta fflegally competent to prescribe.

Scoring:
- If all the above listed requirements are present in good working order and sta ffis competent to provide care, then score as **fully met.**
- If any of the above is not available, then score as **not met.**

Ind 51. **No treatment is administered until the identity of the patient is guaranteed.**

Survey Process:
The surveyor should look for a system32of safe patient identi cationand ccon r that the administration of all treatments and therapies are preceded by con rmingthe identity of the patient.

Scoring:
- If the identi cationof the patient is clearly observable for all patients and sta ffc con identity accordingly, then score as **fully met.**
- If there is no system in practice to con rm identi cationthen score as **not met.**

32- For all patients the system employed must be permanently with the patient and fail-safe.

2.8 Management of Medications (MOM) / Dispensing

Standard 18. MOM-1: Policies and procedures exist for the prescription of medications.

Indicators (52-54):

Ind 52. **Policy on verbal orders is documented and implemented.**

Survey Process: Interview LHV, Dispensers & other paramedics who receive verbal orders. Observe a sta ff member receiving a verbal order. The policy and practice should clearly describe the process including writing down the verbal order and reading it back to ensure that it was clearly understood by both i.e. by the person who gave the order and the person who received the order.

Scoring:

- If there is a clear policy and practice for verbal orders, then score as **fully met.**
- If there is a policy but the process is not consistently followed, then score as **partially met.**
- If there is neither a policy nor a practice to verify verbal orders then score as **not met.**

Ind 53. **The BHU should follow the prescribed policy as to who can write medication orders/ prescriptions.**

Survey Process:

The BHU should follow the policy which identi esthe healthcare service providers/sta ffwho may write medication orders in the medical record or on a prescription. However, determine if any other professionals such as LHVs, midwives, technicians are permitted to write limited medication orders to certain cases. The policy should delineate the healthcare service providing sta ffwho can prescribe restricted classes of drugs33.

Scoring:

- If the clinical sta ffmembers are fully aware of the policy regarding their authorization and limitations as to what they can prescribe and there is documented evidence that the policy regarding writing medication orders is being followed, then score as **fully met.**
- If there is evidence of any confusion or the policy is not clear about who (which professionals) is permitted to order or prescribe medication, then score as **not met.**

Ind 54. **Prescriptions are clear, legible, dated, timed, named / stamped and signed.**

Survey Process: Surveyors are required to check that the prescriptions are legible, dated, timed, named, and signed by the doctor. Names of the medicines (trade or generic) are clearly written and there is no coding.

Scoring:

- If representative sample of prescriptions are as described above, then score as **fully met.**
- If only up to 20% prescriptions are not as above, then score as **partially met.**
- If more than 20% prescriptions are not as above, then score as **not met.**

33- Example – chemotherapy, opiates, digoxin or thyroxin, steroids and antibiotics, or very expensive drugs or unlicensed drugs administered as part of some research program.

Standard 19. MOM-2: Policies and procedures guide the safe storage and dispensing of medications.

Indicators (55-61):

Ind 55. **The BHU has the list of Essential Drugs to treat common diseases, as deUned and noti ed by the Government.**

Survey Process:
Review the list de ningthe medicines to treat common diseases. The updated list duly approved and noti ed by the government must be readily available to staff.

Scoring:
- If the BHU has the list of medicines as described above, then score as **fully met.**
- If the BHU has the Essential Drug List (EDL) list of medicines as described above but it is not updated, then score as **partially met.**
- If the BHU does not have list of medicines (EDL) as described above, then score as **not met.**

Ind 56. **The BHU maintains appropriate stock of Essential Drugs to treat common diseases.**

Survey Process: Review the stock of the medicines to treat common diseases which must be readily available to staff. The buffer stock level of each medicine should not fall below a certain level at all times which is usually sufficient for three months.

Scoring:
- If the BHU maintains stock of medicines as described above, then score as **fully met.**
- If the BHU has a de cientstock of medicines but the de cie y is not more than 20%, then score as **partially met.**
- If the BHU has a de cientstock of medicines and the de ciey is more than 20%, then score as **not met.**

Ind 57. **The BHU de nes a list of high-risk medication.**

Survey Process:
Review the list de ning the high – risk medicin . The list must be readily available to staff. The list of high-risk medications must include at least: concentrated electrolytes such as, KCl , steroids, very high cost drugs, look alike medications, sound alike medications, tranquillizers and psychotropic drugs etc.

Scoring:
- If the BHU has de nedthe list of high-risk medications, then score as **fully met.**
- If the BHU has the list of high-risk medications, but it does not include both look alike or sound alike medications, then score as **partially met.**
- If there is no list of high-risk medications, then score as **not met.**

Ind 58. High-risk medication orders are veri ed prior to dispensing.

Survey Process:
Interview dispensing sta ffsince the safety issue is not just dispensing, but also administration.

Scoring:
- If there is a clear practice (based on interviews with dispensing staff) of verifying the order for high-risk medications, then score as **fully met.**
- If there is no formally defned process, or if there is no list of high-risk medications (Ind 56), then score as **not met.**

Ind 59. Medicines are stored as per guidelines.

Survey Process:
The guidelines for the safe storage include interalia: i. proper stacking in groups to differentiate common drugs, injections, look alike and sound alike medicines within the racks/cupboards; ii. Labelling34 . iii. Ventilation iv. Temperature & humidity control/refrigerator for sensitive drugs like vaccines/sera etc. v. Protection of high risk and narcotic drugs and vi. Record of expiry dates/ shelf life.

Scoring:
- If the medicines are stored as per above referred guidelines, then score as **fully met.**
- If implementation of parameters at serial nos. i, & iii only is inconsistent, then score as **partially met.**
- If implementation of any one of the parameters at serial nos. ii, iv, v & vi is inconsistent then score as **not met**.

Ind 60. Expiry dates/shelf life is monitored and checked prior to dispensing, as applicable

Survey Process:
Check 5 randomly selected medicines dispensed or to be dispensed. Verify that the medicines are within the expiry date printed on the label as per Drug Act/Rules.

Scoring:
- If all 5 randomly selected medicines dispensed or to be dispensed are within the expiry date, then score as **fully met.**
- If any of randomly selected medicines dispensed or to be dispensed are not within the expiry date, then score as **not met.**

Ind 61. Medicines / drugs are dispensed as per the prescription plan[35]

Survey Process:
The essence of the indicator is that medicines prescribed by the MO/ in-charge are correctly dispensed and accordingly utilized by the patient. Observe that the dispensed medicine/s, (bottle or sachet/envelope) indicate patient name/record number, instructions to use, dosage and date of issue. Check sample of 4-6 dispensed Medications to determine how they are labeled36.

Scoring:
- If all Medications are labeled as above, then score as **fully met.**
- If all Medications are not labeled as above, then score as **not met.**

34- As per provision of the Drug Act 1976/ Drug Rules.
35- Manufacturing & Expiry dates as per provision of the Drugs Act/Rules.
36- Instructions for use on the label /pamphlet substantiated with handwritten instructions on the prescriptions/envelops which the surveyors will check.

Standard 20. MOM-3: There are defined procedures for medication administration.

Indicators (62-65):

Ind 62. Medications are administered (dispensed) by those who are permitted by law and authorized to do so.

Survey Process:
The indicator requires that the person made responsible to dispense/administer the medicines is a qualiOed and registered professional able to correctly read and identify the medicines prescribed by the doctor from those in the store/cabinet/shelf. He/she is also able to correctly distinguish look alike and sound alike medicines and to dispense/administer correctly under supervision of the authorized service provider.

Scoring:
- If the drugs are dispensed/ administered by authorized sta ffonly, then score as **fully met.**
- If there is an evidence of medication dispensed/ administered by someone not authorized to do so, then score as **not met.**

Ind 63. Patient is identiLed prior to dispensing /administration of a drug.

Survey Process:
Review the procedure. At least 2 separate identi ersfor positively identifying the patient should be used. Interview a paramedic to ndout what is practiced while dispensing/administering medication and observe how he/she identiFesthe patient. Patients should have a system of identi catiothat is reliable and is practiced at all times37.

Scoring:
- If 2 identi ersare routinely used, then score as **fully met.**
- If this practice is not uniformly followed (1 or more examples where there is failure to follow the procedure), then score as **not met.**

Ind 64. Medication is veri ed from the order prior to dispensing /administration.

Survey Process:
Observe paramedics preparing/administering medication and verify that the medication order was readily available and the medicines were checked prior to preparing the medication. He/she is able to read from prescription and veriSesdosage, route, timing, and expiry date etc. before dispensing/administering.

Scoring:
- If there is clear evidence that the orders are checked as above by name, then score as **fully met.**
- If any example of medication not being checked against the order is seen, then score as **not met.**

37- For ALL patients the system employed for identi cation must be permanently with the patient.

Ind 65. Adverse drug reaction/s (ADR) are reported.

Survey Process:
Check the SOPs regarding reporting of ADR if any occurs.

Scoring:
- If there are SOPs to follow on occurrence of ADR and they are practiced, then score as **fully met.**
- If there are no SOPs to follow on occurrence of ADR or they are not practiced, then score as **not met.**

2.9 Patient Rights and Education (PRE)

Standard 21. PRE-1: A system for obtaining consent for treatment is practiced at the BHU.

Indicators (66-68):

Ind 66 **The MO or other healthcare service provider obtains consent from a patient before examination[38].**

Survey Process:
Healthcare Providers are required to politely seek permission from the patient/relative/parents before physical examination. The verbal consent so obtained is required to be recorded in the documentation/prescription at the minimum as “VCO”. To validate the VCO the Surveyors are required to have an exit-interview of the patient who has undergone examination and also to review register/copy of prescription.

Scoring:
- If there is evidence of VCO then, then score as **fully met.**
- If there is evidence of VCO in up to 80% of cases, then score as **partially met.**
- If there is no evidence of VCO as above, then score as **not met.**

Ind 67. **The situations where Speci c Informed Consent is required are listed as per prescribed policy*.**

Survey Process:
Review the policy or list of situations where speciQcinformed consent is required. Then review medical records of representative sample of patients who should have a speciTcinformed consent to validate that it is documented. This would include consent related to procedures and therapies as well as blood transfusion (if applicable), minor surgical procedures, IUCD insertion, termination of pregnancy and high-risk medications etc.

Scoring:
- If all reviewed relevant records contain/document an informed consent, then score as **fully met.**
- Since this is also a medico-legal issue, if aby record does not contain / document informed consent, then score as **not met.**

Ind 68. **The policy to give consent when patient is incapable of independent decision-making is present and practiced.**

Survey Process:
Review the policy to determine who is authorized to give consent when the patient is incapable of independent decision making and also ascertain that the same is practiced.

Scoring:
- If there is a policy describing who, other than the patient, may give informed consent, then score as **fully met.**
- If there is no policy, then score as **not met.**

38- This is to maintain the respect, dignity and honor of the patients while examining and providing care and to comply with the Code of Ethics and the Patients Charters.

* A generic policy to be prescribed by the Health Department /District Health Administration.

Standard 22. PRE-2: Patient and families have a right to information on expected costs.

Indicators (69-70):

Ind 69. The patient/family is informed about the cost of treatment.

Survey Process:

Customarily the purchi fee is displayed or patients are informed about the OPD purchi fee / procedure at the reception desk (as applicable) and the cost list is shown if requested. The drugs available/ provided at the BHU as per the EDL are displayed so that the patient/ families know that the drugs not included in the EDL and prescribed to the patient have to be procured by them at their own cost.

Scoring:

- If there is evidence that the patients/families are informed about the treatment cost, then score as **fully met.**
- If the patients/relatives are not informed about the expected cost of treatment, then score as **not met.**

Ind 70. The charges list is available to patients.

Survey Process:

Review the charges list and then ask how it is made available to the patients. Customarily this is only upon the patient's request. However, the list may be posted in the patient waiting/ examination area. Patients should be made aware that the charges list is available on demand.

Medicines / drugs available /provided at the BHU as per EDL should be displayed so that the patients are informed that the drugs not included in the EDL have to be purchased at their own cost if prescribed.

Scoring:

- If there is evidence that the charges list is readily available to patients, then score as **fully met.**
- If there is no procedure to make it available to patients, then score as **not met.**

Standard 23. PRE-3: Patients and families have a right to refuse treatment and lodge a complaint.

Indicators (71-74):

Ind 71. Patients and families have a right to refuse the treatment

Survey Process:

Patient and families are expected to respect the instructions / medication order prescribed by the doctor. The patients however, have the right to refuse the treatment39 and seek advice from any other doctor/HCE of their choice[40] as also provided in the PHC Charters41.The treating doctor also can refuse to treat a patient under some speciFcconditions as per PM&DC Code of Ethics of Practice for Medical and Dental Practitioners. In cases where patients refuse advice, procedures or treatment, or the doctor refuses to treat a patient, it has to be recorded in the patients' record/facility record.

Scoring:

- Unless the Surveyors have a reason to believe that the above provision of the charters are not being complied with, the score should default to **fully met.**

Ind 72. HCE Charter is displayed and patients/families are guided.

Survey Process:

Surveyors are required to check that HCE Charters of Rights and Responsibilities of the patients and families are displayed at a prominent place in the BHU like waiting area or main entrance etc. Patient or families are expected to observe the social norms by waiting for their turn, avoid con ting situation, follow instructions of the doctor regarding re-visit date and time. Also observe that guidance is provided on above aspects as a routine.

Scoring:

- If the HCE Charters are displayed and there is evidence that the patients/ families are also guided to observe the same then, score as **fully met.**
- If the HCE Charter is not displayed but there is evidence that the patients/ families are guided to observe the same then, score as **partially met.**
- If neither the HCE Charter is displayed nor there is evidence that the patients / families are guided to observe the same then, score as **not met.**

Ind 73. Patients and families have a right to complain and there is a mechanism to address the grievances.

Survey Process:

Patient and families have a right to complain and put forward their grievances on the spot on occurrence, with some delay, verbally, in writing or by any other means. There should be a mechanism to handle the complaints effectively. A functional complaint box or a complaint register, availability of complaint form and Blrecord are evidence of the system being in place.

39- Provisions 12. ©, PM&DC Code of Ethics of Practice for Medical and Dental Practitioners allows refusal to treat a patient.
40- Provisions 12. (b) and 13., PM&DC Code of Ethics of Practice for Medical and Dental Practitioners allows independent additional opinions.
41- Charter attached as Annex--- Senior citizens and disabled persons be exempting from the queue

Scoring:

- If there is a display to guide the patients about their right of complaint and the system is being followed as above (including zero report recording in the register) then, score as fully met.
- If there is no display to guides the patients about their right of complaint and or the system described above is not being followed then, score as not met.

Ind 74 **The BHU in charge uses the results of complaint's investigations as part of the quality improvement process.**

Survey Process:

Review the process and documentation to identify and observe actual examples of changes in the practice and procedures that have been made as a result of the outcome of complaints analysis.

Scoring:

- If there is evidence of quality improvement process which uses complaint-handling data and reports in this regard are available, then score as **fully met.**
- If there is a quality improvement process to use complaint handling data but no evidence of how that data was used for improvement, then score as **partially met.**
- If there is no process and practice of using complaint-handling data for quality improvement, then score as **not met.**

2.10 Infection Control (IC)

Standard 24. IC-1: An infection control system is in place at the BHU.

Indicators (75-75):

Ind 75. **There are arrangement for infection control aiming at prevention and reducing risk of infections.**

Survey Process:

Observe if there are written instructions on infection control[42]) which cover at least the following aspects:

I. Maintaining general cleanliness / hygiene in the BHU premises
II. Facility of hand washing with soap and water / a disinfectant as the case may be, before and after examination/procedure
III. Facility of sterilizing of the equipment /instruments before procedures3[43]
IV. Arrangement for controlling/preventing/reducing the risk of infections during the process of patient assessment/handling including: Use of disposable gloves and mask etc. by the Doctor/Healthcare Service Provider for certain speci c onditions.[44]
V. Abiding of the instructions on infection control by the Dispenser / Medical Assistant while assisting the Doctor.
VI. Safe handling of Medical / Clinical Waste.[45]

Scoring:

- If there is evidence of observing the infection control procedures and all above mentioned aspects are covered, then score as **fully met.**
- If there are no infection control procedures to cover the aspects prescribed above, then score as **not met.**

42- Provided in Para 2.75 of Part-3.
43- All instruments etc. required/used for procedures should either be disposable and/or properly sterilized.
44- Listed/explained in the Para 2.75 of Part-3.
45- In the light of Punjab Hospital Waste Management Rules 2014 based on Environment Protection Act as applicable locally.

PART

3

Standard Operating Procedures (SOPs) Processes for Implementing

Minimum Service Delivery Standards (MSDS) for Basic Health Units (BHUs)

Standard Operating Procedures (SOPs)

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1.1 - Minimum Service Delivery Standards for BHUs:

“Minimum acceptable service delivery standards to be met when providing care at the BHUs in consonance with the Essential Package of Health Services (EPHS) are provided as Section I and Section II of this document.

1.2 - Standard Medical Protocols (SMPs)

Standard Medical Protocols (SMPs) entail the steps to be taken by a healthcare service provider during medical or surgical management of a patient. The SMPs for Primary and Secondary Healthcare developed and published by the Government of Punjab Health Department through PDSSP in 2008-09 are referred .

1.3 - Standard Operating Procedures (SOPs):

Standard Operating Procedures (SOPs) refer to the detailed description of steps required in performing a task to meet a bench mark. Therefore, this set of SOPs primarily cover the procedures and steps to be taken to ensure delivery of healthcare services at BHUs to be at least of the quality which conforms to the MSDS prescribed by the PHC for BHUs.

The SOPs basically endeavor to lay out the complete activity of a particular service/process/requirement to be achieved at a required standard. Therefore, at certain points the SOPs & Processes contain more details compared to those required to be assessed by the surveyors as provided in the Survey Process integral to the MSDS for BHUs.

Meaning thereby that the Surveyors are required to check only those points which are mentioned in the survey process to gauge the level of implementation and score accordingly. The reason of making SOPs, a section of this document, is to ensure that these reach healthcare service providers who are required to implement these in their given settings to achieve the goal of complying with the standards for delivery of healthcare services of a desired quality.

1.4 SOP FOR SECURITY AND SAFETY OF THE NEW BORN

- ☐ New born is tagged with particulars of the mother on the right wrist and,
- ☐ Particulars of the next of kin whom child may be handed over in case mother is unconscious/expires, on the left wrist.
- ☐ If possible, mother, next of kin & child are photographed together.
- ☐ Parents are instructed not to hand over the child to any unknown person for any reason what so ever.

- ☐ Patients and relatives are always welcomed and asked about what made them to visit the BHU.
- ☐ Always remain receptive to their needs.
- ☐ Evaluate condition of the patient and accord priority in case of emergency.
- ☐ No monitory bene tof any kind like tips/baksheesh/gift is received.
- ☐ All patients are treated on the basis of equity regardless of cast / creed / religion.
- ☐ Doctors, LHVs & LHWs shall impart relevant Health Education on Basic Health Problems, Family Planning, Maternal & Child Health Care, Control of Communicable Diseases and Sanitation to all the patients / parents they attend or come across by all available means.

2- Standard Operating Procedures (SOPs)

2.1 - Identi ation and Guidance to BHU.

2.1.1 Main board/s are required to be C ed on the main entry / gate/s in a way that it is clearly visible to the people from a distance to facilitate identi cation.

2.1.2 Main Board has the full name of the BHU and Registration / license number issued by PHC. (Alternatively Board bearing Registration / License no, may be C ed inside the building as an immediate arrangement during Jrstyear of implementation till it is written on the main board).

2.1.3 Road side directional board/s with arrow showing directions to BHU/ main enterance on the approach roads are ed if required/as feasible[1] .

2.1.4 Boards are periodically checked by the responsible person for wear & damages and to ensure reporting to the in charge for appropriate actions /maintenance.

2.2 - Accessibility.

2.2.1 In charge coordinates with District level health managers and other relevant authorities for maintenance of the approach road / passages to the BHU and from IN and OUT gates etc. and their clearance from encroachments (Dates and timings with name of the person with whom the in charge BHU had the meeting / telephonic or written communication).

2.2.2 In charge BHU ensures Ramp / Stairs (if applicable) remain clear of any obstruction.

2.2.3 Wheel chair / stretcher remains available at the entrance.

2.2.4 Sign Boards with Directional Arrows indicating the location of speci csections within the BHU are to be placed and maintained.

2.3 - Door Plates.

2.3.1 Door plates of a uniform pattern indicating the name/designation & authorized quali cationsof the sta ffas well as for sections/ services provided therein are affixed.

2.4 - Sta ffIdentity Badges.

2.4.1 Officially provided uniform Identity badges are to be worn by the sta ffwhen on duty.

2.4.2 Not worn when moving outside the working place for any reason & kept safely.

2.4.3 Cards are not to be interchanged.

2.4.4 Expired cards are deposited with the authorized sta fffor renewals.

1- It is very convenient to public to identify location, if two small boards showing distance in yards from the point where board are tted.

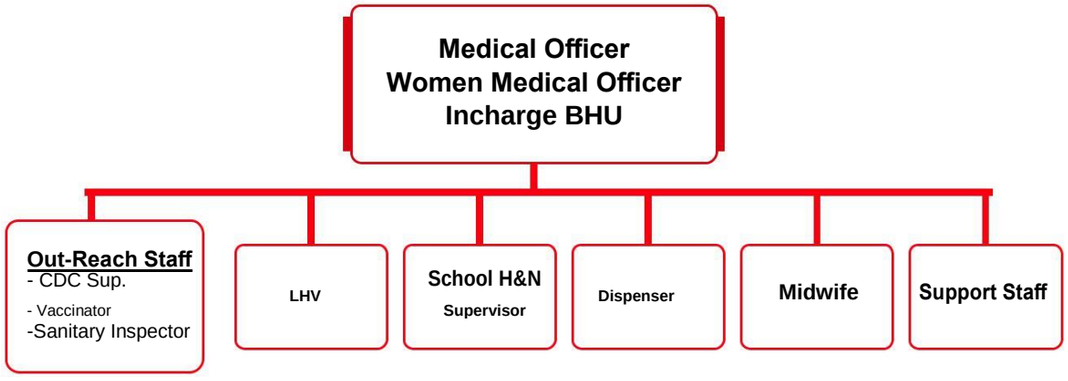
2.4.5 Cards are withdrawn and deposited on transfer/retirement/removal of the incumbent and record is maintained.

2.4.6 Retrieved ID Badges are cut into two halves and kept in safe custody till destroyed by burning in the presence of committee comprising of 3 persons including the in charge of the BHU. The Committee to sign the proceedings and made part of record.

2.4.7 Any loss of card or damage is reported to the management for required actions.

2.5 - Organogram.

2.5.1 Organogram as per the sample provided below based on the sanctioned strength is displayed on a board / Chart / pana exof suitable approved size at Reception/waiting area / In charge office):



2.5.2 The contents of the board are kept updated/revised as per Government/Health department provisions.

2.5.3 Display is maintained and revived as required.

2.5.4 In charge of the BHU is responsible to ensure the above actions.

2.6 - Display of Sanction Verses Filled Posts.

2.6.1 Sanctioned strength verses lledposts as per sample provided below is displayed on a board / Chart / PanaOexof suitable approved size at Reception/waiting area/In charge office):

Stationed verses De cie t Sta ff- BHU XYZ				
Designations	**Sanctioned**	**Posted**	**De cien y**	**Action Taken**
Medical Officer/WMO	1	1		
School Health and Nutrition Supervisor	1	1		
Computer Operator	1	1		
LHV	2	1	1	Letter written
Medical Assistant/MHT/FHT	1	1		
Sanitary Inspector	1	1		
Dispenser	1	1		
Dai/Midwife	2	1	1	
Other Support Staff	3	3		

Out Reach Staff				
CDC Supervisor	1			
EPI Vaccinator	1			
LHWs and LHW Supervisor of NP / IMNRCH CMWs	20			

2.6.2 The contents of the board are kept updated/revised as per Government/Health department provisions.

2.6.3 Display is maintained and revived as required.

2.6.4 In charge BHU is responsible to ensure the above actions.

2.7 - Sta ffAttendance.

2.7.1 All sta ffis required to report for duty on the noti time and remain on duty till the closing time.

2.7.2 All leaves are required to be availed after approval of the sanctioning authority unless there is an emerg-ency so that suitable arrangement for a reliever are made.

2.7.3 All Sta ffmarks his/her own attendance on arrival and departure in person on the attendance register or the biometric system whichever applicable.

2.7.4 On a manual attendance register, Name, Designation, arrival and departure time with signatures are affixed. Format for register is provided below;

Monthly System				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
#	Name	ID	*D	A																													
				D																													
1.																																	
2.																																	
3.																																	

*D=Designation, A= Arrival, D=Departure

Movement Register								
#	Date	Name	Designation	Reason of Movement	Time Out	Time In	Signatures	In-charge Signature
1.								
2.								

2.7.5 Register / biometric system is closed 15 minutes past the noti eddaily reporting time and attendance report / register placed before in-charge BHU for countersignatures by the person authorized to do so.

2.7.6 All late comers/absentees are documented in the record and required action is taken as per policy.

2.7.7 In case of proceeding on eldduty / meeting or a short leave, prior permission of in charge is taken and record to that effect in the movement register without any exception.

2.8 - Mission Statement.

2.8.1 The district level health management is responsible to prepare the Mission Statement in respect of the BHUs based on the overall policy and ensure its displayed accordingly.

2.8.2 Mission Statement prepared by the district level health management is provided to the BHUs officially with appropriate directions indicating their involvement in the development of mission statement.

2.8.3 Mission Statement is displayed at two to three prominent locations in the BHU e.g. Reception/waiting area, OPD and In charge office for awareness of sta ffand patients/ clients (see 2.8.6).

2.8.4 Display is maintained and revived as required.

2.8.5 In charge BHU is responsible to ensure proper maintained and revived as required.

2.8.6 Mission Statement sample for BHU which is close to reality is provided as under;

Mission Statement

We strive to deliver Preventive, Promotive and Curative Healthcare Services to the local community equitably as integral part of the provincial healthcare system

2.9 - Monitor and measure the performance of the BHU against the given targets.

2.9.1 In charge BHU;

2.9.2 Remains aware of the assigned monthly Targets.

2.9.3 Calculations of the targets, like ANC, Deliveries, T.T, EPI etc.

2.9.4 Has the ability to identify issues / hurdles in achieving targets.

2.9.5 Monthly DHIS review meetings, observing minutes of meetings, implementation of decisions to achieve the targets are conducted and recorded as per following format;

Facility Sta ffMeeting /Minutes of Meeting and Recommendations	
No. of Participants:	**Date:**
Topics Discussed:	
Follow - up of decisions of the previous meeting:	
Proceedings of the Meeting:	
Recommendation/Decision:	
Signature of facility In-charge:	

2.9.6 Steps required for repair/maintenance / replacement of equipment are taken timely and record /certi - cation maintained.

2.9.7 Steps required for repair/maintenance of building infrastructure are taken timely and completion certi - cation kept in record.

2.9.8 Main Gates are kept free of encroachment clearway, easy opening/closing, sturdy, painted and manned.

2.9.9 Boundary wall is maintained to stop Jumping over, no holes for animal/human passage, no garbage around i.e. they are kept intact, plastered and painted.

2.9.10 Smooth for movement of patients, stretchers, wheel Chairs and Ambulances.

2.9.11 Performance Appraisal Reports of subordinate sta ffare written in time.

2.9.12 Required documents including MSDS, SOPs, SMPs, JDs and inspection centered SOPs are provided and are available with all staff.

2.9.13 Security Arrangements as per speci corders / policy of the Health Department and provisions are planned and implemented.

2.9.14 An ongoing cleaning / sanitation process is planned and implemented at all places.

2.9.15 All wash rooms, oor, ramps, stairs, walls, roofs, doors are maintained and kept clean.

2.9.16 Cleanliness is checked for ensuring implementation on daily basis.

2.9.17 A detailed list being followed is as under;

MONITORING CHECKLIST FOR INCHARGE BASIC HEALTH UNITS	
A - INFORMATION OF HEALTH FACILITY	
Name of BHU:	Date & Time of inspection:
Name of in charge of the facility:	Designation:

B - Daily Monitoring Tasks	Observation	Recommendation
1. General Cleanliness		
2. Washroom cleaned/Functional		
3. Drinking Water available		
4. Seating arrangement for patients		
5. UPS/Generator functional		
6. Sta ffAttendance: a). Attendance register/Biometric/ Movement b). register/Leave register		
7. Sta ffwwearing identi cation badges		
8. Field sta ffleft ffor Seld as peTour Program/s		
9. ILR/Refrigerator Temperature chart recorded / maintained		
10. Emergency room ready/ drug list/ essential supply		
11. Oxygen cylinder lled/eady		
12. Hospital waste disposed o ffproperly		
13. Sterilization /Hand washing facilities		
14. Daily expense register maintained		
15. Patient registration/Guidance system		
16. Patients privacy ensured during consultation /examination		
17. Health Education being provided		
18. Medicines are being labelled while dispensing		

C- Weekly/Monthly Monitoring Tasks	Observation	Recommendation
19. Medicine store: a). Storage as per guidelines b). Physical Balance maintained as per Bin Cards / Stock register c). Expiry dates d). Essential drug list updated		
20. Equipment functional status		
21. Fire-		

ghting arrangements

22. DHIS Registes/record review focus on
23. Unique number, Completeness, accuracy, Authorization, Legibility
24. OPD/LR/ANC/Meeting/Stock registers etc.
25. VPD Reports submitted
26. DHIS Monthly Report submitted
27. Weekly/Monthly sta ffmeetings conducted / Minutes recorded
28. Complaint register maintained/Reviewed

29. Any Sentinel event recorded
30. Display of IEC Material
31. High risk Obst. Cases identiJcation and documentation
32. HCE/Patient rights charter displayed
33. Leave register maintained

D-Public Opinion /Exit Interviews (please give number of persons in the relevant columns.) Weekly					
Views	**Number of persons contacted in OPD/ Field**	**PUBLIC OPINION**			
		Good	**Average**	**Unsatisfactory**	**No Response**
1) Presence of Doctors/Staff					
2) Attitude of sta fftowards patients					
3) Waiting Time					
4) Free availability of medicines					
5) Vaccination outreach					
6) Vaccination at Health Facility					

Note: Names and Contact Numbers of at least two persons interviewed during the visit

Sr. No.	**Name**	**Address**	**Contact Number**

General Remarks

1. Problems Identi ed during pevious visit

2. Actions taken on Previous report

3. Observations of current visit

2.10 - Social and Community Responsibilities

2.10.1 BHU plans voluntary out-reach activities catering for community's health needs such as Health Education Sessions, health awareness campaigns, Walks, Immunization campaigns, School Health Education sessions, and providing aid to people hit by calamities/epidemics etc.

2.10.2 At least one pager report of the above activities showing the outcome/output of these activities is prep-ared and kept in record for showing to the assessors/inspectors as per format given below;

SOCIAL & COMMUNITY RESPONSIBILITY REPORTING PROFORMA	
Name of HCE:	**Date:**
Name of Event:	
No, of Participants / patients.	
Detail of event (Walk/Seminar/Medical Camp/ RTA etc.)	
Outcome/Impact:	
Name of reporting officer:	
Designation:	**Signatures:**

2.10.3 Pamphlets / Lea etsproviding Information in simple language about the facilities & services are to be prepared, kept in stock, kept at reception for anyone to pick up and distributed at regular intervals amongst the locals to create awareness about the available Services in the Facilities.

2.10.4 The above activity is linked with planned outreach activities like EPI, CDC, Sanitation and health awareness sessions and when possible by camping to accomplish the social responsibility and the record maintained for showing to the assessors/inspectors.

2.11 - Space Utilization

2.11.1 Building and space provision in the HCEs/hospitals are level speci cand responsibility of the Government. It is planned/designed/built through Chief Architect.

2.11.2 All provided space is utilized for the purpose it was designed & built/setup. No alterations in structural design and layout is done without written permission of the relevant authorities.

2.11.3 Following is the approved land area for a typical BHU;

Category of HCEs	HCE's Part	Area in Sq. Feet
	Service Area	7710 Sqft.
Basic Health Centre	Total Land (10 Kanals)	45000 Sqft.
	Service Area	2263 Sqft

2.12 - Facilities for Comfort of Patients

2.12.1 In charge is responsible to ensure the provision of adequate facilities & civic amenities for the comfort of patients and relatives.

2.12.2 Provision of the facilities listed below is ensured;

2.12.2.1 General Cleanliness/sanitation.

2.12.2.2 Sitting arrangement in OPD, waiting areas for patients and attendants.

2.12.2.3 Alternate arrangements of electricity in all patient care areas particularly the site for handling patient and in Labor Room.

2.12.2.4 Waste container/receptacle/s[2].

2.12.2.5 Clean drinking water.

2.12.2.6 Toilets with adequate hand washing facilities.

2.12.2.7 Mosquito and yprroo n(wire gauze).

2.12.2.8 Proper ventilation.

2.12.2.9 Intact main gate and boundary wall

2.12.2.10 Internal roads.

2.12.3 A sta ffmember is made responsible to have a daily check and regular cleaning / maintenance.

2.12.4 A regular repair and replacement plan is made and acted upon and record maintained.

2- As per EPA, Punjab Hospital Waste Management Rules 2014.

2.13 - Privacy

2.13.1 Always honor the con dentialiy of the information related to the patient. Do not disclose information about patient's medical record to anyone without explicit consent of the patient.

2.13.2 Female patients are not to be examined by a male doctor or conducted by a male technician without the presence of another female (attendant of the patient or a sta ffmember). (So if a FMT, LHV, M/W or AYA is not available then another female patient or a female relative should be requested to remain present during any such technical conduct).

2.13.3 Children are also not seen alone. A female attendant or a female relative or another female patient must be present.

2.13.4 Consultations and examination are conducted with such arrangements that other patients/relatives and other sta ffcan neither see nor hear the conversation.

2.13.5 Second patient is allowed to enter the examination room only when the earlier one is free and has left the room.

2.13.6 In charge personally explains the importance of privacy to the concerned sta ffin an organized way.

2.13.7 Conducts frequent orientation/guidance sessions on the subject.

2.13.8 Maintains record of the orientation session with signatures.

2.13.9 Ensures that the requirements of privacy are complied with by frequent checking in person and through reporting.

2.14 - Relevant Laws, by-laws and Regulations.

2.14.1 Copies of following laws/regulations are kept in record for ensuring practices accordingly;

Sr#	Health Related Laws	Link to Download
1.	The Punjab Healthcare Commission Act, 2010	http://punjablaws.gov.pk/laws/2434.html
2.	PM&DC Ordinance, 1962	http://www.pmdc.org.pk/LinkClick.aspx? leticket=7 Y1%2fco4suQ%3d&tabid= 292&mid=850
3.	The Allopathic System (Prevention of Misuse) Ordinance 1962	http://www.punjablaws.punjab.gov.pk/public/dr/ALLOPATHIC%20SYSTEM%20 (PREVENTION%20OF%20MISUSE)%20ORDINANCE,%201962.doc.pdf
4.	2012 Amendment in the PM&DC Ordinance	http://www.pmdc.org.pk/LinkClick.aspx? leticket=a8U v7NVyX4%3D&tabid= 292&mid=850
5.	PMDC Code of Ethics	http://www.pmdc.org.pk/LinkClick.aspx? leticket=v5 mQYMvhz4%3D&tabid= 292&mid=845
6.	Punjab Hospital waste management Rules 2014	http://epd.punjab.gov.pk/system/Nles/ unjab%20Hospital%20Waste%20 Management%20Rules%2C%202014.pdf
7.	Pharmacy Act, 1967	http://www.pmdc.org.pk/LinkClick.aspx? leticket=j9LEQikC bs%3D&tabid= 102&mid=588
8.	Drug Regulatory Act, 2012	http://www.na.gov.pk/uploads/documents/1352964021_588.pdf
9.	Schedule II scanned from Civil Defense Office Lahore to be uploaded on website of PHC.	Measures Speci ed or Dealing With Outbreaks of Fire at Premises of Hospitals / Clinics / Maternity Homes/Clinical Labs / X-Rays / Diagnostic Labs & Medical Centers Under Rule Of Civil Defence (Special Powers) Rules 1951 As ModiEe .

Sr#	Health Related Laws	Link to Download
10.	Injured Persons (Medical Aid) Act, 2004 (XII Of 2004)	http://www.punjablaws.punjab.gov.pk/public/dr/INJURED%20 PERSONS%20 (%20MEDICAL%20AID%20)%20ACT,%202004.doc.pdf
11.	Punjab Blood Transfusion Safety Act 2016	http://punjablaws.gov.pk/laws/2664.html
12.	The Punjab Environmental Protection Act, 1997	http://punjablaws.gov.pk/laws/2192a.html
13.	Control of Narcotics Substance Act, 1997	http://www.fmu.gov.pk/docs/laws/Control%20of%20Narcotic %20Substances%20Act.pdf
14.	The Punjab Health Foundation Act, 1992	http://punjablaws.gov.pk/laws/386.html
15.	Drug Labeling & Packaging Rules, 1986	http://www.healthkp.gov.pk/downloads/Druglabeling.pdf
16.	The Medical & Dental Degrees Ordinance, 1982	http://www.punjablaws.punjab.gov.pk/public/dr/THE%20MEDICAL%20AND %20DENTAL%20DEGREES%20ORDINANCE,%201982.doc.pdf
17.	The Punjab Nursing Council Act, 1973	http://www.punjablaws.punjab.gov.pk/public/dr/THE%20PAKISTAN%20 NURSING%20COUNCIL%20ACT,%201973.doc.pdf
18.	The Punjab Vaccination Ordinance, 1958	http://punjablaws.gov.pk/laws/95.html
19.	The Epidemic Diseases Act, 1958	http://punjablaws.gov.pk/laws/90.html
20.	The Public Health (Emergency Provisions) Ordiance, 1944	http://punjablaws.gov.pk/laws/58.html
21.	Punjab Local Government Act 2013	http://faolex.fao.org/docs/pdf/ind143880.pdf
22.	The Punjab Prevention And Control Of Dengue (Temporary) Regulations 2011	http://www.punjabcode.punjab.gov.pk/public/dr/Punjab%20P revention%20and%20Control%20of%20Dengue%20(Tempora ry)%20Regulations%202011.doc.pdf
23.	Dengue Regulation (SOPs, 2014)	http://health.punjab.gov.pk/system/Nles/ oPs%20for%20Preve ntion%20and%20Control%20of%20Dengue.pdf

2.14.2 Following copies of standards, SOPs and SMPs applicable to BHUs are kept in record and provided to sta ff under their signatures and kept in record;

2.14.2.1 Minimum Service Delivery Standards and Indicators for Basic Health Units (MSDS) For BHUs provided by PHC.

2.14.2.2 Standard Operating Procedures (SOPs) for BHUs/EHSP provided by the parent Department.

2.14.2.3 Standardized Medical Protocols (SMPs) for BHUs provided by the parent Department.

2.14.2.4 Blood transfusions services at BHUs are provided only in accordance with the provisions of the. Punjab Blood Transfusion Safety Act 2016.

2.15 - Responsibility of in charge in implementation of relevant laws.

2.15.1 The copies of relevant laws duly updated are kept in record and in charge remains conversant with the requirements and ensures their implementation.

2.15.2 All sta ffis oriented/trained in an organized way to comply the requirements.

2.15.3 Orientation schedule and attendance sheets duly signed and countersigned should be maintained in the record.

2.15.4 A sta ffmember should be made responsible in writing for the above actions to be completed.

2.16 - Inventory Management

2.16.1 A BHU sta ffmember is made responsible for inventory management (Stock Register).

2.16.2 An inventory of all equipment, materials and T tures (manual or electronic) is maintained by the author-ized person.

2.16.3 A /Yearly physical check is carried out by the in charge to curb the non-functioning/losses/damages.

2.16.4 Inventory/s is/are updated on condemnation and new additions.

2.16.5 Inventory/s is/are signed by the responsible person and duly countersigned by the in charge with dates of signing.

2.16.6 Authorized Person maintains the periodic inspection, repair and maintenance record.

2.17 - Early detection and Management of Pre and non-fe emergencies.

2.17.1 Adequate reFghtinequipment is acquired and the records are kept up to date. At least the equipment as standardized by the Civil Defense Department is available and maintained in functional state;

- **2.17.1.1** Proper Ventilation.
- **2.17.1.2** Two water type Fire Extinguisher of 10 Liters capacity for Rooms and Corridors,
- **2.17.1.3** TWO CO2 Fire Extinguishers Capacity 5 KG (Controlled type) or two Halotron type e extinguishers Capacity 4 Kg for Dispensary and any electrical installation / laboratory.
- **2.17.1.4** One CO2 Fire Extinguisher Capacity 5 KG. (Controlled type) for each main electric switch board/control panel (7 ft away from main switch board).
- **2.17.1.5** The sta ffis trained tto visually pick up the smoke/fe or be able to smell and raise alarm before it becomes a problem.
- **2.17.1.6** The sta ffis oriented/trained in an organized training program to perform their duties under such eventualities for effective implementation of the plan.
- **2.17.1.7** The organized training is conducted by a trained and competent person and the Training program and the conduct/attendance are kept in record.

2.17.2 Fire plan covering e arising out of burning of in ammabl items, explosion, electric short circuiting or acts of negligence or due to incompetence of the sta ffon duty is prepared and available with the authorized person. The sta ffis nominated for fe duties, duties of each sta ffin such events are written and provided to them under their signatures and copies kept in record. The duties are;

- **2.17.2.1** The person who detects and raises alarm (Shouting loudly).
- **2.17.2.2** The person who evacuates the patients/attendants outside the HCE.
- **2.17.2.3** The person who switched o ffthe electric / Gas supply.
- **2.17.2.4** The sta ffwho hears the alarm and tries to extinguish it.
- **2.17.2.5** The person to call the MreFg ers if it is uncontrollable.
- **2.17.2.6** The person to call o ffthe alarm.
- **2.17.2.7** The duties after the Ue alarm is ovver/fe is under control.
- **2.17.2.8** Reporting.

3- vide SCHEDULE II, “Measures speci edfor dealing with outbreaks of fe, Premises of hospitals / clinics / maternity homes/clinical labs / x-rays / diagnostic labs & medical centers under Rule of Civil Defense (special powers) Rules 1951as modi e.

2.18 - Evacuation in case of re and non-fe emergencies.

2.18.1 A clear Evacuation plan is prepared and displayed.

2.18.2 Exit routes are arrow marked to Assembly area.

2.18.3 Assembly area is marked.

2.18.4 A person is made responsible to ensure evacuation.

2.18.5 The responsible person remains available and guides others in safe evacuation.

2.19 - Simulation exercises.

2.19.1 Mock Fire Drills are scheduled quarterly/half yearly etc,

2.19.2 All sta ffperforms fe duties as per actual.

2.19.3 A trained person is made responsible to conduct the simulation exercises.

2.19.4 Mock Drill Records including participation/attendance are maintained.

2.19.5 Mock drills are conducted for all sta ffand reported on following format;

Fire Drill Reporting Format
To be completed after every alarm or drill by designated Ee safety officer
Date: Time:
Location of Alarm/Fire sign:
1). Rounds of hospital made by:
Hallways Cleared:
Visitors/Patients – Instructed Appropriately:
Sta ffknows how and when to turn o ff0 : 2
Fire Extinguishers on Location:
Sta ffperformed as per assigned role and responsibility:
2). Problems Identi ed:
3). Recommendations:
Signed: _____ Name/ Designation:

2.20 - Sta ffOrientation

2.20.1 Each regular / contract based / part time employee is oriented/trained in an organized training program at BHU/District level to perform their duties at BHU effectively.

2.20.2 All sta ffis involved in training/orientation.

2.20.3 The orientation/training is in line with BHU's mission and goals as well as relevant section / service / program policies and procedures scope of work, SOPs for Infection control, Fire safety and JDs.

2.20.4 The organized training is conducted by a trained and competent person/organization.

2.20.5 Training program and the conduct/attendance duly countersigned by the in charge are kept in record to be produced during inspections. Following check list is used;

ORIENTATION CHECKLIST					
Employee's Name:		**Designation:**			
Department:		**Date:**			
In order to avoid duplication of the instructions, the Information is checked below, has been given or explained to the employee by the HR department.					
Introduction:		**Time Schedule:**		**Salary Administration:**	
Company Introduction		Work Schedule/Lunch timings		Salary Process	
Mission & Vision		Attendance & Punctuality		Email address provided	
Corporate Values		Public Holidays		Advance Salary	
Organizational Structure		Leave		Outstation & local Travel	
Employment:		**Employee Relations:**		**Career Development:**	
Recruitment & Selection		Violation of company rules		Performance Management	
Appointment Letter issued		Disciplinary Policy		Promotion/Increments	
Con dentialiy Agreement signed		Internal Communication		Training	
Statements of Ethics signed		Code of Conduct		**Others:**	
Job Description issued		**Compensation & BeneOts:**		Other Bene ts	
Employee Records		Medical Facility		Tour of the company	
Probation & Con rmation		Parking Facility		Employee Handbook issued	
Resignation /Termination		Provident Fund			
How satisBed ae you with the orientation process		☐ SatisUed	☐ Very SatisBed	☐ Not Satis4ed	
		☐ Improvement Needed ?		☐ Outstanding	
Additional Comments/Suggestions:					
Orientation Conducted by:					
Employee's Signature:		Supervisor's Signature:			

2.21 - Job Descriptions (JDs)

2.21.1 Each regular / contract based / part time employee is oriented/trained in an organized training program at BHU/District level to perform their duties at BHU according to their individual JDs effectively.

2.21.2 JDs[4] are provided to all employees and they are made aware of their duties / responsibilities as per approved format provided therein.

2.21.3 Copies of JDs duly signed by the employees as a token of their acknowledgement and awareness are kept in their personal le.

2.22 - Rights and Responsibilities

2.22.1 Each regular / contract based / part time employee is oriented/trained in an organized training program at BHU/District level about his/her own rights and responsibilities and their duties toward patients at BHU.

2.22.2 The orientation/training is in accordance with the PHC Charters.

2.22.3 The organized orientation/training is conducted by a trained and competent person/organization.

2.22.4 Training program and the conduct/attendance are kept in record to be produced during inspections.

2.23 - Performance Appraisals

2.23.1 A copy of currently in vogue Performance Appraisal System (PAS)/Performance Evaluation Report(PER)) is made available by Department

2.23.2 Each regular / contract based / part time employee is oriented/trained in an organized training program at BHU/District level regarding in vogue PAS.

2.23.3 All sta ffis involved in training/orientation.

2.23.4 The orientation/training is in line with individual JDs.

2.23.5 The organized training is conducted by a trained and competent person/organization.

2.23.6 Training program and the conduct/attendance are kept in record to be produced during inspections.

2.23.7 Performance appraisal (ACRs/PERs) is carried out at pre-de nedintervals and is regularly documented in their le.

2.23.8 The record is produced at the time of inspections.

4- Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff-2008-2009, published by PDSSP/Government of the Punjab.

2.24 - Employee Personal Records

2.24.1 A copy of all employees' record / information regarding posting, qualiVcation/ education, in-service training, disciplinary background, job description, performance appraisal and health status is obtained from the district authorities & maintained at the BHU.

2.24.2 Personal leof each regular/contract/part time employee is available.

2.24.3 A BHU sta ffis made responsible to keep the leupdated.

2.25 - Employee personal record veriS ation

2.25.1 Copies of veriScation of the cedentials done by writing letters to the awarding institutions and originals maintained by EDOH / DOH office including education, registration, training and experience of doctors and paramedics permitted to provide patient care without supervision are obtained from the district authorities and kept in record at BHU as evidence.

2.25.2 Verifcation of credentials done by writing letters to the awarding institutions and original record maintained at the EDO / DOH office. Duplicate ele of each sta ffto be maintained at respective BHU.

2.26 - Unique Identi er or Medical Records

2.26.1 Each new patients is allocated a unique number at the reception/Central Registration Point (CRP) or in the section where rstseen along with other particulars helps to trace the patient/client even when different services like EPI, MCH, use different numbers.

2.26.2 The unique ID number and the particulars are recorded in a register in manual system.

2.26.3 The unique ID number and the particulars are recorded in a computer system if available.

2.26.4 The unique ID is used during all visits.

2.27 - Only authorized person/s to make entries in the record

2.27.1 BHU sta ffis authorized by the DOH/in-charge through explicit written orders which remains in record to;

2.27.1.1 Write prescriptions by doctors,

2.27.1.2 Write limited prescriptions by LHVs during ante natal and parturition,

2.27.1.3 Make entries in the records,

2.27.1.4 To maintain Record/Stock registers,

2.27.2 The authorized person signs and clearly writes his/her name & designation or stamps and puts date for identi cationat a later stage.

2.27.3 The list of such authorizations having their specimen signatures, initials and the stamps they use is kept in record for veriScationat any time.

2.28 - Every record entry is legible, dated, timed and signed.

2.28.1 Every time the authorized person makes an entry, he/she signs and clearly writes his/her name & designation or stamps and puts date for identifcation at a later stage.

2.28.2 The Frstsuch record is the Register at the Reception and the 'Parchi' issued for consulting a doctor. Format of the Record Register is as under;

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Unique ID	Date	Time	Visit #	Name	Parentage	Age	Gender	Weight	Add. & Ph.	Allergy	Symptom	Finding	Provisional/ Diagnosis	Treatment

Note:- Column Nos. are only for reference.

2.28.3 Then it is the turn of the attending doctor / service provider at OPD / Emergency who examines the patient, prescribes medicine/s or refers the patient if required, while putting the date and time along with his / her signatures on the slip and on OPD, anti-natal, vaccination, preventive programs and the expense register etc.

2.28.4 The dispenser/pharmacist/also signs and puts the date and time after issuing the medicine.

2.29 - Contents of Medical Record

2.29.1 The record contains information regarding patient/client ID, presenting complaints, provisional/diagnosis, action taken and details if shifted /referred/died as the case may be.

2.29.2 The details are as under;

2.29.2.1 The patient's initial presenting complaints or conditions(s) are recorded.

2.29.2.2 Findings of assessments and reassessments.

2.29.2.3 Any allergies to food or latex.

2.29.2.4 Any allergies to medication.

2.29.2.5 Conclusions drawn from the patient's medical history and physical examination.

2.29.2.6 Diagnoses/conditions established during the patient's course of care, treatment, and services.

2.29.2.7 Any consultation reports.

2.29.2.8 Any observations relevant to care, treatment and services.

2.29.2.9 The patient's response to care, treatment and services.

2.29.2.10 Any emergency care, treatment and services provided to the patient before arrival.

2.29.2.11 Progress notes.

2.29.2.12 All orders

2.29.2.13 Medications ordered or prescribed.

2.29.2.14 Medications administered, including the strength, dose, frequency and route.

2.29.2.15 Any access site for medication, administration devices used and rate of administration.

2.29.2.16 Any adverse drug reactions.

2.29.2.17 Medications dispensed or prescribed.

2.29.2.18 Follow-up plans.

2.29.2.19 Referral letters.

2.30 - Weekly Reports

2.30.1 Weekly reports of notifable / Vaccine Preventable Diseases are submitted regularly and copy is maintained / retained at BHU.

2.30.2 A person is made responsible by a written order/JD.

2.30.3 The designated person is trained for desired actions.

2.30.4 The activity is monitored by the in-charge check list.

2.31 - Monthly Reports

2.31.1 Monthly DHIS reports are submitted regularly and copy is retained/maintained at BHU record.

2.31.2 A person is made responsible by a written order/JD.

2.31.3 The designated person is trained for desired actions.

2.31.4 The activity is monitored by the in-charge check list.

2.32 - Medical Records review

2.32.1 The medical records are reviewed regularly / periodically by the In charge BHU/ DDOH/DOH/ EDOH.

2.32.2 The designated person/s is/are trained for desired actions.

2.32.3 Review focuses on accuracy, legibility, timeliness, completeness and that authorized persons only are making entries in record.

2.32.4 The review identi es a ny de ciencies inreventive and Curative Services and suggests corrective measures.

2.32.5 Review should be conducted regularly in predeEned inervals.

2.32.6 Review reports should be maintained as documentary evidence for surveyor.

2.32.7 The review report duly signed is submitted to DOH.

2.32.8 The activity is monitored by the in-charge through his check list.

2.33 - Quality Assurance System

2.33.1 A quality assurance and internal monitoring system is in place as under;

2.33.1.1 In charge BHU is personally responsible under a written order.

2.33.1.2 The designated person is trained for desired actions to ensure QA of all processes involving preventive, promotive, curative, rehabilitative and referral management.

2.33.1.3 All sta ffof BHU is provided with their respective JDs, SOPs and SMPs under their signatures.

2.33.1.4 The sta ffis trained and guided in performing their respective duties.

2.33.1.5 Daily attendance of BHU static staff.

2.33.1.6 Tracking of daily visit plans of sta ffrelated to outreach programs.

2.33.1.7 Checking that outreach sta ffachieves assigned targets on daily/weekly/monthly/yearly states.

2.33.1.8 Daily monitoring according to checklist for facilities for patient comfort, infrastructure and equipment.

2.33.1.9 Reporting deHciencies and getting eplenished.

2.33.1.10 Keeping the equipment functional as far as possible.

2.33.1.11 MSDS Self Scoring Matrix provided in Section-4 of this publication is used by all respective sta ffto ensure their compliance with MSDS for BHUs prescribed by PHC.

2.33.1.12 Using the patient feedback to improve the system.

2.33.1.13 Investigating complaints and using their results for improvement of patient care / process / system.

2.33.1.14 The activity is monitored by the in-charge through his/her own check list.

2.33.1.15 Record of monitoring checklists is kept as documentary evidence.

2.33.2 Following Patient/Client Satisfaction Proforma is used to keep a track of satisfaction level;

Name of BHU _____

Patient Name _____ Dated _____

Sr. #	Questions	Response	
1	Are you satis ed with the health services, behavior of Sta ffand the environment at BHU _____ ?	Yes	No
2	If YES, how? (You can circle more than one response and write below)	**1.** Complete information provided. **2.** Services available when needed. **3.** Medicines available. **4.** Services are not costly. **5.** Convenient to reach the facility. **6.** Sta ffis courteous. **7.** Relevant sta ffis available. **8.** Privacy is observed. **9.** Female sta ffis available. **10.** I recovered after treatment. **11.** Other (specify) _____	
3	If NO, why? (You can circle more than one) response and write below)	**1.** Issues of con dentialiy. **2.** Issues of privacy. **3.** Lack of attention. **4.** Inadequate information provided. **5.** I was asked to come another time. **6.** Medicines not available. **7.** Medicines/services are costly. **8.** The facility is too far away from my home. **9.** Waiting time is too long. **10.** Sta ffis discourteous / Unsatisfactory behavior. **11.** Sta ffis not competent. **12.** Relevant sta ffNOT available. **13.** Female sta ffNOT available / Gender difference. **14.** I suffered from side effects of the treatment. **15.** Language barrier in communication with HCP. **16.** 18. Other (specify) _____	
	Signatures of patient/relative:		
	Action by the In charge with date:		

2.34 - Sentinel Events

2.34.1 A sentinel event is defned as “An unexpected occurrence involving death or serious Physical or Psychological Injury, or the Risk thereof". Serious Injury speciQcallyincludes loss of limb or function. The phrase, ‘or risk thereof’ includes any process variation for which a recurrence carries a signi cantchance of a serious adverse outcome.”

2.34.2 Sentinel events may include the following, even if the outcome is not death or major damage or permanent loss of function:

2.34.2.1 Newborn abduction, or discharge to the wrong family.

2.34.2.2 Unexpected death of a full term fetus or any death at BHU.

2.34.2.3 Wrong medication/adverse reactions/wrong procedures.

2.34.2.4 Rape/physical assault/violence.

2.34.2.5 Hemolytic transfusion reaction due to blood group incompatibilities etc when and where applicable.

2.34.2.6 List of sentinel events is dynamic and kept updated.

2.35 - Sentinel event analysis

2.35.1 Sentinel events are intensively analyzed when they occur as under;

2.35.1.1 A three-member standing committee including the in charge is nominated in writing by the in charge/DOH.

2.35.1.2 All untoward/unusual events are reported verbally and in writing as well to the committee,

2.35.1.3 The committee identiEesand responds appropriately to all sentinel events occurring in the BHU or associated with services that the BHU provides.

2.35.1.4 Appropriate response includes conducting a timely, thorough, and credible root cause analysis; developing an action plan designed to implement improvements to reduce risk, implementing the improvements, and monitoring the effectiveness of those improvements.

2.35.1.5 The in-charge personally monitors the outcome.

2.35.1.6 Record of sentinel events occurred, root cause analysis, remedial measures/ preventive action plans to be taken is maintained.

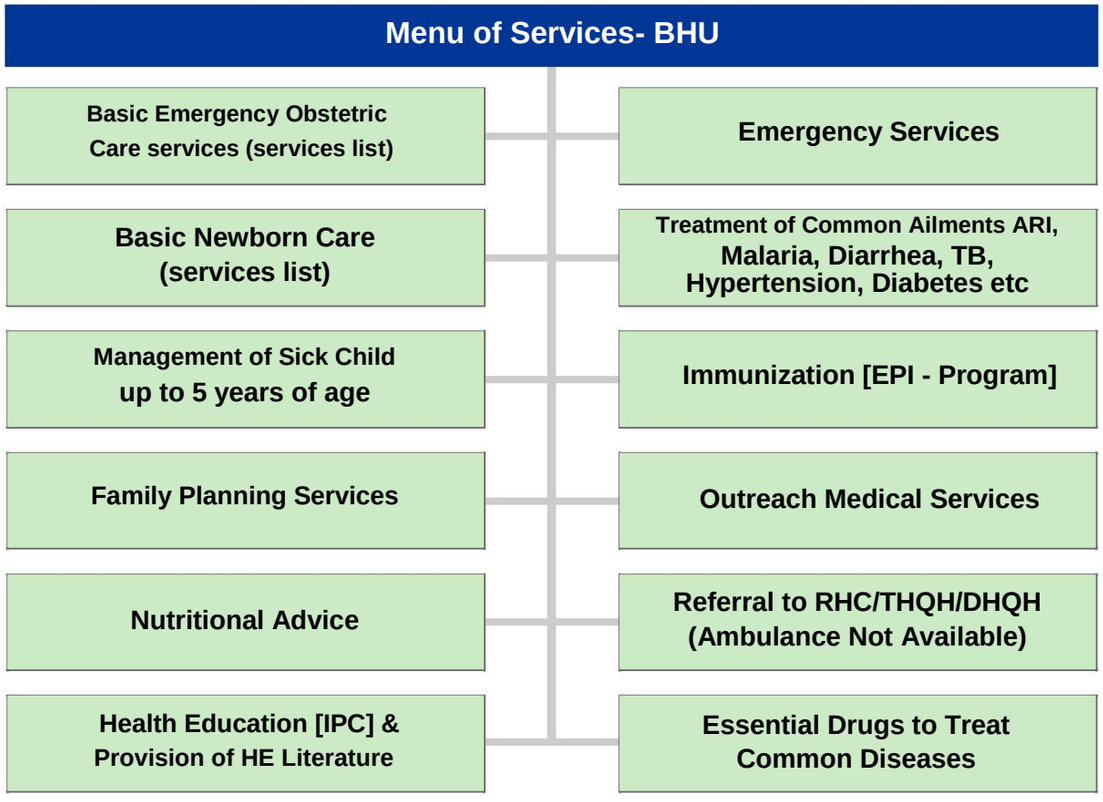
2.36 - Portrayal of Services

2.36.1 The services being provided at the BHU are displayed on a menu of services board.

2.36.2 It is clearly & boldly written on a large board / pana exproportionate to the facility & fed at the entry points, (Main Gate), Key Turning Points & Receptions/Waiting Areas.

2.36.3 Only Services available at BHU are shown in this Menu.

2.36.4 Following is displayed on the board;



2.37 - Patient Registration and Guidance

2.37.1 There is a well-established registration and guidance process as under;

2.37.1.1 A senior, preferably dispenser/computer literate is appointed to perform duty as Receptionist at central registration point.

2.37.1.2 Information to patients is provided both verbally & on telephone in a pleasant manner.

2.37.1.3 Patient is received at reception desk, particulars are recorded in the register, a prescription slip prepared accordingly for doctor to write on or particulars of patients are entered in the DHIS register/ Following format is used for patient record register; / CRP/OPD Register;

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Unique ID	Date	Time	Visit #	Name	Parentage	Age	Sex	Weight	Ph.	Add.	Allergy	Symptom	Finding	Provisional/ Diagnosis

?

Note:- Column Nos. are only for reference.

2.37.2 Patients are guided to reach the MO/WMO/LHV/relevant clinic.

2.37.3 If the MO / WMO / Vaccinator / LHV / Nutritional Supervisor or the concerned person to attend is busy then, the patient is requested to wait for a while.

2.37.4 MO / WMO & all other concerned Health Care providers take actions as per their level / Job Description.

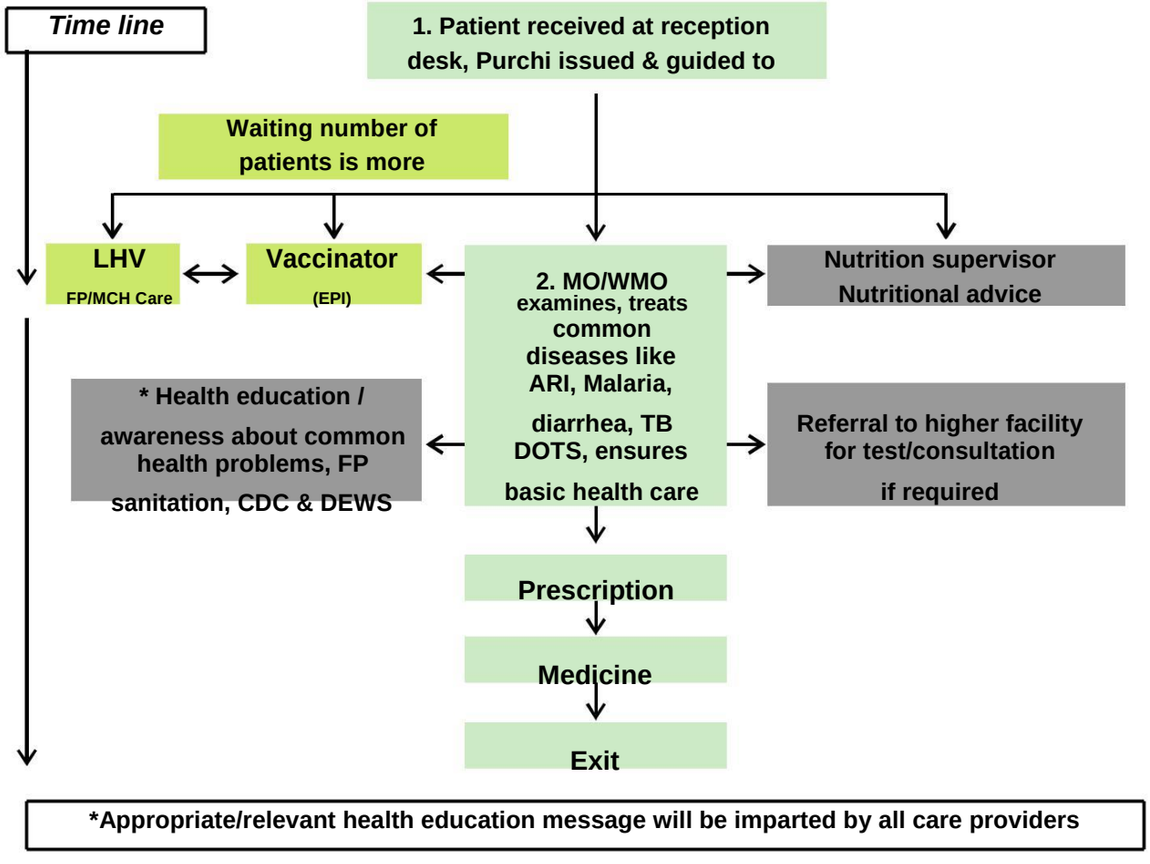
2.37.5 All Health Care providers talk to their patients on prevention of disease, sanitation issues & educate them on Common Health Problems, FP, CDC & DEWS.

2.37.6 Patients are prescribed medicines which they obtain from the Pharmacy and go home.

2.37.7 Patients are referred for investigations & Consultations when ever considered essential.

2.37.8 Following is a Flow Chart providing an overall view of patient's movement to various sections of the facility;

Overall Patient Flow-BHU



2.38 - Patient Assessment.

2.38.1 There is a well-established patient assessment process as under;

2.38.1.1 The patient is observed attentively,

2.38.1.2 History of Present illness is taken and symptoms noted down,

2.38.1.3 History of Past illnesses for picking up any relevant point is noted down,

2.38.1.4 Social Habits like smoking etc are noted,

2.38.1.5 Examining and eliciting the signs for reaching at a Provisional Diagnosis/Differential Diagnoses,

2.38.1.6 Deciding about the laboratory tests/investigations to be done if essentially required, and line of management to be reached at.

2.38.1.7 At this stage, patient is provided a Prescription if medication is required along with advised tests and clear advice in writing to be followed after going home or referral to another facility as the case may be. (Disposal).

2.38.1.8 Doctors follow the Standardized Medical Protocols[5] when managing any particular disease, at the same time using their own clinical acumen in treating and saving the patient's lives.

2.39 - Health Education.

2.39.1 Health Education is provided as follows;

2.39.1.1 IEC material / guidelines for prevention of diseases in the form of banners, posters, pamphlets, walls hangings regarding MNCH, EPI, Malaria, TB, hygiene, Sanitation and Dengue etc. developed by Punjab Health Department is collected from the DOH.

2.39.1.2 The provided IEC material is displayed and used to educate the community visiting the BHU.

2.39.1.3 The BHU sta ffprovides guidancce on speci c health issues in person duringonsultations as well as specially where required.

2.39.1.4 LHWs are also provided IEC material, tutorial books, to educate the community at their door step. The same is con rmed fom LHWs monthly Reports.

2.39.1.5 The in-charge monitors periodically through his own checklist.

2.40 - Preventive Services.

2.40.1 The following Preventive Services are provided as per guidelines;

2.40.1.1 Every child aged one year is immunized against 9 (nine) preventable diseases namely Measles, Diphtheria, Tetanus, Polio, Tuberculosis, Pertussis, Pneumonia, Meningitis, Hepatitis-B and Vitamin-A deOcien y as per National Guidelines.

2.40.1.2 Extended Program of Immunization (EPI) is strictly followed.

2.40.1.3 Vaccination is done on ed days which are well displayed.

2.40.1.4 Availability of vaccine & the vaccinator is ensured accordingly.

2.40.1.5 Storage of vaccine is ensured as per guidelines.

5- Standardized Medical Protocols (SMPs) for Primary and Secondary Health Care Facilities by PDSSP is an associated document of MSDS for Primary and Secondary Health Care Facilities 2008 by PDSSP/ Government of The Punjab, a disease specic document, may be consulted for more details.

2.40.1.6 Children approaching for vaccination are documented at reception desk & guided to vaccinator. This is done in frst 5-10 minutes.

2.40.1.7 Vaccination history is checked & Child is vaccinated as per EPI Schedule.

2.40.1.8 Complications if any are noti ed o MO for action.

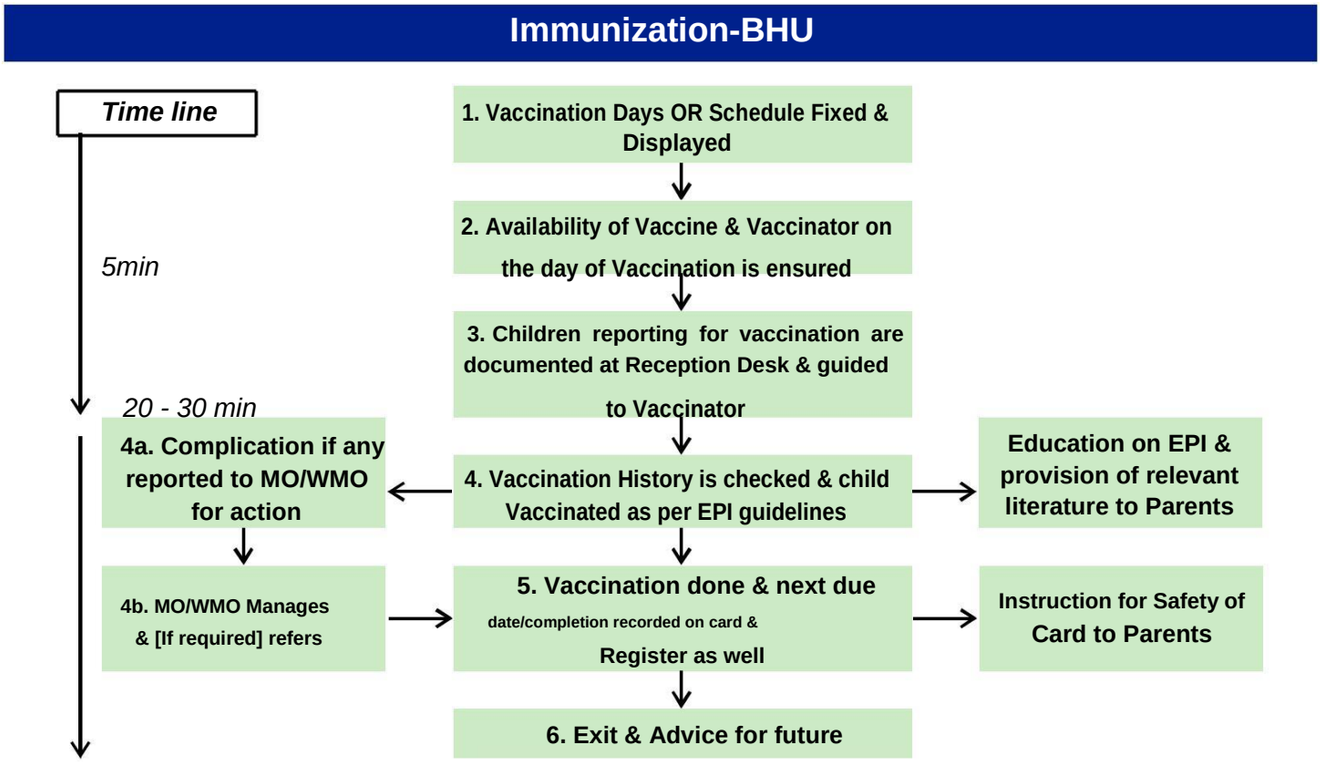
2.40.1.9 Adverse events following immunization (AEFI) cases are reported on prescribed format to the authorities immediately.

2.40.1.10 Parents are instructed for safe custody of vaccination card, educated on bene tsof EPI & provided literature to be given to friends.

2.40.1.11 Completion of vaccination is recorded & date for booster dose is give before allowing to leave.

2.40.1.12 Total process is completed in about 30 Min or so.

2.40.1.13 Following is a w chart of the above activities;



2.40.1.14 Ante natal care / assessment is provided to all pregnant women at four properly spaced intervals by or under supervision of a skilled attendant as per protocols.

2.40.1.15 Normal deliveries are conducted, complications recognized and referral to higher level facility as per protocol is done.

2.40.1.16 Natal care is provided by a skilled birth attendant at home or at BHU.

2.40.1.17 Two postpartum visits; rstvisit within 24 hours of delivery by a skilled person providing integrated postpartum checkups for mother and newborn, FP counseling, nutritional counseling and micronutrients supplementation are conducted as per guidelines.

2.40.1.18 Every married CBA is provided with FP services, nutritional counseling and HE during Natal and postnatal Care.

2.40.1.19 All patients in reproductive age (especially high risk groups) are appropriately examined for STIs and RTIs and treated according to WHO protocols of Syndromic Case Management.

2.40.1.20 Partners of all the diagnosed cases are tracked and treated.

2.40.1.21 All eligible couples/males/females are provided necessary information and services on FP.

2.40.1.22 All Major Micro-Nutrient De cien y cases seen at BHU are recorded, supplemented and followed.

2.40.1.23 Patients coming with mental health issues are thoroughly assessed, counseled and / or referred to appropriate level of care.

2.40.1.24 Cases of gender base violence particularly of child abuse, drug abuse, anxiety, depression etc are identi e , diagnosed, counseled, treated and rehabilitated.

2.40.1.25 Two Medical Camps are organized each year for screening of the vulnerable groups for prevalent health problems like Hypertension, Diabetes, Anemia, Malnutrition, Obesity, vision etc. based on local Burden of Disease (BOD).

2.40.1.26 LHVs conduct 2 visits a week to provide Health Education, MCH services including ANC, postnatal care, nutritional advice, FP services and provision of newborn and early childhood care.

2.40.1.27 Planned domiciliary home visits of Midwife for ANC, Natal & Post Natal care, nutritional advice, FP services and provision of newborn and early childhood care are conducted as per plans.

2.40.1.28 Midwife conducts 4 visits a week to provide MCH services at the door steps of the community.

2.40.1.29 Patient is received at Reception, documented & Purchi to attend is issued & he/she is guided. As per policy of the Primary and Secondary Healthcare Department

2.40.1.30 LHV attends & decides level of care needed by the child or mother.

2.40.1.31 LHV provides Ante Natal, Basic Natal, Post Natal & Inter Natal care herself to the Mother.

2.40.1.32 LHV refers the mother to higher facility if comprehensive Natal Care is needed.

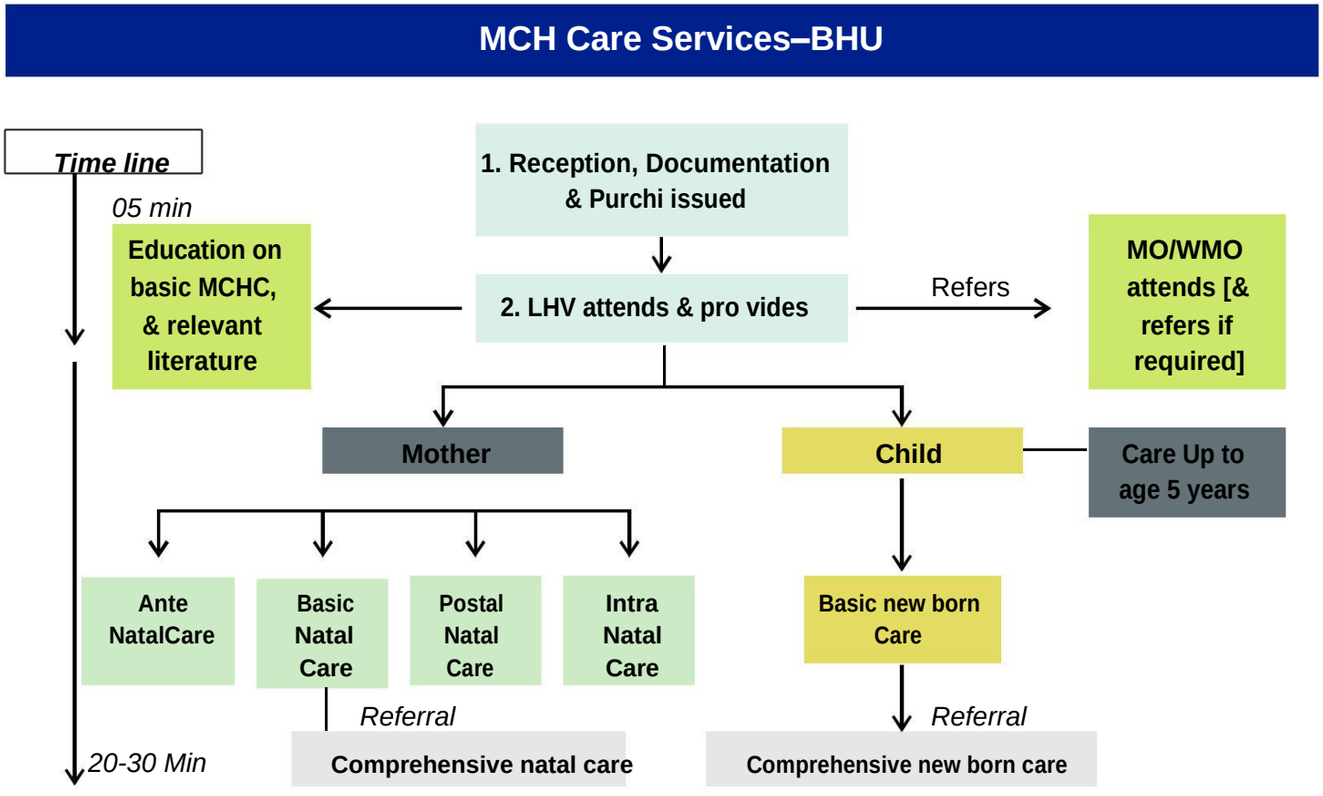
2.40.1.33 Basic new born care and growth monitoring care to children up to 5 years is provided by LHV.

2.40.1.34 Parents educated on basic MCHC & relevant literature provided.

2.40.1.35 Child needing comprehensive new born care is referred to higher facility after consultation with MO / WMO.

2.40.1.36 Total process up to referral stage takes 20-30 min.

2.40.1.37 Following Chart shows w of MCH Care Services:



2.40.2 Investigation of Epidemics at BHU as required in "DEWS" is maintained & higher authorities kept informed as follows;

2.40.2.1 Vigilance about the news of any epidemic is exercised.

2.40.2.2 Affected areas are visited.

2.40.2.3 Diagnosis is carefully veriSe .

2.40.2.4 Management of cases arriving at the BHU is continued.

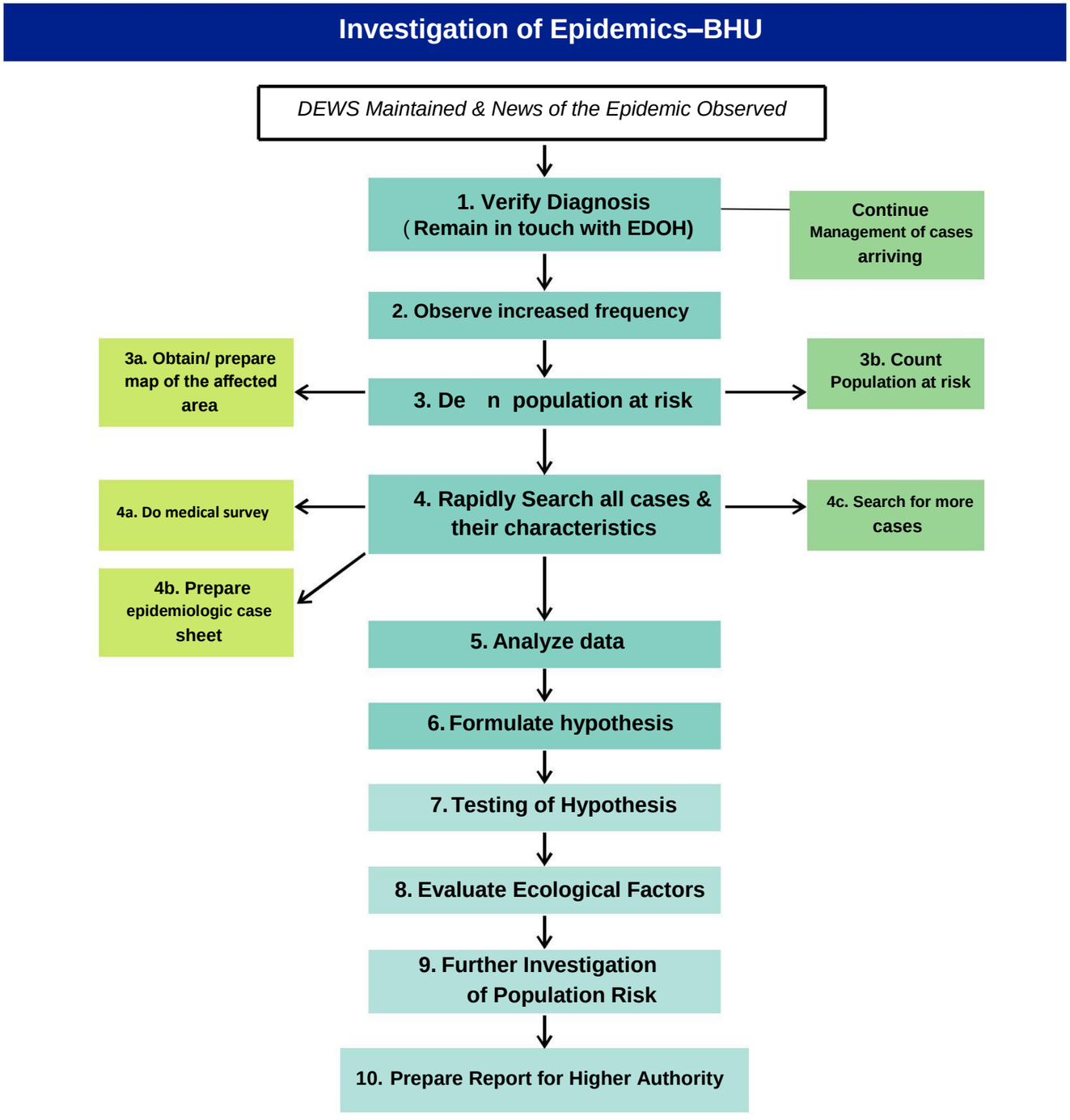
2.40.2.5 Frequency of occurrence of disease being checked for epidemic is observed.

2.40.2.6 Population at risk is identiSe , counted and map of the affected area is prepared/obtained.

2.40.2.7 All cases are to be rapidly searched /reported for their characteristics by Medical Survey & Epidemiological Case Sheet preparation.

2.40.2.8 Report is written and submitted for further action by EDO/DOH office.

2.40.2.9 A Flow Chart of the above activities is as follows;



2.41 - Essential Emergency Care.

2.41.1 Stretcher Bearers receive the patient on stretcher / wheel chair if not in a walking condition & quickly carry to the MO/WMO Room.

2.41.2 The patient's relative / attendant is requested to get patient's particulars recorded at the reception with time & date & gets emergency slip.

2.41.3 Reception Staff, registers the patients on register / computer.

2.41.4 Reception Sta ffissues Purchi / Emergency Attendance Slip to the patient / relative / attendant for attendance by the MO/WMO & guides / facilitates him / her.

2.41.5 MO/WMO/authorized person on receiving the patient, records the vital signs, examines and initiates the treatment.

2.41.6 First attendance by the MO/WMO should be immediately (preferably within 5 Minutes) of arrival of the patient.

2.41.7 MO/WMO quickly assesses the patient / prioritize and initiates management as per treatment protocols immediately. He is to use all his clinical acumen to save the life in emergency while keeping in mind his/her own limitations.

2.41.8 Minor cases after diagnosis & treatment are discharged.

2.41.9 Seriously ill patients are referred to higher medical facility after providing BLS and stabilizing vital signs.

2.41.10 MO/WMO makes sure that all required investigations are promptly carried out.

2.41.11 If a patient needs to be admitted & is referred, then MO/WMO will personally convey the condition of the patient & the treatment provided at BHU to the concerned doctor of the facility where patient is being transferred.

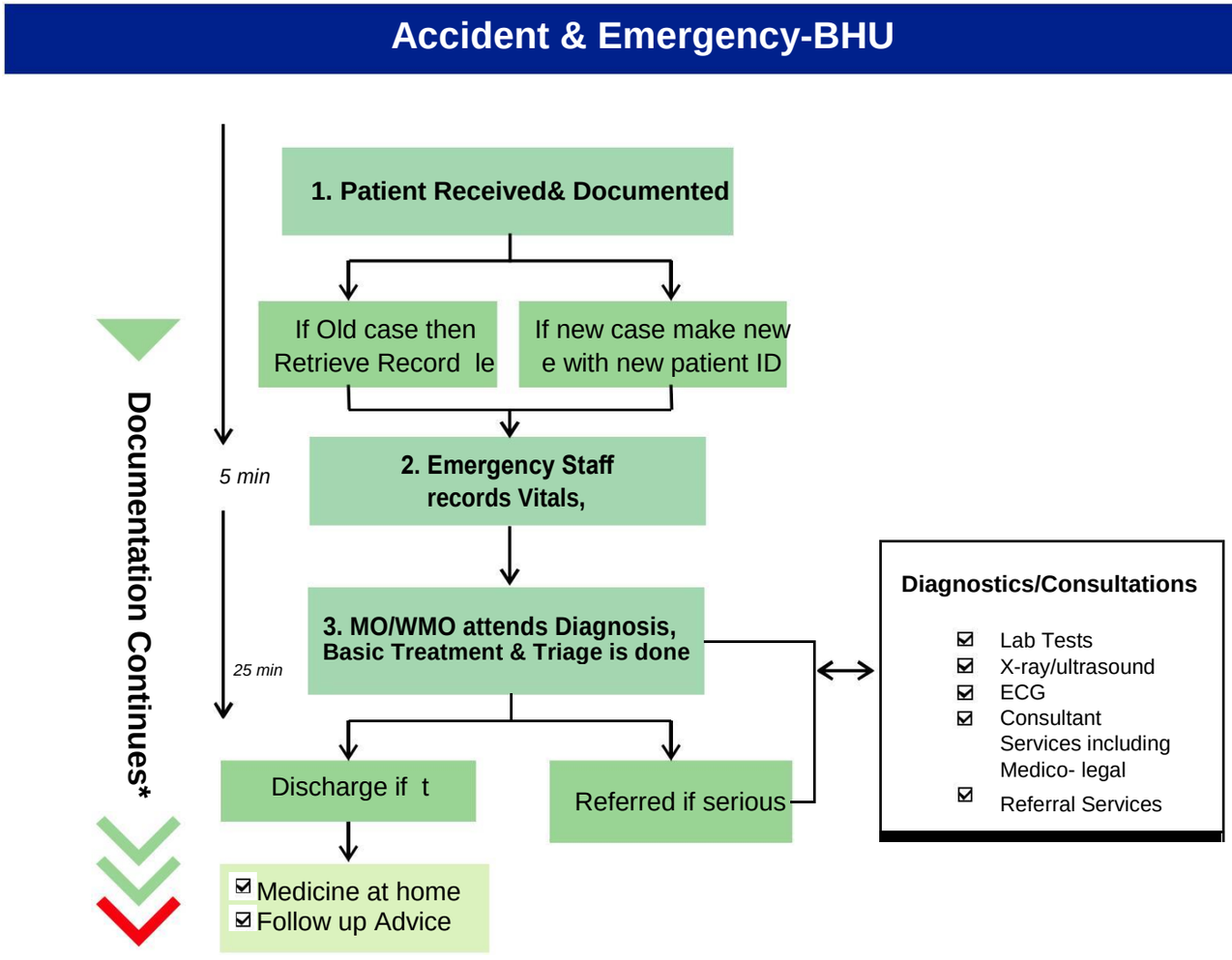
2.41.12 Patient is not detained un necessarily for want of a decision. Such decisions are made quickly and disposal made within 5 to 30 minutes.

2.41.13 Instructions regarding Infection Control are strictly complied in all patient handling.

2.41.14 All emergency medications / disposables are used from the Emergency trays/Kits/ Trolies / stock without wasting any time.

2.41.15 All fast running items are quickly replaced / replenished to maintain smooth function

2.41.16 Following is a suggested Flow Chart of the above activities:



* ***Note:*** *Complete Med Record entries are made with date, time, signature, stamping of concerned doctor/Consultant regularly at all steps.*

2.42 - Medico Legal Cases.

2.42.1 Emergency services also address handling of medico-legal cases as follows;

2.42.1.1 Immediate rst aid is povided and patient is referred to the next facility authorized to handle MLCs.

2.42.1.2 Government of Punjab Instructions on handling of ML Cases are abided.

2.43 - Referral from BHU.

2.43.1 Decision to refer to higher facility / other facility is made by MO / WMO / attending HCP.

2.43.2 Telephone/mobile numbers of Ambulance Services, referral hospitals/doctors and NGOs are available, displayed and patients are guided as required.

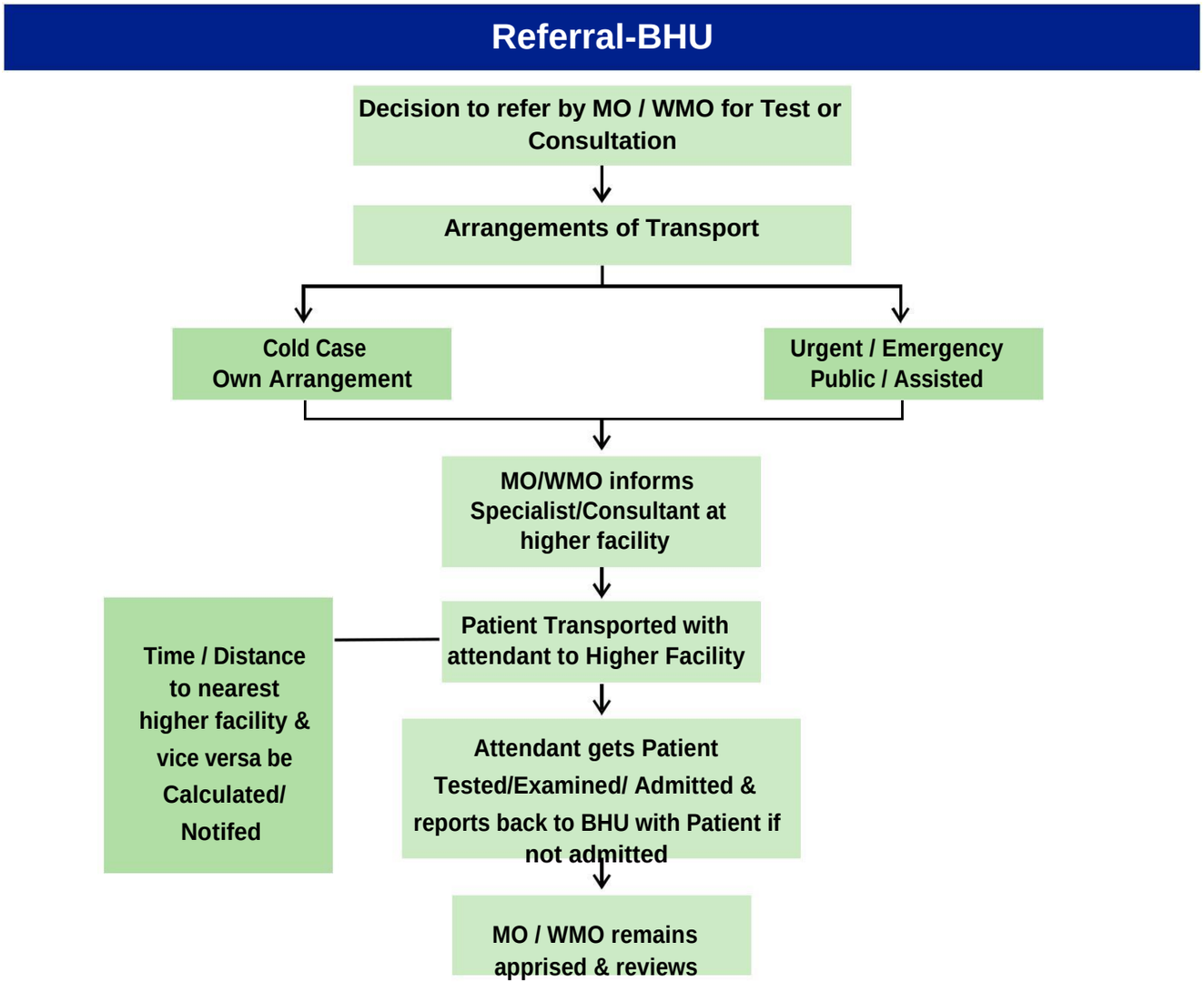
2.43.3 Patient/relatives are assisted in making arrangements of Transport by informing them the private/NGO resources.

2.43.4 Referring doctor discusses/informs about difficult /unusual / emergency cases to doctors at receiving end.

2.43.5 Patient is guided to be transported with his/her own attendant to higher facility.

2.43.6 Attendant gets the patient tested / examined / admitted and then may report back with / without patient as the case may be so that MO / WMO / referring HCP remain apprised and review accordingly as directed.

2.43.7 Referral Flow Chart follows;



2.44 - Referral Facilities.

2.44.1 The BHU has list of contact numbers of the;

2.44.1.1 Referral facilities,

2.44.1.2 Medico legal authorities,

2.44.1.3 Concerned police stations,

2.44.1.4 Rescue 1122 and other such services where available,

2.44.1.5 Edhi and other Ambulance Services,

2.44.1.6 Social Services Organizations/Local NGO if any.

2.45 - Patient Management Documentation.

2.45.1 An OPD case is provided prescription (copy of which is retained at BHU or OPD register) along with dispensed medicines and fully explained how to take the medicine, for how many days, to report if there is any adverse effect and or follow up visit .

2.45.2 Return to home after detention or transfer to another HCE/organization is documented as follows;

2.45.2.1 In case of return to home after detention, a Discharge slip is given to the patient.

2.45.2.2 The patient's treating doctor determines the readiness for returning home during assessments.

2.45.2.3 The same is discussed with the patient and his/her family.

2.45.2.4 For MLC/MLR, the HCE shall ensure that the police are informed.

2.45.2.5 The authorized BHU sta ffhands over the Summary to the patient/attendant in all cases and a copy is retained.

2.45.3 The Summary shall be signed by the treating doctor or a member of his/her team and should contain the following:

2.45.3.1 Date.

2.45.3.2 Unique identi cation numbe.

2.45.3.3 Patient's name.

2.45.3.4 Reasons for detention.

2.45.3.5 Signi cant ndin .

2.45.3.6 Diagnosis.

2.45.3.7 Patient's condition on discharge.

2.45.3.8 Investigation results if done.

2.45.3.9 Any procedure performed.

2.45.3.10 Medication administered.

2.45.3.11 Follow up advice and other instructions deemed necessary in a manner that the patient can easily understand.

2.45.4 Refusal to referral when it was essential is treated as Leaving Against Medical Advice (LAMA) cases, the declaration of the patient/attendant is recorded and signed on the following format;

Left Against Medical Advice (LAMA) PROFORMA	
BHU Name:	Date :
Patient Name: W/O, D/O	
Contact:	
It is certi edthat I have been explained the medical condition/status of my patient and requirement of immediate treatment/management and its bene tsand the possible consequences of delaying or refusing the immediate treatment/management at BHU. I am not willing to have treatment/continue treatment at BHU and want to take my patient to a place of my own choice. I will be responsible for any consequences whatsoever and will not hold any BHU sta ffaccountable for that.	
Signatures of patient/relative:	
Witness 1: Witness 2:	
Countersigned by In charge with date:	

2.45.5 In case of transfer to another facility, following details in addition to particulars regarding medical history of the patient are provided in the Transfer Summary;

2.45.5.1 Presenting Complaints/Symptoms.

2.45.5.2 History of present and past illness.

2.45.5.3 Socio economic details like smoking/nonsmoking, non-affording/affording.

2.45.5.4 Investigations/procedures performed at BHU or already done & reports available with the patient,

2.45.5.5 Treatment provided,

2.45.5.6 Reasons for referral,

2.45.5.7 Name of the HCE to be referred will be recorded in the prescribed referral form. In such cases, SOPs regarding patient transfer (Reproduced below) shall be strictly followed so as to ensure proper care during transportation and handing over of the patient to referred facility takes place.

2.45.5.8 A copy of the summary is retained at the BHU.

2.45.5.9 If the patient is being transferred at his/her own request, a note to that effect is added in the summary. In such cases the name of the receiving hospital would be of the one where the patient desired to go to.

2.45.5.10 If the patient is transferred by the BHU under care with medical staff, an have acknowledge-ment from the receiving hospital is obtained by the accompanying staff.

2.46 - Domiciliary Services / Home Visit Policy. (Link with 3.40 above)

2.46.1 The in vogue policy regarding home visit / domiciliary services is displayed prominently at the main gate, reception and OPD areas and accordingly practiced.

2.46.2 Approved visit/tour plan issued by competent authorities is displayed.

2.47 - Care of Obstetrical Patients.

2.47.1 The high risk obstetric cases are de ned and displ yed.

2.47.2 De nition:A high risk pregnancy is one in which some condition puts the mother, the developing fetus, or both, at a higher risk than normal for complications during or after the pregnancy and birth. At BHU, high-risk pregnancies may present with any of the following conditions:

2.47.2.1 Hemorrhage.

2.47.2.2 Prolonged or obstructed labor.

2.47.2.3 Postpartum sepsis.

2.47.2.4 Complications of abortion.

2.47.2.5 Pre-Eclampsia or Eclampsia.

2.47.2.6 Ectopic pregnancy.

2.47.2.7 Ruptured uterus.

2.47.2.8 Foetal Distress / Newborn Distress (intrapartum).

2.47.2.9 Pregnancy with medical disorders.

2.47.2.10 Mal-presentation.

2.47.2.11 Twin pregnancy.

2.47.2.12 Pregnancy with scarred uterus.

2.47.3 The type of obstetric cases which can be cared for or not along with their neonates are de nedand displayed.

2.47.4 Referral guidelines for such cases are displayed.

2.47.5 The above messages are displayed in combination and prominently.

2.47.6 Guidance regarding appropriate referral HCEs for shifting risk cases is provided.

2.48 - Competence and availability of Staff.

2.48.1 Sta ffcaring for obstetric cases are competent , trained, experienced) and remain available as (quali per JD criteria.

2.48.2 Alternate arrangement for a relief in case one has be away due to any reason are made through District authorities.

2.49 - Assessment of Nutritional Status.

2.49.1 Obstetric patients / clients and children under fve are also assessed and documented for nutritional status by the MO/WMO/LHV.

2.49.2 Appropriate dietary and supplementary advice is provided accordingly.

2.50 - Facilities and Competent Staff.

2.50.1 Following technically competent staff (WMO Registered with PM&DC duly trained or experienced/LHV Registered with PNC and experienced) to care for obstetric cases and neonates of such cases remains available as per departmental orders issued from time to time.

2.50.2 Following technical facilities to care for obstetric cases and neonates of such cases remains functional and available as under;

2.50.2.1 Ambu bag of appropriate size.

2.50.2.2 Appropriate neonatal size oxygen masks.

2.50.2.3 An oxygen cylinder.

2.50.2.4 Bulb sucker/suction machine.

2.50.2.5 Emergency neonatal resuscitation drugs etc. for use by the sta fflegally competent to prescribe.

2.51 - Identity of the Patient.

2.51.1 No treatment is administered until the identity of the patient is guaranteed.

2.51.2 At least two or three identifers are used before administration of treatments and therapies.

2.51.3 In case of conscious, sane adults their name and parentage along with CNIC is checked.

2.51.4 In case of un-conscious, in-sane adults their name and parentage along with CNIC is checked through their relatives.

2.51.5 Wrist band labels are checked for name, parentage, registration no, ID Card no, etc.

2.54.1.4 The date & time of the order.

2.54.1.5 Name of the medication.

2.54.1.6 Dosage, duration and administration information.

2.54.1.7 Route of administration.

2.54.1.8 Physician's Signature & Name or/and Stamp (containing name of Physician).

2.54.1.9 Following format is used for prescriptions;

BHU ABC

Ref. No. (Unique Identi er) _____ **Time** _____ **Date/s** _____ **No. of Visit** _____

Patient Name _____ **S/o, D/o, W/o** _____

Age _____ **Sex** _____ **Weight (kg)** _____ **Contact No.** _____

Address _____

Allergies _____

Symptoms _____

Findings _____

Provisional/Diagnosis _____

INVESTIGATIONS

℞

(Signature & Stamp)
with time & date.

2.55 - Availability of Essential Drugs List (EDL)

2.55.1 The following list of Essential Drugs notifed by the Government (revised as and when required) to treat common diseases, is procured and kept update.

2.55.2 The updated EDL is displayed.

2.55.3 The sta ffis aware of the EDL and prescribes accordingly.

LIST OF ESSENTIAL MEDICINES FOR BASIC HEALTH UNITS	
Sr.No	**Name of Medicines**
1	Cap. Amoxicillin/ Ampicilline
2	Syp Amoxicillin/Ampicilline
3	Tab. Cotrimoxazole/O axacine
4	Tab. Metronidazole
5	Syp Paracetamol/Ibuprofen
6	Tab. Diclofenac/Ibuprofen/ Paracitamole
7	Syp. Antihelminthic
8	Tab. Iron/ Folic Acid
9	ORS (packets)
10	OCP
11	IV infusions
12	Syp Cotrimoxazole
13	Syp Metronidazole
14	Tab chlroquine
15	Inj. Dexamethasone
16	Inj Diclofenac/Ibuprofen
17	Inj Ampicilline
18	Syp Salbutamol
Sr.No	**Name of Supplies**
1	Bandages
2	D/Syringes
3	Cotton Wool
4	Suture
5	D/Gloves
6	IV Branula
7	IV Sets
8	Antiseptic Solution
Sr.No	**Name of Contraceptive**
1	Coper T
2	Depo Prova
3	Condoms

2.56 - Maintaining Stock of Essential Drugs.

2.56.1 A Minimum stock level of the medicines included in the EDL based on average usage of each item in a month is maintained as per Government Policy in vogue;

2.56.2 The Minimum stock level / buffer stock level of each medicine is not allowed to fall below a certain level at all times which is usually sufficient for three months.

2.57 - High Risk Medicines.

2.57.1 The BHU de)nesthe high-risk medication or high-alert (or high-hazard) medications as “medications that are most likely to cause signi cant harm o the patient, even when used as intended.

2.57.2 All concerned sta ffis made aware of the above de nitio and that although any medication used improperly can cause harm, high-alert medications cause harm more commonly and the effect they produce is likely to be more serious and lead to the patient’s suffering, and additional costs associated with care of these patients. So use of such medicines only when prescribed by the medical officer accordingly can reduce the potential hazard and harm.

2.57.3 The high-risk medications including but not limited to the following are frequently associated with harm such as hypotension, bleeding, hypoglycemia, delirium, lethargy and bradycardia etc;

2.57.3.1 Anticoagulants,

2.57.3.2 Narcotics,

2.57.3.3 Opiates,

2.57.3.4 Insulin,

2.57.3.5 Concentrated Electrolytes e.g. KCl,

2.57.3.6 Chemotherapeutics and,

2.57.3.7 Sedatives etc.

2.57.3.8 Sound alike medicines.

2.57.3.9 Look alike medicines.

2.58 - VeriS ation of high risk medication.

2.58.1 The person/s prescribing and dispensing such medicines are authorized in writing to do so with directions to write discretely and clearly.

2.58.2 The dispensing sta ffhas written instructions to double check the correctness of every high risk medicine prescribed from the prescriber and personally as well, as follows;

2.58.2.1 Independently comparing the Label and Product Contents in hand versus the written order.

2.58.2.2 Independently verifying any calculations for doses that require preparation.

2.58.3 The identity of the patient is verifed with the particulars on prescription before administration.

2.58.4 A verifcation note is endorsed on the prescription/register, signed & dated with name/stamp of the person administering duly countersigned by the in charge.

2.59 - Storage of Medical Stores.

2.59.1 Medical stores are stored as per following guidelines;

2.59.1.1 The store place is well ventilated, dry & shaded to keep the temperature low.

2.59.1.2 Store is safe from rodents, pests and such others.

2.59.1.3 Stores are placed at least 6 inch away from the walls.

2.59.1.4 The similar type/group of medicine are staked together on the shelves/racks with Bin Cards.

2.59.1.5 The medicines having similar names but different actions/usage are discreetly placed with alerts. Look-alike, sound-alike (LASA) drugs are not stored next to each other (instead of storing by generic name, the drugs are stored by brand name. FIFA Principle is observed.

2.59.1.6 Bulk packs are opened only when required.

2.59.1.7 Stores are consumed within shelf life.

2.59.1.8 Near expiry items, not likely to be consumed are transferred to other HCEs through District authorities.

2.59.1.9 Temperature sensitive products are stored in the Refrigerator / Ice Liner Refrigerator (ILR) between 2-8 degrees centigrade and opening the door is restricted to max 6 times in a day.

2.59.1.10 No eatables or other items are placed in the Refrigerator / Ice Liner Refrigerator (ILR).

2.59.1.11 Narcotic and controlled drugs are stored with proper measures of security under lock and key.

2.59.1.12 Stores are kept neat and clean consistent with directions.

2.60 - Usage within shelf life/ Expiry date.

2.60.1 Expiry date of the products included in the List is maintained at store.

2.60.2 Expiry dates of all medical store items are checked on monthly basis by the store in charge and the report signed & dated by him is put up to the in charge BHU.

2.60.3 In charge BHU checks at least ten items to verify correctness personally and countersigns.

2.60.4 Dispenser is directed to check date of expiry of drugs and dispensed only if within limit.

2.60.5 Any expired item found by the dispenser is immediately reported to in charge.

2.60.6 Medicines like Vaccines, antibiotic syrups/injections, drips, eye drops etc. which need preparation / recombination are labelled having date and time of preparation by Pharmacist and are used within life period written on the packing by the manufacturer and if not used within that time, are discarded immediately.

2.60.7 Dispenser checks date and time of prepared medicine prior to dispensing and administration.

2.60.8 If date and time is not mentioned on prepared medicine, it is not dispensed / administered to patients.

2.60.9 Near expiry (Less than 3 months) are stored separately.

2.61 - Correct dispensing.

2.61.1 The sta ffis trained and directed to label and dispense medicines / drugs exactly as per the directions given in the prescription which means e.g.;

2.61.1.1 Name of the medicine.

2.61.1.2 Route/site.

2.61.1.3 Strength in mg/gm etc.

2.61.1.4 Frequency in a day.

2.61.1.5 Sequencing if directed in case of more than one medicines.

2.61.1.6 Duration in days/weeks etc.

2.61.1.7 Only one patient is managed at a time even when there are others in waiting. The next preparation is initiated only upon completion of earlier

2.62 - Authorization for dispensing.

2.62.1 A qualifed and experienced person is authorized in writing to dispense/administer medications as per following format;

Sr.#	**Particulars of Professionals (Name & Designation)**	**Authorization PMDC/PNC/PMF etc.**	**Validity Date**	**Specimens**		
				Initials	Sign	Stamp
1.						
2.						
Signatures of In-Charge BHU:						
Name: Date:						

2.63 - Patient identi ation.

2.63.1 The dispenser checks identity of the patient with the particulars by calling patient's name and then veriSes y asking s/o, d/o,/ w/o etc and about the complaints etc on prescription before administration.

2.63.2 Ticks are marked on each of above with ball pen to indicate that the required check was conducted.

2.64 - VeriS ation of prescribed medicine before dispensing / administering.

2.64.1 Medication being given or administered is also veriSedby reading its name, dosage, route, timing, expiry date, shelf life etc from the order prior to its dispensing / administration.

2.64.2 In case of slightest doubt, the closest relevant colleague is requested to help in veriScation.

2.64.3 If the doubt persists then the in charge is requested to resolve the issue.

2.65 - Reporting of Adverse Drug Reaction.

2.65.1 Any adverse drug reaction/s (ADR) whether expected or unexpected are reported to the in charge with following details;

2.65.1.1 Complete details of the patient including personal particulars, visit, clinical and drug usage history,

2.65.1.2 Name of the drug,

2.65.1.3 Manufacturer,

2.65.1.4 Manufacturing Batch,

2.65.1.5 Dates of manufacturing and expiry,

2.65.1.6 Date the store was received at BHU,

2.65.1.7 Storing conditions.

2.65.2 Further reporting to district authorities is done by the in charge BHU.

2.66 - General Consent.

2.66.1 The MO or other authorized healthcare service provider obtains verbal consent from all patient before examination by politely informing the need of examination to reach at the diagnosis.

2.66.2 On getting a nod, the words "VCO" (Verbal Consent Obtained) is endorsed on the prescription or document where ndingsof examination are being written.

2.66.3 On forms having printed VCO, it is ticked after having talked to patient as above.

2.66.4 The patient is offered/indicated/guided/shown to the privacy.

2.67 - Speci

c Inormed Consent.

2.67.1 The situations requiring Speci cInformed Consent in writing at BHU are listed below;

2.67.1.1 Obstetrics & Gynecological procedures.

2.67.1.2 Use of local anesthetics.

2.67.1.3 Stitching of wounds.

2.67.1.4 Procedures that may affect persons other than the patient

2.67.1.5 High risk medicines like Venofer, interferon, anti rabies, snake venum etc.

2.68 - Policy for consent when patient is incapable of independent decision making.

2.68.1 The policy to obtain consent when patient is incapable of independent decision-making is present and practiced as follows;

2.68.1.1 A speciQcinformed consent is always taken from the patient if an intervention is considered essential.

2.68.1.2 Consent of a legal representative is taken when a patient is unable to express him/herself and a medical intervention is urgently needed.

2.68.1.3 When the consent of a legal representative is required, patients (whether minor or adult) is nevertheless involved in the decision-making process to the fullest extent which their capacity allows.

2.68.1.4 When a patient is unable to express his or her will and a medical intervention is urgently needed, the consent of the patient is presumed, unless it is obvious from a previous declared 'Expression of Will' that consent would be refused in the situation. The presumption is endorsed in writing on the documents by the care provider.

2.68.1.5 When the consent of a legal representative is required and the proposed intervention is urgently needed, that intervention may be made if it is not possible to obtain the represe-ntative's consent in time. The urgency of treatment is endorsed in writing on the documents by the care provider.

2.68.1.6 In all situations where the patient is unable to give informed consent and where there is no legal representative or representative designated by the patient for this purpose, appropriate measures are taken to provide for a substitute decision making process, taking into account what is known and, to the greatest extent possible, what may be presumed about the wishes of the patient.

2.68.1.7 In case of Family Planning methods like IUCD, Tubal Ligation, Vasectomy etc. consent from both partners is mandatory.

2.69 - Information on cost of treatment.

2.69.1 The words “Patients can enquire about user charges at Reception” are displayed,

2.69.2 The reception sta ffresolves query of the patient/family about the cost of treatment at BHU.

2.69.3 The EDL is displayed to guide the patient that BHU will provide these medicine and rest of medicine prescribed by Service provider in the best interest of patient but not included in EDL will be purchased by the patient.

2.70 - Charges list.

2.70.1 The reception sta ffis provided printed user charges list and made aware of its contents with written directions to inform the patient / family when they enquire about the cost of treatment at BHU.

2.70.2 The same user charges list is shown to patients when they so desire.

2.70.3 The same user charges list is displayed on a board prominently.

2.71 - Right to refuse the offered treatment.

2.71.1 The BHU sta ffis aware that patients and families have a right to refuse the treatment being offered at BHU.

2.71.2 All such refusals are recorded preferably with the signatures of the person refusing and countersigned by the in charge.

2.72 - HCE Charters.

2.72.1 Following HCE Charter is displayed preferably in Urdu and patients / families are guided accordingly;

PHC CHARTER FOR HEALTHCARE ESTABLISHMENTS

Part A: Rights of Healthcare Establishments/Healthcare Service Providers

The Healthcare Establishment or the Healthcare Service Provider, as the case may be, shall have the right to: -

1. Collect accurate and complete information from the patient/client or carer, to the best of his knowledge, regarding medical history including but not limited to, present medical condition and complaints, medications, allergies and special needs, past illnesses, prior hospitalizations etc., as is required;
2. Require the patient/client to follow treatment instructions, including the written instructions explained at the time of discharge;
3. Require all patients to abide by its rules and regulations regarding admission, treatment, safety, privacy and visiting schedules etc.;
4. Limit visiting hours and number of visitors in the best interest of the patient/client and that of the others in the Healthcare Establishment;
5. Limit number of carers in the best interest of the patient/client, and that of the others, while keeping in view the special needs of particular patients, for example, minor children, women, elderly and/or seriously ill patients;
6. Be timely noti edby the patient/client regarding cancellation of appointment, consultation, procedure, surgery, etc. or delay in his arrival at the Healthcare Establishment;
7. Require the patient/client and/or carer(s) to cooperate with Healthcare Establishment sta ffin carrying out assessments, prescribed investigations and treatment procedures.
8. Require from the patient/client or carers and visitors, as the case may be, to understand the role and dignity of the Healthcare Establishment, its sta ffand/or the Healthcare Service Provider, as the case may be, and treat them with due respect at all times;

9. Report and take legal action against the patient/client and/or his carer(s), visitors, in case of harassment of its staff, damage to its property and disturbance to other patient(s), as the case may be;

10. Demand abstinence from the use of violent and disruptive behaviors or language abuse and take appropriate legal action in case of breach;

11. Prohibit smoking and/or substance/drug abuse on the premises and take appropriate legal action in case of breach;

12. Limit its liability for misplacement or theft of valuables and belongings of the patient/client, carer and visitor;

13. Be paid for all services rendered to the patient/client, either personally or by the carer or through the third party, e.g. insurance company.

14. Be notiOedof any change of contact, address and other details of the patient/client, as the case may be;

15. Ask for information from the patient/client regarding its services for thepurposes of improving the healthcare services/systems within the Healthcare Establishment;

16. Maintain and utilize the data collected from the patient/client, subject to the principles and law relating to confdentiality, for the purposes of improving the healthcare services/systems within the Healthcare Establishment;

17. Ensure that while using the available facilities and equipment, due care and caution is taken by the patient/client and/or their carers and visitors, as the case may be. The Punjab Healthcare Commission while recognizing the fact that each Healthcare Establishment is a “House of Hope” where advice and treatment, including other services, are rendered to the public at large, has developed this Charter of Rights for all Healthcare Establishments/Healthcare Service Providers in the Province of Punjab. All these rights are to be exercised with a view to make better services available to the masses.

The Punjab Healthcare Commission further assures that it stands committed to the cause of the Healthcare Establishments/Healthcare Service Providers in the exercise of these rights and shall always be ready and willing to support in the implementation and enforcement of the rights envisaged herein.

This document will be reviewed annually or earlier, as deemed appropriate by the Punjab Healthcare Commission, in view of its experiences, through a consultative process involving patients, former patients, family members, related professionals, Healthcare Establishments/Healthcare Service Providers, sta ffand other stakeholder groups.

Part B: Responsibilities of Healthcare Establishments/Healthcare Service Providers

The Healthcare Establishment or the Healthcare Service Provider, as the case may be, shall be responsible for:-

1. Ensuring the safety of patient/client.
2. Establishing such systems which enable easy access to services as are required by the patient/client.
3. Maintaining the services being provided through fully competent professionals.
4. Establishing systems to ensure that the rights of the patient/client and others are enforced and fully protected.
5. Adopting open policies regarding its procedures in relation to treatment of the patients/clients including but not limited to, their care and complaints etc.
6. Invigorating in their sta ffincluding but not limited to, Consultants and other professionals rendering services at the Healthcare Establishment, the importance and thorough practice of professional ethics.
7. Complying with all the governing laws, rules and regulations while operating, maintaining and rendering services.

2.73 - Complaint Management.

2.73.1 Patient's Right to complaint is displayed in following Urdu template;

آپ کو بنیادی مرکز صحت (BHU) کی سروس کے متعلق تحریری یا زبانی شکایات کرنے کا حق حاصل ہے۔

آپ اپنی شکایات بنیادی مرکز صحت (BHU) کے انچارج و دفتر یا ٹیلی فون نمبر۔۔۔۔۔۔۔۔۔۔۔۔ پر کر سکتے ہیں۔

یا استقبالیہ ہیلپ ڈیسک/ریسپشن پر موجود شکایات رجسٹر میں اپنی شکایات درج کر سکتے ہیں یا اس مقصد کے لیے لگائے گئے باکس میں ڈال سکتے ہیں۔

2.73.2 Complaint box is J ed and marked prominently.

2.73.3 Complaint box is opened daily at 09 AM and 2 PM by the in-charge / authorized person.

2.73.4 Complaint register is placed on the reception counter with prominent label.

2.73.5 Register is taken to the in charge every time a complaint is registered.

2.73.6 Record of all complaints is entered on the Complaint Register on following format;

1	2	3	4	5	6	7	8	9	10
S/No	Date	Complainant's Name	CNIC No.	Contact No.	Address	Detail of the Complaint	Signature/thumb impression of the Complaint	Action Taken	Date & Signature Incharge

2.73.7 Complaints which can be locally resolved are managed and the patient informed and counselled to satisfaction.

2.73.8 All complaints are personally addressed by the in charge BHU either immediately or in shortest possible time according to the nature of the complaint and patient is informed accordingly under his signatures.

2.73.9 Complaints which cannot be resolved locally are referred to district authorities for action at their end or for obtaining advice.

2.73.10 Complaint management process is recorded in a Complaint Management Register on following format;

1	2	3	4	5	6	7	8	9	10	11
S/No	Complainant's Name	Contact No.	Priority	Date(s)	Detail of the Investigation	Date(s) Complainant	Outcome	Date Complainant informed	Quality improvement Policy or Procedure Change	Signature of Incharge

2.73.11 The registers are labelled with their names on a white chit 3"x4" pasted on the cover and are page numbered and total page count certifed by the in charge on the rst page as;

"It is certi edthat this register contains _____ pages; each page has been numbered (at the top centre), stamped with the BHU seal (at top right corner) and initialed by me."

Dated and signed by In Charge BHU.

2.73.12 If complainant is satisUed on the a tion taken, then his/her signatures to that effect are taken.

2.74 - BeneOt of omplaint management.

2.74.1 The complaints are investigated with a concept of improving the quality and results are used as part of the quality improvement process. **(Link with 2.33)**

2.74.2 Patients / clients remain satis e .

2.75 - Infection Control.

2.75.1 Following written infection control instructions/guidelines/SOPs are displayed.

2.75.2 One of the posted sta ffis trained in the Infection Control SOPs and made responsible to ensure implem-entation of at least the following aspects;

2.75.3 Personal Protective Measures:

2.75.3.1 Facility of hand washing before and after examination / procedure with soap and water or a disinfectant as the case may be are available.

2.75.3.2 Hands are always washed thoroughly, before and after examining a patient.

2.75.3.3 Directions to wash hands are displayed clearly indicating location of washing facility.

2.75.3.4 An effective antiseptic solution is also used before procedures.

2.75.3.5 Facility of sterilizing the equipment / instruments before procedures exists.

2.75.3.6 Arrangement for controlling/preventing/reducing the risk of infections during the process of patient assessment.

2.75.3.7 Use of disposable gloves and mask etc. by the Doctor / HCP while examining the patient for certain speci ccontaminated conditions/ infected wounds and airborne infectious diseases.

2.75.3.8 Abiding of above Infection Control instructions by the dispenser/medical assistant while assisting the MO/WMO/In Charge.

2.75.3.9 Safe handling of medical / clinical Waste.

2.75.3.10 Surgical gloves, masks & protective glasses are used whenever performing a procedure or dealing with a high risk patient e.g. any case of communicable disease or infected wounds.

2.75.3.11 Waste handlers are trained not to ddlewith the waste, they should be trained & motivated, so nothing t herein becomes / remains an attraction for them for the purpose of monetary gain.

2.75.3.12 Waste handlers are also trained not to segregate mixed waste. Mixed waste with some hazardous waste is treated as hazardous.

2.75.3.13 All waste handlers wear Gloves, Masks, Long Boots & Yellow Jackets when on work.

2.75.3.14 All Waste Handlers and those Health Care Delivery Personnel who are at direct risk e.g. MO / WMO, LHV and Dispenser are to be vaccinated against Hepatitis B.

2.75.4 Instruments & Equipment:

2.75.4.1 Properly sterilized [reusable] instruments or ready to use sterilized disposable instruments are used.

2.75.4.2 Thermometers are always washed and disinfected with a fresh solution before using in mouth.

2.75.4.3 Bed Sheets, protective dress & all linen items are changed daily / as soon as soiled & sent to Laundry for proper washing.

2.75.5 Disinfection/Sterilization of Instruments:

2.75.5.1 It is mandatory for healthcare workers to disinfect/sterilize the soiled medical instruments as indicated before using those on other patients. Liquid bleach, as well as isopropyl and ethyl alcohol, are extremely effective in disinfecting medical instruments if a hospital grade germicidal cleanser is not available.

2.75.6 SOPs for Disinfection:

2.75.6.1 Washbasins and supplies are placed at a cleaning place or utility room. Chemical to disinfect the medical instruments - germicidal spray, liquid bleach or alcohol is decided as per ICC approved protocol.

2.75.6.2 Protective wear - gloves, goggles, mask and apron are worn. Heavy-duty utility style gloves are used for handling sharp instruments like scalpels and knives. A new pair of gloves is used if there is a tear during the disinfecting process.

2.75.6.3 Each individual instrument is sprayed heavily with germicidal spray and disinfected one piece at a time. Allow each item to stay for two minutes in the basin containing chemical. Place the instruments into a separate basin of clean water to rinse. Dried blood or Cuidson instruments may require an additional application of germicidal spray and light scrubbing with a dedicated toothbrush for removal.

2.75.6.4 In case of liquid bleach, mix one ounce of bleach with one quart of boiled water in a basin and add the soiled medical instruments. Allow the instruments to stay in the bleach solution for e minutes to kill any infectious organisms. Remove the instruments and check for any remaining blood or uid. Use a toothbrush to remove any visible contaminants left on the instruments and rinse the instruments with clean water in a separate basin.

2.75.6.5 In case of using isopropyl or ethyl alcohol, place the soiled instruments in the basin, pour alcohol into a spray bottle and spray the instruments thoroughly. Use a toothbrush to remove any dried uid. Apply more spray and scrub vigorously if the contaminant is still visible on the object. Place the instruments into another basin and rinse with clean water.

2.75.7 Cleaning Instruments with Sterile Water:

2.75.7.1 While using medical equipment or instruments that need to be disinfected/ sterilized for safety, a solution of chemicals in sterile water is used to ensure that all bacteria and viruses are killed and eliminated from the instrument or the tool.

2.75.7.2 A mix of enzymatic detergent and sterile water is used to assist in effectively cleaning and eliminating unwanted mi

2.75.8 SOPs for Cleaning Instruments with Sterile Water:

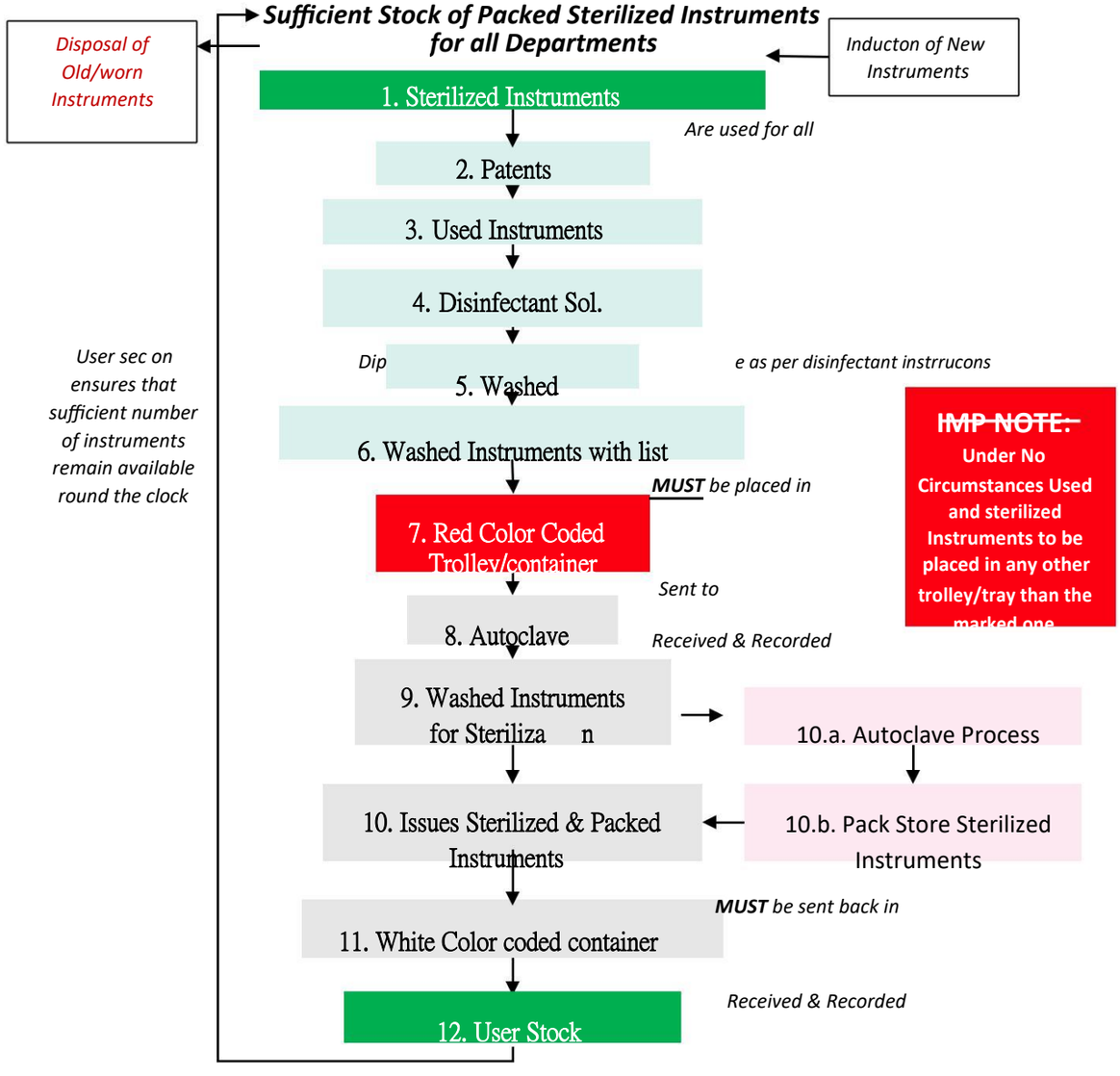
2.75.8.1 Debris and residue is removed from the instruments by rinsing under sterile water and using a toothbrush or other scrubbing tools.

2.75.8.2 Proper amounts of sterile water and enzymatic detergent in ratios as directed by the OEM are mixed in a clean container large enough to hold the instruments. Place the instruments in the container with the enzymatic detergent and sterile water formula, making sure that they are fully covered by the solution.

2.75.8.3 Tools/instruments are immersed in the solution for 20 minutes or as directed by the manufacturer to be effectively sterilized before reuse.

2.75.8.4 Sterilization of reusable instruments for minor surgical procedures is done in the autoclave as per its procedure to protect patients from contaminants like HIV and Hepatitis C that can live on instruments.

2.75.8.5 A Flow Chart of above SOP is as follows;



2.75.9 Injections & Drips:

2.75.9.1 Only Disposable Syringes are used.

2.75.9.2 With hands cleaned as described above, packing is checked to ensure that it is intact for sterility and that the date of expiry has not crossed.

2.75.9.3 Not opened before actual use.

2.75.9.4 It is ensured that needle does not touch anything before the actual prick to the patient.

2.75.9.5 The contents of the injection vials are seen for conformance to visual clearance standards.

2.75.9.6 The place of injection is decided and cleaned with fresh alcohol swab. The area so cleaned is allowed to dry itself without blowing any exhaled air and is not touched with anything even by the clean ngerof the person who is injecting.

2.75.9.7 At this stage, hands are sanitized with sanitizing solution and allowed to dry for 40-50 seconds.

2.75.9.8 Syringe/drip needle is opened for the required action.

2.75.9.9 Then the patient's cleaned & untouched place is pricked with the freshly opened syringe or drip needle.

2.75.9.10 After injection/withdrawal of blood sample a new swab is used to temporarily apply light pressure to stop oozing of blood or a needle holing plaster strip applied in case of drip.

2.75.9.11 Contents of injections in powder form, once mixed are injected within stipulated time of the manufacturer.

2.75.9.12 Contents of the drips & giving sets are also to be treated in the similar way.

2.75.9.13 Drip which has anyoatingobject or turbidity is not used.

2.75.9.14 Air bubbles are removed from the giving set by smooth leaking from the needle. The needle is not shuddered close to the waste basket for it may touch its brim/side or a discarded content or any other thing.

2.75.9.15 Drip bottle is not punctured with needle to allow air into the drip bottle.

2.75.9.16 Drip is discontinued if the recipient shows any sign of reaction like shivering or tachycardia.

2.75.9.17 Used syringes & needles of giving sets are destroyed / rendered unusable by the Needle & Syringe Destroyer immediately after use.

2.75.10 Labor Room

2.75.10.1 Labor room is used for the purpose it is available.

2.75.10.2 Entry into labor room restricted and that too after observing the protocols.

2.75.10.3 Separate Color Coded containers for clean and soiled linen / instruments for sterilization and Vice Versa are used.

2.75.11 Cleaning

2.75.11.1 All patient care areas are thoroughly washed on weekly basis & disinfected with fast acting nontoxic surface disinfectants.

2.75.11.2 Daily cleaning of all rooms & mopping with fast acting nontoxic surface disinfectant solution.

2.75.11.3 Special attention is to given to the sanitation of the toilets.

2.75.11.4 Patients suffering from Infectious / Communicable Diseases are managed discreetly to avoid cross infection.

2.75.11.5 All such identiledpatients are provided separate set of items for their use and disposed off. NO CROSS USE & very careful sterilization before reuse.

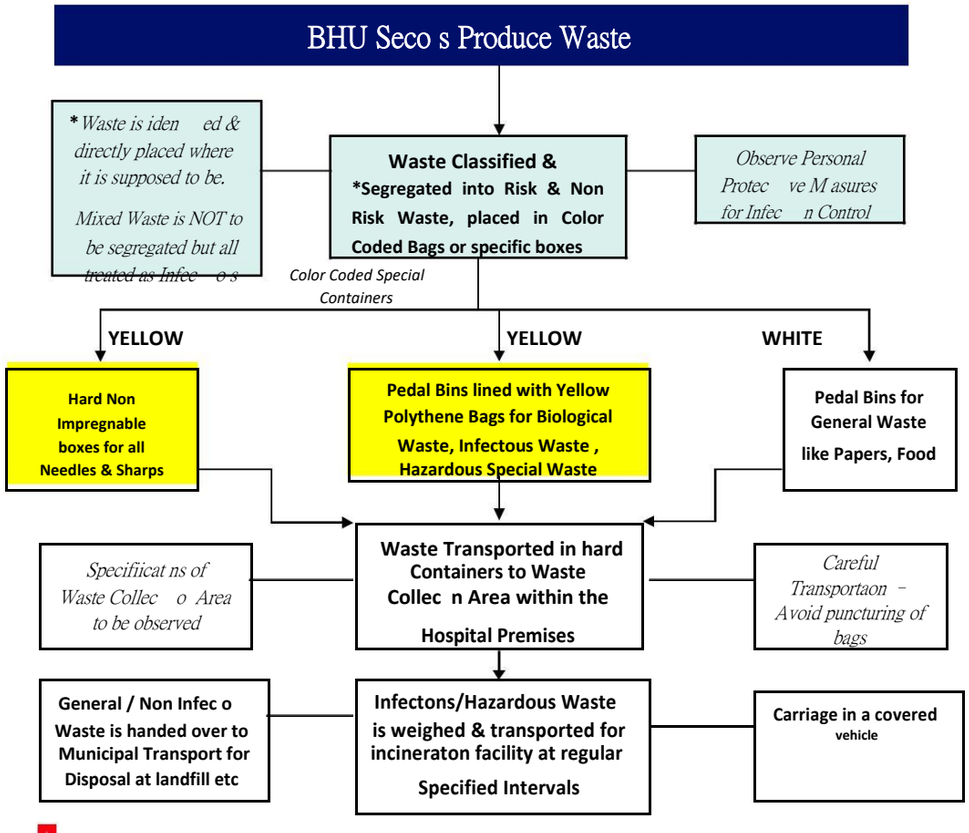
2.75.12 Disposal of Waste:

2.75.12.1 One of the posted sta ffis trained in the Hospital Waste Management SOPs based on (HWMR) 2014 and made responsible to ensure implementation of at least the following aspects;

2.75.12.2 General cleanliness/hygiene in the BHU premises is maintained.

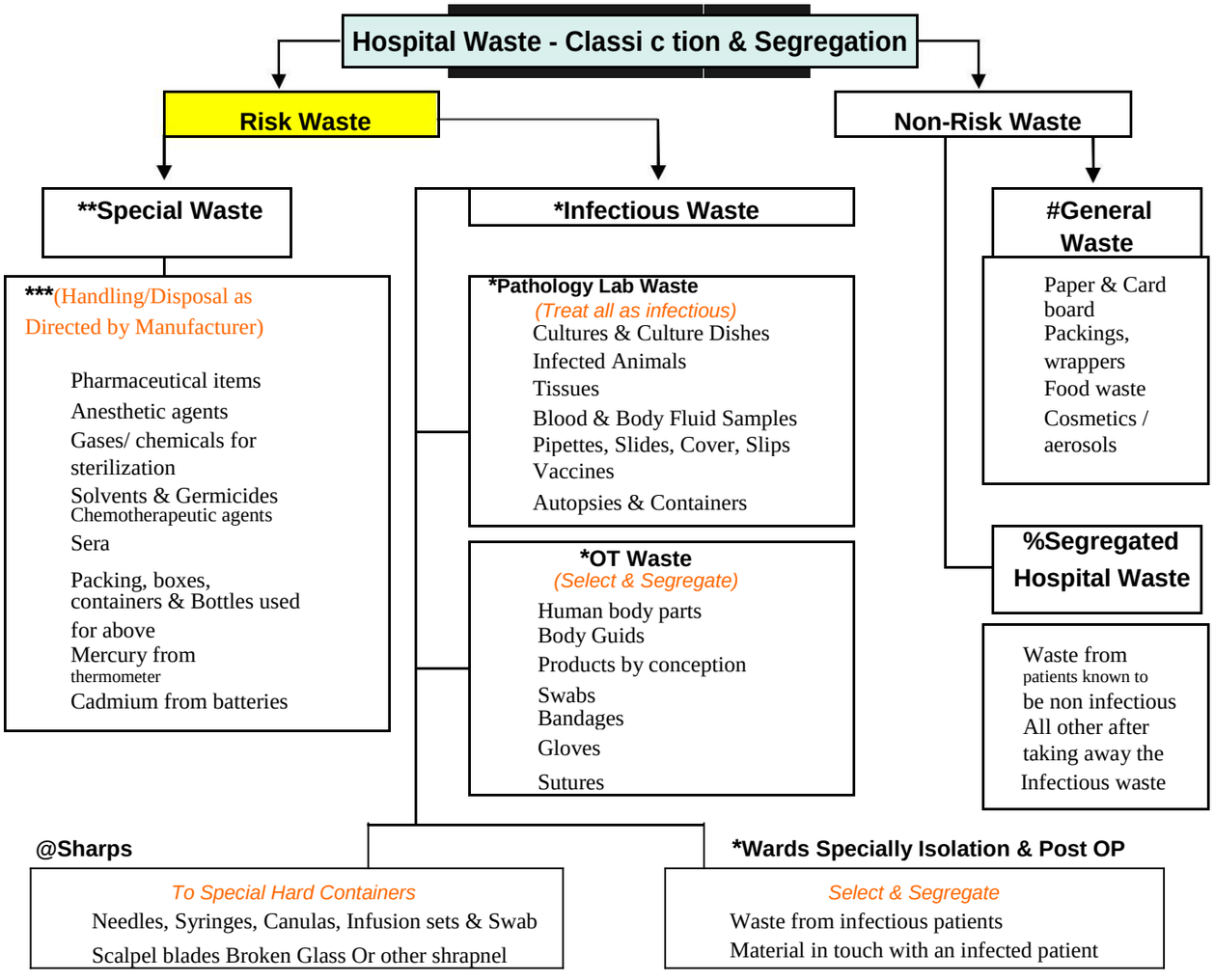
2.75.13 Flow Chart showing the Waste Management activities at BHU is given below;

FLOW CHART - WASTE MANAGEMENT ACTIVITIES AT BHU



NOTE: BHU, being a basic facility, is not exercising the whole SOP but according to scope of its services.

2.75.14 Clinical Waste is classiDed & egregated as shown in the nexxt fw chart;



NOTE: BHU, being a basic facility, is not exercising the whole SOP but according to scope of its services.

Following are the descriptions related to the above fow chart;

- *Segregation: By waste producers i.e. Doctors / Nursing / Paramedical staff. Select & Segregate Risk Waste (Usually 20% of total) to be incinerated, from non-Risk Waste at the site of generation.
- **Segregate in Yellow Colored Pedal Bins lined with strong Yellow Colored Polythene Bags for disposal by Incineration.
- ***Segregate into Special Waste further subgroups viz Pharmaceuticals, Germicides, Chemotherapeutic Agents for Carriage & Disposal as per instructions of manufacturer. Yellow Color with Standard Warning Labels.
  Disposal as per instructions of manufacturer. Yellow Color with Standard Warning Labels.
- @ All Sharps regardless of their origin are to be placed in Non-Impregnable Sealed Yellow Colored Containers with special care for disposal by Shredding / Incineration.
- %, # Non Risk Waste usually constitutes 80% of total BHU Waste and is to be sent through Municipal Carriage Means for disposal at Land ll. Use Pedal Bins Lined with O ffWhite Color Polythene Bags. No labeling required.
- Products of Conception & Body Parts are to be buried at speci edburial sites. Use Yellow Color.

Transportation to internal storage & out of BHU in tough containers/covered vehicles to avoid littering.

PART

4

Job Descriptions

Medical and Paramedical Staff BHUs

Adapted from Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Sta ff2008-09, developed by the Punjab Devolved Social Services Programme (PDSSP) published and notiTedby the Government of the Punjab vide NO. PO(P&E-I) 19-57/2005, dated 13.12. 2008 and as modi edfrom time to time

1. Health Officer In charge (Male/Female)

1.1 Job Summary

Health Officer In charge (Male/Female) BPS 17, is a M.B;B.S. registered with PMDC[8] reporting to DDOH, performs full time duties as overall in-charge of BHU, as Health Care provider and supervisor of all outreach activities in his area of jurisdiction. The Health Officer in charge BHU is not only a Health Care Provider, but is also a manager. He/She facilitates individuals and communities to attain health under the domain of Primary Health Care in accordance with MSDS, SOPs & SMPs. The Job includes promotive, preventive, curative and rehabilitative services.

1.2 Duties / Responsibilities

1.2.1 Administrative

1.2.1.1 For the purpose of discipline, the Health Officer in charge is immediate officer and leader of the BHU health team.

1.2.1.2 Ensures maintenance of daily attendance register of BHU sta ffand out-reach workers with base station at BHU.

1.2.1.3 Ensures that sta ffhas read, understood the SOPs, SMPs related to job and signed at the check sheet as a token of having read the instructions.

1.2.1.4 Takes report of activities from all the sta ffof outreach, static, other vertical programmes. Supervises the receipt and distribution consumables for these programs and ensures no stock outs.

1.2.1.5 Ensures that the services available in the facility are clearly & well displayed in the form of boards /neon signs at the entry / key points for the information of visitors / patients. Also ensures that services not available are not displayed.

1.2.1.6 Responsible for cleanliness and general maintenance, in all respect, of BHU.

1.2.1.7 Ensures provision, and supervises efficient utilization of material resources available to the BHU health team according to rules.

1.2.1.8 Responsible to properly utilize and recoup the allocated Imprest amount Rs.5000/[9]-

1.2.1.9 Supervises that all the forms and registers under his control are kept updated.

1.2.1.10 Ensures the timely submission of monthly DHIS and MIS reports of other vertical programs to the District MIS Cell.

1.2.1.11 Family planning activities at the BHU are carried out under the supervision of Health Officer who ensures that the targets, in this respect, set for various health workers are achieved. Also keeps a liaison with the family planning outlets, out-reach workers of the Department of Population Welfare and keeps himself abreast of their activities and achievements.

1.2.1.12 The Health Officer in charge is responsible himself, directly and indirectly through the members of the BHU health team for provision of primary health care to the people as laid down in the MSDS, SOPs particularly of IC & WM and SMPs.

8- An additional training in preventive health care is recommended to be provided to MOs/ WMOs being posted at BHUs as Health OfGcers.
9- No. PO (P & E-I) 19-113/2004(V) dated 22 November 2006, Department of Health GoPb

1.2.1.13 Ensures data gathering and display; demographic proPl , epidemiological characteristics and health statistics of union council / BHU's revenue limit.

1.2.1.14 Prepares local health facility work plan in line with the District Annual Operational Plan (DAOP).

1.2.1.15 Supervises all the members of BHU health team i.e. health personnel posted in the Catchment Area of Union Council or BHU and out-reach workers and ensures their performance evaluation based on achievement of objectives.

1.2.1.16 Oversees all official correspondence and Performs any other duty assigned by the DDOH.

1.2.2 Preventive / Promotive

1.2.2.1 Ensures maintenance of an optimal standard of sanitation, clean environment, clean water reservoirs and other sources of water supply.

1.2.2.2 Keeps himself abreast with the epidemiological characteristics and the health statistics of the BHU's covered area and takes appropriate measures to effectively combat foci of communicable diseases, if any, before its eruption into epidemic.

1.2.2.3 Ensures encouragement of community participation with his team to achieve the aims. Ensures close working relation of the BHU health team with the workers from the other allied sectors, such as Sanitation, Water Supplies, Teachers, and Imams/ Khateebs for dissemination of health promotional messages/ slogans to community through them.

1.2.2.4 Delivers health promotional messages to the patients by Inter Personal Communication (IPC), Visual Displays in the Facility e.g. charts/photos.

1.2.2.5 Creates awareness & demand for Immunization, Pre Natal and Post Natal care, Family Planning, Good Hygienic Practices, Health Education regarding HIV/AIDS, STIs Hepatitis and communicable diseases, awareness and information regarding development/adaptation of healthy life style behaviors e.g. no smoking, exercise etc.

1.2.2.6 Health Officer adopts appropriate measures as per standing instructions including screening of the locality / community, the patient has come from if the patient suffers from some noti able disease / ommunicable disease and takes measures to combat the situation accordingly. In this process he/she keeps the higher authorities informed/noti ed and seeks their help if required.

1.2.3 Curative

1.2.3.1 The curative duties of the Health Officer include diagnosis, treatment and referral of individual patients coming to the BHU from the communities. Diagnoses the patients on the basis of clinical examination and / or laboratory investigations if required.

1.2.3.2 Provides out door treatment available at BHU.

1.2.3.3 Refers for special advice / admission / investigations to the appropriate level of care.

1.2.3.4 Records curative treatment provided to the patients in the appropriate forms and registers.

1.2.3.5 Rehabilitative

1.2.3.6 Provides Psychiatric, Psychological, Social, Nutritional rehabilitation services and refers essential cases to higher facilities.

1.2.4 Medico-Legal

1.2.4.1 Provides essential lifesaving treatment to any such case reporting at BHU and refers to RHC for medico legal services.

Signature of the Incumbent.
(I have read and accept the job description)

2. School Health & Nutrition Supervisor

2.1 Job Summary

School Health & Nutrition Supervisor BPS 17, holding a Master degree in any subject preferably in Nutrition, Sociology, Social Work, Psychology, Political Science, Public Administration or Business Administration reports to In Charge BHU, performs full time duties. Based at BHU, as an outreach person, acts as a pivot for the provision of school health services in his area of jurisdiction. Provides guidance to students in schools including schools of special education, in preventive & nutritional support services, by providing Jrstaid and referring any case if required to BHU .10

2.2 Duties / Responsibilities

2.2.1 Preventive / Promotive

1.2.2.1 Provides guidance regarding general cleanliness and healthy environment of the school and assists the health officer in annual medical examination of school children &

1.2.2.2 Assists the health officer in conducting comprehensive examination of students at the time of school entry and every 4 years with the help of health related staff.

1.2.2.3 Conducts general physical examination (Nutritional status, anemia, skin, height & weight, skeletal deformities & mental health), checks Eye Sight, Hearing, Oral & Dental Hygiene, with the help of school staff. Immediately refers any child appearing sick to BHU.

1.2.2.4 Provides guidance on good nutritional practices and additional nutritional needs including major micronutrients to physically weak children.

1.2.2.5 Creates awareness amongst teachers & students about communicable diseases, common health problems including hazards of unsafe blood transfusion.

1.2.2.6 Participates in community health promotional activities by interacting with parents during the parent teachers meeting day on health and nutrition matters.

1.2.2.7 Provides information and enables the students in adopting healthy life style behaviors including no smoking, regular exercise, personal hygiene and healthy diet etc.

2.3 Rehabilitative

2.3.1 Understands the principles of rehabilitation, interprets the directions of Doctors / Physiotherapists and guides the teachers, the concerned child, parents to return to normalcy with minimum or no disability after a disease or injury. The service includes nutritional and psychological rehabilitation.

2.4 General

2.4.1 Receives health education / related educational material, stationery items boards etc., from BHU.

2.4.2 Prepares his / her own work / tour plan and gets its approval from the In charge of the health facility and communicates his / her approved tour plan to the concerned schools.

10- After recruitment, the School Health & Nutrition Supervisor will be given a proper training in school health services.
11- Female health staff will be involved while dealing with female students.
12- Common ailments like anemia, skin diseases, ear nose throat eyes and oral problems.

2.4.3 Records Tndingsof the medical examinations in the school health register with a copy of the same to the BHU.

2.4.4 Provides training to the teachers for early detection of common ailments & and rstaid under the supervision of Health Officer.

2.4.5 Performs any other duty assigned by the in charge.

2.5 Signature of the incumbent:
(I have read and accept the job description)

12- Common ailments like anemia, skin diseases, ear nose throat eyes and oral problems.

3. Medical Assistant / Health Technician

3.1 Job Summary

Medical Assistant / Health Technician BPS 9 & 16, holding FSc Pre Med + Diploma as Health Technician from Punjab Medical faculty (PMF) OR Diploma as Dispenser from PMF + 5-year relevant experience reports to In Charge BHU and performs full time duties. Accomplishes duties under the guidance of Health Officer and is responsible for the dispensary and its related activities. Provides static and out-reach health services to the individuals and communities including preventive, curative i.e. minor care & and creates awareness about health and nutrition education and immunization.

3.2 Duties / Responsibilities

3.2.1 Curative

3.2.1.1 Assists the Health Officer in performing duties in examination / treatment.

3.2.1.2 Refers seriously ill patients to the higher facility in the absence of in charge.

3.2.1.3 Provides minor care to patients.

3.3 Preventive / Promotional

3.3.1 Guides the patients & the communities on prevention of communicable / common diseases.

3.3.2 Creates awareness about the immunization (EPI), FP, STI/ RTIs and good nutritional and hygienic practices.

3.4 General

3.4.1 Assists in general administration.

3.4.2 Prepares monthly HMIS report.

3.4.3 Maintains OPD records.

3.4.4 Issues medicines to the Dispenser and records expense.

3.4.5 Demands & procures medicines and stores from DOH office.

3.4.6 Performs any other duty assigned by the in charge.

3.5 Signature of the incumbent:

(I have read and accept the job description)

13- Minor care includes Drst aid, change of dressings and pain killer medication.

4. Dispenser

4.1 Job Summary

Dispenser BPS 9, Matric with Science and recognized certi cae in dispensing reports to in Charge BHU and performs full time duties. Assists Health Officer in activities relating to promotion of Community Health and general administration at the BHU. Provides services both at in-patient as well as in out-patient departments. Responsible for issuing medicines to the patients according to the prescription using standard pharmacological procedures, guide patients about the use of dispensed drugs and work as dresser. Prepares mixtures, lotions, suspensions, ointments, powders liniments etc. Works as store keeper of Medical / General Store in the BHU & maintains different registers regarding medicines and patients.

4.2 Duties / Responsibilities

4.2.1 Curative

4.2.1.1 Responsible for providing necessary assistance to the doctor in the efficient dressing of the patients Dispenses the prescribed drugs and medicines to the patients according to the prescription and furnishes sufficient information to the patient on use of the dispensed drugs. Explains the patients on the proper use of medicines in accordance with the prescription.

4.2.1.2 Refers seriously ill patients to the higher facility in the absence of in charge.

4.2.1.3 Prepares and keeps the dressing trolley in order and ready for emergency.

4.2.1.4 Prepares the dressing drums for autoclaving by himself or at the central autoclave unit.

4.2.1.5 Carries out dressing of the patients with simple injuries and assists in or carries out dressing of serious injuries under the guidance of medical attendant/officer.

4.2.1.6 Indents linen/dressing material required for dressing and maintains the ledgers/stock accordingly.

4.3 Preventive / Promotive

4.3.1 Administers the vaccines at the static centre in the absence of Vaccinator/ LHV.

4.3.2 Disposes o ffsyringes, needles, sharps and other wastes as per SOP on HCWM.

4.3.3 Ensures sterilization of instruments as per SOP.

4.4 General

4.4.1 Regularly maintains the medicines and other store items, all the registers as per SOPs and assists in preparation of monthly DHIS report.

4.4.2 Performs any other duty assigned by the in charge.

4.5 Signature of the incumbent

(I have read and accept the job description)

5. Lady Health Visitor

5.1 Job Summary

Lady Health Visitor BPS 9, Two years Diploma in LHV Course registered with PNC reports to In Charge BHU and performs full time duties. Promotes Community Health by working with individuals and families for the welfare of mother and children through static and out-reach domiciliary MCH services. Provides antenatal, natal, postnatal care and family planning services to the mothers. Her job also extends to the care of infants and pre-school children including EPI, ARI, Nutrition, growth monitoring, and health education for awareness and motivation.

5.2 Duties / Responsibilities

5.3 Preventive / Promotive

5.3.1 Provides Ante Natal Care:

5.3.1.1 By trying to keep herself aware of every expectant mother in her catchment area and visit mothers if required.

5.3.1.2 By advising mothers on preparation for delivery, choice of a skilled attendant at delivery and signs/symptoms of the onset of labour.

5.3.1.3 By detecting complications during pregnancy, especially danger signs of pregnancy and to arrange their timely referral if required.

5.3.1.4 By ensuring 2 doses of TT immunization to every expectant mother.

5.3.1.5 Maintaining adequate health record of expectant mothers according to the standing instructions.

5.3.1.6 Advises pregnant and lactating mothers on their and the children's nutritional needs.

5.3.1.7 Assesses nutritional status of pregnant women and lactating mothers through hemoglobin estimation and other anthropometric measures (weight, growth etc).

5.3.1.8 Advises micronutrients Iron, Iodine, Vitamin A, Folic acid and Vitamin D if required.

5.3.1.9 Educates the mothers on accurate methods of preparation and timing of breastfeeding and good weaning practices.

5.3.1.10 Distributes the food supplements from WFP among eligible mothers.

5.3.2 Provides Post Natal Care:

5.3.2.1 By visiting at least once to each mother with Urst postnatal week in case of reported complicated delivery and within Xrstmonth for the remainder.

5.3.2.2 Arranges immediate referral in the event of any post-natal complication.

5.3.2.3 Advises the mothers on the care of their health and that of the infant.

5.3.2.4 Advises mothers on optimum birth spacing.

5.3.2.5 Provides advice to mothers in the post natal period for enabling them to resume normal daily routines at the earliest.

5.3.3 Care of the Infant:

5.3.3.1 Advises LHWs, TBAs and Midwives on infant care during Seldvisits of the catchment area.

5.3.3.2 Ensures the entry in birth register of all births in the catchment area and assesses each infant for growth and umbilical cord condition at the post natal visit.

5.3.3.3 Supervises the health of infant and nursing mother by making visits on monthly basis.

5.3.3.4 Monitors nutrition, growth of the clients & identiJes any deviation from normal health standard and arranges their referrals to the health facility.

5.3.3.5 Makes efforts that all infants are vaccinated against six communicable diseases under EPI programme, promotes use of ORS in diarrhoeal diseases and advices on ARI management.

5.3.3.6 Maintains health record of all the infants visiting the health facility as per standing instructions to have regular follow-up .

5.3.4 Care of the Pre-school Child:

5.3.4.1 Advises LHWs, TBAs and Midwives on child care during Seldvisits of the catchment area.

5.3.4.2 Monitors the weight of the children up to the age of 3 years and llsup MCH Card of the clients coming to the health facility.

5.3.5 Creates awareness & demand for:

5.3.5.1 Immunization

5.3.5.2 Prenatal, Natal and Postnatal Care

5.3.5.3 Hygienic / Sanitation Practices

5.3.5.4 Prevention of STIs/RTIs, AIDS, Hepatitis etc.

5.3.5.5 Development / adaptation of healthy life style behaviors e.g. healthy nutritional habits, exercise etc.

5.3.6 Advises mothers on family planning as one of the prime duties. She carries out this by conducting sessions with them in the facility and individually.

5.3.7 Advises appropriate family planning methods and provides non surgical FP Services.

5.3.8 Maintains a record of family planning clients on a prescribed family planning register.

5.4 Curative

5.4.1 Provides Basic Emergency Obstetric & Neonatal Care (EmONC) as under;

5.4.1.1 Manually removes placenta & retained products.

5.4.1.2 Ensures availability of oxytocic drugs, parenteral antibiotics and anticonvulsants.

5.4.1.3 Basic newborn resuscitation, Warmth (drying and skin-to-skin contact), Eye prophylaxis, clean cord care, early and exclusive breast feeding.

5.4.2 Refers patients to Health Officer BHU / higher health facilities for management

5.5 Training of Dais, TBAs.

5.5.1 Conducts initial and refresher training of Dais, TBAs if asked / arranged by the District Health Department.

5.5.2 Maintains training records.

5.6 Reports and Returns

5.6.1 Maintains the following registers;

5.6.1.1 Mother health register

5.6.1.2 Child health register

5.6.1.3 Birth register

5.6.1.4 Vaccination register of the EPI Static Centre in the absence of the Vaccinator.

5.6.1.5 Completes the MCH portion of the monthly DHIS / HMIS report.

5.7 General

5.7.1 Maintains record of all activities / stocks and reports as per SOPs.

5.7.2 Coordinates with vaccinator in management of vaccine store at the health facility.

5.7.3 Creates an informal system of interaction and communication with TBAs and supervises the sub-ordinate personnel.

5.7.4 Supervises the conduct of at least one con nementeach year for each trained Dai and TBA and additional con nementswherever required.

5.7.5 Maintains register of Dais, TBAs working in the area. Displays list of names and addresses of trained Dais, TBAs and LHWs in the health facility.

5.7.6 Keeps record of her eldvisits in the area.

5.7.7 Performs any other duty assigned by the in charge.

5.8 Signature of the incumbent:
(I have read and accept the job description)

6. Mid Wife

6.1 Job Summary

Mid Wife, BPS 5, One-year Diploma in Midwifery registered with PNC reports to LHV and performs full time duties in the Noti ed atchment area. Performs maternity and child welfare work in her area under the supervision of the LHV. Strives towards a goal of conducting 80% of the con nementsin her area. She performs duties at BHU for two days, four days' outreach domiciliary Midwifery services and care of the new born. Assists and cooperates with other health workers especially LHV, LHW in their work at the center and during home visits.

6.2 Duties / Responsibilities

6.3 Preventive

6.3.1 Makes efforts to contact all expectant mothers in her area and persuades them to come to the centre for examination, advice and assistance by the LHV or Lady Doctor.

6.3.2 Visits antenatal, post-natal cases and newborn babies at home regularly with the LHV.

6.3.3 Brings any prenatal, post-natal or newborn abnormalities to the notice of the LHV and arranges for medical aid.

6.3.4 Helps the pregnant mothers in preparation of delivery at home.

6.3.5 Reports cases of infection or contagious diseases to Health officer or LHV.

6.3.6 Makes efforts that all babies born in her area have been immunized and explains the importance of immunization to the people in her area.

6.3.7 Participates in Health Education and family planning services. Guides Parents on EPI, ORT, child spacing, breast feeding, weaning, balanced diet etc.

6.4 Curative

6.4.1 Limited to very simple remedies like painkillers (Paracetamol, Disprin) or First Aid like stopping the bleeding by compression/bandaging and fracture splinting.

6.4.2 Receives / Indents kits, medicines and keeps their record.

6.4.3 Guides patients to seek advice from her senior level if required.

6.4.4 Helps / guides mothers in Post Natal period to return to normal life specially the mother of rstchild.

6.4.5 Performs any other duty assigned by the in charge.

6.5 Signature of the incumbent:

(I have read and accept the job description)

7. Computer Operator

7.1 Job Summary

Computer Operator, BPS 12, One-year Diploma in Midwifery registered with PNC reports to LHV and performs full time duties at the BHU. Performs all computer related activities assigned to him and ensures efficient, economical utilization and routine maintenance of data processing and related equipment under his use. Responsible for collection and installation of standard/authorized computer programs of utility on the computer/s at BHU. Mainly works in office. Manages computer hardware/software CDs etc. Occasionally required to collect / disburse information to other offices or prepare / show a presentation.

7.2 Duties / Responsibilities

7.2.1 Utilizes DHIS software to record and store patient / client data.

7.2.2 Types official letters as per instructions of the in charge BHU.

7.2.3 Maintains official l l and records.

7.2.4 Prepares reports / presentations according to the requirement.

7.2.5 Responsible for routine maintenance of computers and related equipment.

7.2.6 Ensures that no mishandling of the computers & related equipment occurs.

7.2.7 Performs any other duty assigned by the in charge.

7.3 Signature of the incumbent:

(I have read and accept the job description)

8. Sanitary Inspector

8.1 Job Summary

Sanitary Inspector, BPS 8, Matric with Science + Diploma Sanitary Inspector reports to In Charge BHU and performs full time duties at the BHU. The Sanitary Inspector, along with the other members of the out-reach team, is responsible for ensuring clean environment of the community. He is also responsible for promotion / awareness of good sanitation practices including use of latrines, clean water for washing and safe disposal of excreta.

8.2 Duties / Responsibilities

8.2.1 Maintains diary of his movements and daily activities and gets it counter signed by the officer in charge on daily basis.

8.2.2 Maintains the stocks of various items in his use, updated in all respects.

8.2.3 In case good sanitation practices are not being complied with and when the individual/family action, in this regard, is hazardous to the environment / community, reports in writing to the officer in charge for legal action by the DOH.

8.2.4 Conducts sessions on good sanitation practices and clean environment including use of latrines, clean water for washing and safe disposal of excreta.

8.2.5 Conducts campaign to kill stray dogs, ie, insects etc, in the villages himself or with the help of sanitary patrol, if posted.

8.2.6 Chlorinates/disinfects the wells and ponds of drinking water.

8.2.7 Collects information on the epidemicity or endemicity of diseases in the area under his jurisdiction with the help of LHW/TBAs and village activists. Informs the officer in-charge of his health facility upon n Pndisuch a situation immediately, and at the same time, takes appropriate action with the assistance of fellow out-reach workers to combat such menaces.

8.2.8 Collects samples, of food items, stocked or displayed for sale, suspected of adulteration and arranges its dispatch for analysis by the public analyst and subsequent legal action, if required, by the DOH through the Officer I/C health facility.

8.2.9 Performs any other duty assigned by the in charge.

8.3 Signature of the incumbent:

(I have read and accept the job description)

9. CDC Supervisor

9.1 Job Summary

CDC Supervisor, BPS 5, Matric with Science + Training in Parasitology and Communicable Disease Control, knowledge of signs and symptoms of insecticidal poisoning and its treatment, reports to In Charge BHU and performs full time duties. CDC Supervisor Carries out his assignment by eldvisits with fellow members of the out-reach team as pre-announced visit plan. Helps in controlling the communicable diseases by performing preventive activities and advising corrective actions to be taken immediately and also by administering antimalarial drugs.

9.2 Duties / Responsibilities

9.3 Preventive / Promotive

9.3.1 Arranges spray of insecticides on ponds, drainage channels and other sites suspected of mosquito breeding in high risk areas. Conducts and ensures that the insecticidal spray is done in the area, according to the SOPs.

9.3.2 Ensures that items in stock with him are consumed within their shelf life and any items left with 06 months shelf life are brought immediately in the notice of the medical officer in charge.

9.3.3 Conducts health educational sessions and delivers talks, to the individuals and communities, on how to prevent and control communicable diseases in their localities.

9.3.4 Gets information from the LHWs/TBAs about the patients in their village/locality suffering from fever and other Communicable Diseases and visits / assesses such patients.

9.3.5 In case of suspected malaria, prepares the thick blood slides for examination for malarial parasite and administers radical anti-malarial treatment to the malaria positive cases.

9.3.6 However, in case of long standing, low grade fever i.e. suspected tuberculosis; he collects sputum for AFB detection.

9.4 General

9.4.1 Maintains and keeps the instruments, insecticides, stock register etc. up to-date and periodically countersigned by the in charge.

9.4.2 Establishes an active liaison with the LHWs, TBAs and village activists interested in human welfare and community development with the help of fellow out-reach workers.

9.4.3 Maintains a diary of his movements and activities for countersignature by the in charge and submits statistical / situational reports about his functions to the in charge..

9.4.4 Performs any other duty assigned by the in charge.

9.5 Signature of the incumbent:

(I have read and accept the job description)

10. Vaccinator

10.1 Job Summary

Vaccinator, BPS 5, Matric with Science + Training in vaccination & Expanded Programme on Immunization, having training in minor repair and maintenance of cold chain equipment, reports to In Charge BHU and performs full time duties in the catchment area of BHU. Vaccinator is responsible to in charge BHU for ensuring vaccination of children and mothers. Carries out assignment through Heldvisits, with the fellow members of the out-reach team as pre-announced plan.

10.2 Duties / Responsibilities

10.3 Preventive Services

10.3.1 Gets information about new-borns and children under one year from the LHWs and TBAs in their village/locality and registers them appropriately.

10.3.2 Ensures vaccination of all new born and children under one year, in the catchment area assigned to him, as per standard EPI schedule and good professional competence.

10.3.3 Gets information about the occurrence of vaccine preventable diseases and informs, immediately, the health officer BHU.

10.3.4 Conducts sessions on health education including motivation of people, using his interpersonal communication skills, to get the vaccination schedule of their children including the defaulters.

10.4 General

10.4.1 Establishes an active link with the LHWs/TBAs and village activists, interested in human welfare and community development along with the fellow out-reach workers.

10.4.2 Submits monthly EPI report of his area to in charge BHU.

10.4.3 Maintains and keeps the instruments, equipment, refrigerator, vaccine carrier, ice cubes, thermometer etc. in working order and ensures that they are not used for purposes other than the immunization programme.

10.4.4 Maintains and keeps the stock register for vaccines, cold chain equipment etc., updated and periodically countersigned by the I/C medical officer.

10.4.5 Stores vaccine and other items of stock at optimal conditions and ensures that the these are consumed before expiry and the situation is brought in to the notice of Health Officer I/C.

10.4.6 Keeps diary of his movements and activities.

10.4.7 Performs any other professional duty assigned by the in charge.

10.5 Signature of the incumbent:

(I have read and accept the job description)

11. Sanitary Patrol

11.1 Job Summary

Sanitary Petrol, BPS 1, performs full time duties in the catchment area of BHU and reports to Sanitary Inspector. Responsible for proper carriage of equipment, chemicals and instruments essentially required for conduct of duties to be performed by the Sanitary Inspector and out-reach team.

11.2 Duties / Responsibilities

11.2.1 Conducts Teldvisits with Sanitary Inspector according to the pre-announced visit plan.

11.2.2 Assists Sanitary Inspector in motivating people for environmental sanitation, using clean water for washing, building and keeping the latrines clean and appropriate disposal of excreta.

11.2.3 Patrols the area with the SI and carries equipment, chemicals and instruments for use as per given instructions.

11.2.4 Ensures safe custody of the equipment, chemicals and instruments being carried.

11.2.5 Performs any other duty assigned by the in charge.

11.3 Signature of the incumbent:

(I have read and accept the job description)

12. Lady Health Worker [4]

12.1 Job Summary

Lady Health Worker, Middle, preferably Matric (with past community development experience preferred), selected by Health Facility Selection Committee, performs full time duties in the notiVedcatchment area of BHU and reports to Lady Health Supervisor. Promotes Community Health by working with individuals, families and communities by providing/guiding them to Primary Health Care Facilities viz Family Planning Services, immunizing mothers & children under EPI, providing treatment for minor ailments and coordinating with other community based preventive programmes. She also promotes positive health behavior in the communities. The LHWs are residing in the same communities for which they are recruited, are acceptable to their communities, trained to deliver Family Planning Services, to promote positive health behavior and deal with the minor health problems of individuals and the community through a PHC approach. She accomplishes this by organizing the community by developing women groups and health committees and acts as a bridge between community & the health system by coordinating on both sides. Gets the support of NGOs.

12.2 Duties / Responsibilities

12.3 Preventive

12.3.1 For Mother and Child

12.3.2 Register pregnant women and less than 5 years children.

12.3.3 Provides preventive services regarding Malaria, Diarrhea, ARI, TB, Intestinal Parasites, Hepatitis, Eye problems, Scabies, other minor diseases & Injuries.

12.3.4 Provides ante-natal and post-natal care to mothers.

12.3.5 Arranges / ensures delivery through skilled birth attendant.

12.3.6 Coordinates with TBA/Mid Wife/LHV, and local health facility for efficient, antenatal and postnatal services.

12.3.7 Coordinates & works with EPI Vaccinator for immunization of mothers and children.

12.3.8 Emphasizes the importance of immunization and motivates the mothers for immunizing themselves and their children.

12.3.9 LHW trained in vaccination administers vaccines according to the policies of the program.

12.3.10 Maintains record of all children and mothers eligible for immunization in her area of responsibility.

12.3.11 Family Planning

12.3.12 Registers eligible couples.

12.3.13 Provides condoms, oral pills to eligible couples and refers clients needing IUD insertions, contraceptive surgery and injectable in coordination with TBAs/Mid Wives/LHV and local health facilities.

14- Job Description of LHW has been adopted from National Program for Family Planning and Primary Health Care / IRMNCH

12.3.14 Provides guidance to families for prevention of STIs, AIDS and RTIs.

12.3.15 Provides guidance to families for countering Major Micronutrient Defciencies & to take the supplements especially iron and folic acid.

12.4 Health Promotional

12.4.1 Provides Health Education for Good hygienic/sanitation practices.

12.4.2 Creates awareness & demand for services available in the Health Facilities.

12.4.3 Disseminates health education messages in the communities.

12.4.4 Undertakes nutritional interventions such as anemia control, growth monitoring, and emphasizes on breast feeding and weaning practices.

12.5 Curative

12.5.1 Provides guidance & accompanies the clients to the concerned health facility when required.

12.5.2 Treats minor ailments e.g. Diarrhea, ARI, Intestinal Parasites, Minor Eye Diseases, Scabies etc. & minor Injuries.

12.5.3 Requisites medicines from health facility / receiving / disbursing etc.

12.5.4 Works with TB DOTs, Hepatitis and Malaria Control Programmes & provides treatment and follow up as per programme policies, SOPs/SMPs.

12.6 Rehabilitative

12.6.1 Guides mothers in the post natal period for enabling them to resume normal daily routines at the earliest.

12.7 Referral

12.7.1 She refers cases to nearest FLCFs as per SOPs guidelines.

12.7.2 Performs any other duty assigned by the in charge.

12.8 Signature of the incumbent:
(I have read and accept the job description)

Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part 3
MSDS and Indicator for Rural Health Centre (RHCs)

(Weightage 10%)

MINIMUM SERVICE DELIVERY STANDARDS (MSDS) AND INDICATORS FOR RURAL HEALTH CENTRES

Final Draft – CG-13MS-Ed1-050516

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Lahore Division, Lahore.

Punjab Healthcare Commission

Ind 20. The In-charge ensures implementation of these requirements.....19

Ind 21. The RHC in-charge ensures periodic/instant repair & maintenance, renovation of building/s and raising demand/s for missing facility. 19

Standard 7. FMS-2: The RHC has a system for clinical and support service equipment management. 21

Ind 22. The RHC in-charge ensures maintaining inventory, periodic inspection, service and proper functioning of equipment.....21

Standard 8. FMS-3: The RHC has arrangement to cater for fire and non-fire emergencies within the facilities. 22

Ind 23. The RHC has arrangements and provisions for i. Early detection and ii. Management of fire and non-fire emergencies.....22

Ind 24. The RHC has a safe exit (evacuation) arrangements in case of fire and non-fire emergencies. 22

Ind 25. Simulation exercise is held at least once in a year and Staff members are trained for their role in case of such emergencies. 22

2.3 Human Resource Management (HRM) 23

Standard 9. HRM-1: The staff joining the RHC are oriented to the environment, respective sections and their individual jobs.....23

Ind 26. Each regular/ contract based /short term employee, is appropriately oriented to the RHC's mission and goals as well as relevant department / service / program policies and procedures. 23

Ind 27. Each regular / contract based/ short time employee is made aware of their job description. 23

Ind 28. Each regular/contract based/short term employee is made aware of his /her rights/responsibilities and patient's rights/responsibilities.....24

Standard 10. HRM-2: The approved appraisal system for evaluating the performance of the employees is practiced at RHC.....25

Ind 29. Performance appraisal is carried out at pre-defined intervals & is regularly documented in their files. ..25

Standard 11. HRM-3: There is a documented personnel record for each staff member and process of credential verification exists. 26

Ind 30. The Employee's record/information regarding posting, qualification / education, in-service training, disciplinary background, job description, appraisal record and health status is maintained at the RHC. 26

Ind 31. There is an evidence of verification of the credentials (education, registration, training and experience) of medical professionals including doctors and paramedics permitted to provide patient care without supervision. 26

2.4 Information Management Systems (IMS) 27

Standard 12. IMS-1: The RHC has a complete and accurate medical record of every patient/client.....27

Ind 32. Every medical record has a unique number / identifier.....27

Ind 33. Only authorized person/s make entries in the record. 27

Ind 34. Every record entry is legible, dated, timed and signed. 28

Ind 35. The record contains information regarding patient/client identity, presenting complaint, diagnosis, action taken and details if shifted/ referred/died as the case may be.....28

Ind 36. Weekly reports of notifiable vaccine preventable diseases are submitted regularly. 28

Ind 37. Monthly DHIS reports are submitted regularly.....29

Ind 38. The medical records are reviewed regularly/periodically. 29

2.5 Quality Assurance / Improvement (QA) 30

Standard 13. QA-1: The RHC has quality assurance / improvement system in place. 30

Ind 39. A quality assurance and internal monitoring system is in place.....30

Standard 14. QA-2: Sentinel events are assessed and managed. 31
Ind 40. The RHC has defined sentinel events. 31
Ind 41. Sentinel events are intensively analysed when they occur. 31

2.6 Access, Assessment, and Continuity of Care (AAC) 32
Standard 15. AAC-1: Services are provided as portrayed. 32
Ind 42. The services being provided at the RHC are displayed. 32
Standard 16. AAC-2: The HCE has a well-established patient management system. 33
Ind 43. There is a well-established registration and management process. 33
Ind 44. There is a well-established patient assessment process. 33
Ind 45. The health education is provided as per guidelines. 34
Ind 46. The preventive services are provided as per guidelines. 34
Standard 17. AAC-3: Laboratory services are provided as per the requirements of patients. 35
Ind 47. Scope of the laboratory services is according to the clinical services provided by the RHC. 35
Ind 48. Adequately qualified and trained personnel perform and/or supervise the laboratory investigations. 35
Ind 49. Policies and procedures guide the: i. collection, ii. identification, iii. handling, iv. safe transportation, v. processing and vi. disposal of specimens. 36
Ind 50. Laboratory results are available within a defined time frame. 36
Ind 51. Critical results are reported immediately to the concerned personnel. 37
Ind 52. Laboratory tests not available in the RHC are referred to laboratories, based on policy. 37
Standard 18. AAC-4: Imaging services are provided as per the clinical requirements of the patients. 38
Ind 53. Imaging services comply with legal and other regulatory requirements. 38
Ind 54. Scope of the imaging services is in accordance with the clinical services provided by the RHC. 38
Ind 55. Adequately qualified and trained personnel perform, supervise and interpret the radiological investigations. 39
Ind 56. Arrangements for identification and safe transportation of patients to imaging services exist. 39
Ind 57. Imaging results are available within a defined time frame. 39
Ind 58. Critical results are intimated immediately to the concerned personnel. 40
Ind 59. Quality assurance activities are evident in the imaging department. 40
Ind 60. Imaging tests not available in the RHC are referred, based on the policy. 41

2.7 Care of Patients (COP) 42
Standard 19. COP-1: Essential arrangements for emergency care exist. 42
Ind 61. The RHC has essential arrangements to cater for emergency care. 42
Ind 62. Emergency services also address handling of medico-legal cases. 42
Ind 63. The RHC has referral SOPs 42
Ind 64. The RHC has list of contact numbers of the referral facilities, medico legal authorities, concerned police stations, ambulance/rescue services and the social services organizations. 43
Ind 65. Discharge to home or transfer to another facility is documented. 43
Ind 66. The Policy regarding home visit is portrayed and accordingly catered for. 43
Standard 20. COP-2: RHC defines its policy and procedures for rational use of blood and/or blood products. 44

Ind 67. RHC defines policy and procedures for transfusion of blood and blood products. 44
Ind 68. Informed consent is obtained for transfusion of blood and blood products 44
Standard 21. COP-3: Policies and procedures guide the care of obstetrical patients. 45
Ind 69. The RHC defines and displays whether high-risk obstetric cases and their neonates can be cared for or not. 45
Ind 70. Staff caring for obstetric cases are competent and available. 45
Ind 71. Obstetric patients / clients and children under five are also assessed for nutritional status. 46
Ind 72. The RHC caring for obstetric cases has the facilities and technically competent staff to take care of neonates of such cases 46
Ind 73. No treatment is administered until the identity of the patient is ensured 47
2.8 Management of Medications (MOM) 48
Standard 22. MOM-1: Policies and procedures exist for the prescription of medications. 48
Ind 74. The RHC should follow the prescribed policy as to who can write orders. 48
Ind 75. Prescriptions are clear, legible, dated, timed, named/stamped and signed 48
Ind 76. Policy on verbal orders is documented and implemented. 48
Ind 77. The RHC has the list of essential drugs to treat common diseases, as defined/notified by the government. 49
Ind 78. The RHC maintains appropriate stock of essential drugs to treat common diseases. 49
Ind 79. The RHC defines a list of high-risk medication. 49
Ind 80. High-risk medication orders are verified prior to dispensing. 50
Standard 23. MOM-2: Policies and procedures guide the safe storage and dispensing of medications. 51
Ind 81. Medicines are stored as per guidelines. 51
Ind 82. Expiry dates/shelf life are checked prior to dispensing, as applicable 51
Ind 83. Labelling requirement are implemented 51
Standard 24. MOM-3: There are defined procedures for medication dispensing/administration 52
Ind 84. Medications are dispensed/administered by those who are permitted by law and authorized to do so. 52
Ind 85. Patient is identified prior to administration of a drug. 52
Ind 86. Medication is verified from the order prior to dispensing/administration. 53
2.9 Patient Rights and Education (PRE) 54
Standard 25. PRE-1: A system for obtaining consent for treatment exists at RHC. 54
Ind 87. The MO or other HCP obtains consent from a patient before examination. 54
Ind 88. The situations where specific informed consent is required are listed as per prescribed policy. 54
Ind 89. The policy describes who can give consent when patient is incapable of independent decision-making. 55
Standard 26. PRE-2: Patient and families have a right to information on expected costs 56
Ind 90. The user charges list is available and patient/family is informed about the costs. 56
Standard 27. PRE-3: Patients and families have a right to refuse treatment and lodge a complaint. 57
Ind 91. Patients and families have a right to refuse the treatment 57
Ind 92. Patients and families have a right to complain and there is a mechanism to address the grievances 57
Ind 93. The RHC uses the results of complaints investigations as part of the quality improvement process. 58

Ind 94. HCE charter is displayed and patients/families are guided..... 58

2.10 Infection Control (IC)..... 59

Standard 28. IC-1: The RHC has an infection control system in place. 59

Ind 95. The RHC has arrangement for infection control aiming at prevention and reducing risk of infections... 59

List of Acronyms and Abbreviations

AAC	Access, Assessment and Continuity of care
ASA	American Society of Anaesthesiologists
COP	Care of Patients
CQI	Continuous Quality Improvement
DFID	Department for International Development
FGD	Focus Group Discussion
FMS	Facility Management and Safety
HIC	RHC Infection Control
HRM	Human Resource Management
ICU	Intensive Care Unit
IMS	Information Management Systems
IND	Indicator
JCAHO	Joint Commission for Accreditation of Healthcare Organizations
JCI	Joint Commission International
KCl	Potassium Chloride
MOM	Management of Medication
MSDS	Minimum Service Delivery Standards
OH&S	Occupational Health and Safety
PHC	Punjab Healthcare Commission
PNAC	Pakistan National Accreditation Council
PNRA	Pakistan Nuclear Regulatory Authority
PRRE	Patient Rights/Responsibilities and Education
QA	Quality Assurance
QHA	Quality Holistic Accreditation
ROM	Responsibilities of Management
SEPP	Society of Emergency Physicians Pakistan
SOPs	Standard Operating Procedures
TAC	Technical Advisory Committee
TAMA	Technical Assistance Management Agency

Minimum Service Delivery Standards (MSDS) for Rural Health Centers (RHCs)-2016

Foreword

The Punjab Healthcare Commission (PHC) is an autonomous health regulatory body established under the PHC Act 2010 for the standardization of healthcare service delivery in Punjab. Under this mandate, the PHC has developed the Minimum Service Delivery Standards (MSDS) and associated Indicators for Cat-I RHCs in 2012 to introduce a culture of Clinical Governance grounded in the principles of responsibility and accountability so that the quality, safety and efficiency of healthcare service delivery in Punjab could subsequently be improved.

These standards for RHCs (Public Sector Cat-II HCEs) are largely based on the above product of collaborative deliberations between international and local health experts, and extensive consultations with the relevant stakeholders, which were reviewed and endorsed by the Technical Advisory Committee (TAC), and approved by the Board of Commissioners (BOC) of the PHC and the Government of Punjab.

A total of **28** Standards and **95** Indicators are prescribed in the MSDS for Cat-II RHCs/HCEs covering 10 vital aspects of healthcare service delivery at Secondary level, ranging from Care of Patients and Management of Medication to Continuous Quality Improvement, Infection Control and Information Management Systems, among others. Each indicator is accompanied by a Survey/scoring system to facilitate their implementation and assess compliance.

I would like to thank the experts of Clinical Governance and Organizational Standards of PHC for their valuable inputs in the development/adaptation of standards considering the lessons learnt during implementation of MSDS at Cat-I and Cat-II HCEs and compilation of this document. My thanks are also due to all the stakeholders who made extremely beneficial suggestions for making the MSDS implementable for RHCs. I am also indebted to the TAC for a highly professional critical appraisal of the final document. My special appreciation also goes to the team of the PHC under the leadership of the Chief Operating Officer for their diligence and hard work in achieving this crucial milestone. Lastly, I am grateful to my fellow Commissioners of the Board for their guidance and support in the development of this document.

I sincerely hope that these MSDS, developed by the PHC, would mark another step towards achieving its purpose of providing quality healthcare services to the people of Punjab.

Justice (R) Aamer Raza Khan

Chairman

Punjab Healthcare Commission

1. Introduction

The Government of Punjab is committed to provide quality healthcare to its citizens. With this aim Government promulgated the Punjab Healthcare Commission (PHC) Act 2010 to provide for establishing the Punjab Healthcare Commission (PHC) as a regulatory body aiming ***to improve healthcare services and ban quackery in the Punjab in all its forms and manifestations***. The Commission is legally empowered to regulate all healthcare establishments and service providers in public and private sectors through registration and licensing, and by setting minimum service delivery standards (MSDS) for all categories of health services[1]. At the on-set, the Commission has prioritized its work in three recognized areas of healthcare services, these are; Allopathic, Homeopathic and Tibbi (Hikmat and Ayurvedic systems). The Commission through its Directorate of Clinical Governance has already developed and initiated implementation of MSDS and Indicators in 2012 for Cat-I (Hospitals having 51 and over beds) and Cat II (having up to 50 beds) HCEs related to Allopathic System of Treatment (Medical) and Homoeopathic Clinics (Cat III).

1.1 Service Delivery Standards

Setting service delivery standards and indicators is an established practice for continuously improving the provision of quality services in the health sector. Joint Commission International (JCI) in the USA is one such organisation that sets standards to improve the quality of health services against such standards. Likewise, the Quality Care Commission in the UK ensures clinical governance with the help of a system of standard setting and facilitating compliance. The 'Indian Public Health Standards' were introduced in 2005 and since then the Quality Council of India expanded their scope with the launching of 'Standards for the Health and Wellness Industry' in 2008. The Australian Council on Healthcare Standards was initiated in 1974 that has facilitated the development of the New Zealand and Singapore Councils. La Haute Autorite de Sante is the French equivalent. Accreditation Canada (formally the Canadian Council on Health Services Accreditation) became independent from the Joint Commission for Accreditation of RHCs (JCAH) in 1953. The Quality Holistic Accreditation (QHA) Trent Accreditation Scheme is based in the UK and Europe and has serviced RHCs in Asia. Regional Internationally accredited RHCs can be found in Pakistan, India, Bangladesh, Kazakhstan, China and Iran.

Standardization of Healthcare Services by implementing MSDS is a newer concept in Pakistan and the province of Punjab has taken a lead amongst the provinces by establishing the PHC and other provinces are now following its foot prints.

1.2 Development Methodology

Originally the MSDS for Hospitals 2012 (Cat I HCEs) was developed with the concept and purpose of implementation at all types of HCEs including Allopathy, Tibb and Homoeopathy. Soon after starting the implementation of MSDS for Cat-I HCEs in 2012 in its first phase, the issues of understanding and capacity started showing up which hampered implementation. Therefore PHC

[1] Preamble, Section-1 and Section 20 of Punjab Healthcare Commission (PHC) Act 2010 in particular refer.

strategized implementation through a Capacity Building Program for the HCE staff. This was the stage when it was kept in view that whether the same MSDS would be used for Cat-II HCEs or a modified version but the decision was to be made after gathering sufficient information from the stakeholders i.e. staff working at Cat II HCEs about the ground realities. Capacity Building Sessions of 3 days conducted by0 PHC for various HCE staff provided an opportunity to firmly conclude to have a category specific MSDS for Cat-II HCEs to facilitate implementation at secondary level of healthcare services. During all this CB phase, CG&OS Training and development Team regularly noted the changes required to be made. The feedback from the stakeholders at the implementation level gathered during 16 Training Sessions involving 426 participants from 152 HCEs from the Public (81) and Private (61) have been incorporated.

MSDS for Cat-II was thus prepared after a thorough scrutiny of existing MSDS for Cat-I HCEs, by addition of new standards in ROM, AAC and by minimizing the existing from FMS, HRM and IMS in particular without compromising the standardization requirements to suit the secondary levels. Later Cat II HCEs were further sub categorized into Cat II A (having 31-50 beds), Cat II B (having 16-30 beds) and Cat II C (having 1-15 beds) to meet the challenges encountered during implementation. Existing MSDS Cat II HCEs was retained as such for Cat II A and two milder versions were compiled to suit Cat II B and Cat II C. RHC was categorized as an additional Cat II entity specific to Public Sector only and this MSDS in hand is therefore exclusively prepared for it. Numerous minor changes have been made in the text to make it easier to facilitate understanding.

The Draft has been shared with the larger group of stakeholders mainly the experts from the medical fraternity involved in providing services at secondary levels to ensure wider ownership before presenting for approval to the Technical Advisory Committee (TAC), Board of Commissioners (BOC) of PHC and the Government of the Punjab for implementation.

1.3 MSDS and Indicators for RHCs

In order to meet its legal obligations towards all recognized systems of healthcare in Pakistan, the Commission has now developed the Minimum Service Delivery Standards (MSDS) and Indicators for implementation RHCs (Public Cat-II HCEs). Keeping in view the ground realities, these have also been kept **dynamic**. The PHC is pleased to present 95 Indicators under the 28 standards which are organized in 10 Functional Areas universally accepted for such services. These are professionally developed by the Experts of PHC Team after thorough consultations and approvals of stakeholders.

A uniform color coding scheme has been used to facilitate the RHC staff who are responsible to implement and the assessors to evaluate it. The RED indicators **(59)** have 100% weightage while the YELLOW **(36)** 80%. It means that RED indicators are required to be implemented in 100% and YELLOW up to 80% (Partial Compliance) to qualify for a license from PHC.

It is highly desirable to achieve 100% scoring in all areas as these standards are already minimum. This would be a minimum requirement for RHCs who intend to qualify for empanelment in the insurance schemes coming up in near future. Insurance companies would eventually be desiring higher level of accreditation standards for competitiveness.

2. Standards and Indicators

2.1 Responsibilities of Management (ROM)

Standard 1. ROM-1: RHC is identifiable as an entity.

Indicators (1-2):

Ind 1. The RHC is identifiable with name on sign board/s.

Survey Process:

The essence of the indicator is to ascertain that any one approaching the RHC is able to locate it with the help of sign board/s[2] having clearly written "Name" of the RHC. Surveyor is required to assess this indicator while approaching the RHC from a distance of about 30-40 Meters[3].

Scoring:

- If there is a sign board/s with clearly written Name of the RHC which is visible from a distance as above, then score as **fully met. fully met**
- If there is no sign board or not maintained to the extent that it does not provide identity of RHC, then score as **not met.**

Ind 2. The PHC registration/license number is displayed on sign board/s.

Survey Process:

The registration/license number[4] issued by PHC as the case may be, is required to be clearly displayed on the sign board/s so that any one approaching the RHC is able to see it. Surveyor is required to assess this indicator while approaching the RHC from a distance of about 30-40 Meters[5].

Scoring:

- If there is a sign board/s with clearly written PHC registration/license number visible from a distance as above, then score as **fully met OR** if there is a main sign board/s with clearly written Name of the RHC and the PHC Registration/License number displayed separately[6], then also score as **fully met.**
- If there is no display of registration/license number as the case may be, then score as **not met.**

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[2] Registration/license number can be on the main sign board or on separate smaller board or Plate as considered feasible and the detailed list of specialties on a board is prominently displayed inside the RHC.

[3] Minimum 3x4 ft. size of the board is recommended.

[4] All HCEs are required to get registered with PHC vide Section 13 of PHC ACT 2010. In case an HCE has applied for Registration but Certificate has not yet been issued by PHC then Surveyors/Inspectors are required to see the proof of having been so applied and that should be provisionally acceptable subject to confirmation from PHC.

[5] Minimum 3x4 ft. size of the board is recommended.

[6] Relaxation in terms of displaying PHC Registration/License number on the main sign board is for initial ONE year.

Standard 2. ROM-2: RHC is accessible to the catchment area.

Indicators (3-7):

Ind 3. An approach road exists.

Survey Process:

The hospitals need to be ideally located on a motor able road for easy access by Ambulances, Law Enforcement/Rescue agencies /Fire Fighting Vehicles. Surveyors are to see that the access road allows easy transportation of patients.

Scoring:

- If there is an approach road as described above, then score as **fully met.**
- If the approach road exists but is not maintained, then score as **partially met.**
- If there is no approach road as described above, then score as **not met.**

Ind 4. RHC has a clear entry/exit for the transport.

Survey Process:

Surveyors are to see that preferably in and out gates exist and preferably there is a clear road which connects the two and allows easy and unhindered movement of incoming and outgoing vehicles carrying patients.

Scoring:

- If there is an in and out circuit for transport as described above, then score as **fully met.**
- If there is an in and out circuit for transport as described above but there are hurdles in movement, then score as **partially met OR** if there is no in and out circuit for transport as described above but easy movement is being managed from single entrance, then also score as **partially met.**
- If there is no in and out circuit for the transport as described above and easy movement is not being managed from single entrance, then score as **not met.**

Ind 5. Parking area is available.

Survey Process:

Surveyors are to see that sufficient parking area for ambulance/s and private vehicles exists.

Scoring:

- If parking space as described above exists, then score as **fully met.**
- If parking space as described above exists but is not maintained, then score as **partially met.**
- If parking space as described above does not exists, then score as **not met.**

Ind 6. Functional stretcher / wheel chair is available.

Survey Process:

Functional stretchers and wheel chairs are required to be available for shifting the patients.

Scoring:

- If the stretcher and wheel chairs are available as described, then score as **fully met.**
- If the stretcher and wheel chairs are available but are not maintained, then score as **partially met.**
- If the stretcher and wheel chairs are not available at all or are non-functional, then score as **not met.**

Ind 7. Internal movement is easy.

Survey Process:

Surveyors are to see that the internal movement of patients and others is easy and there is a ramp (where necessary) to facilitate movement of stretcher and wheelchair for the serious / disabled / elderly.

Scoring:

- If the internal movement is easy as described above, then score as **fully met.**
- If the ramp / floor are not maintained, then score as **partially met.**
- If the ramp is required but not available at all, then score as **not met.**

Standard 3. ROM-3: The Staff on duty is identifiable.

Indicators (8-9):

Ind 8. Door plates at offices/rooms clearly display name, qualification/s, designation/s of the staff[7] on duty.

Survey Process:

Observe the placement of the door-plate/s, qualifications / designation/s and conformity of the text on the plates with law / Act / ethical guidelines of the respective councils. It generally means, Name/Designation authorized qualification/s in full or with permissible abbreviations as the case may be are written.

Scoring:

- If all the door-plates are according to the above, then score as **fully met.**
- If about 80% of the door-plates are present and display full information as above, then score as **partially met.**
- If less than 80% of the door-plates exist/display full information as above, then score as **not met.**

Ind 9. The staff on duty uses the identity badge[8]

Survey Process:

The essence of the indicator is to ascertain that every employee of the RHC[9] who is on duty can be identified by means of the Identity Badge which is either hanged around the neck with a ribbon or is clipped on the front pocket of the shirt/coat. The badge has clearly written name/designation, where applicable withdate of joining duly authenticated (signed & stamped) by the issuing authority[10].

Scoring:

- If the staff is using an identification badge which clearly identifies the RHC staff as above, then score as **fully met.**
- If the authorized identification badge is not in use or there are non-conformities to above, then score as **not met.**

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[7] SMO, MO,WMO, Dental Surgeon, Homeopathic Doctor, Hakeem ,Charge Nurse, Laboratory Staff etc, duly supported by RHCs notifications / Organogram.

[8] Means a full identity card with photo and signatures to be issued by the RHC/HCE/EDO Office

[9] With the exception of female staff like nurses/ lady doctors etc. who may not like their names/photos to be displayed, a modified system having appointment and some number may be devised.

[10] EDO(H)/DOH or SMO.

Standard 4. ROM-4: The responsibilities of the in-charge are defined.

Indicators (10-15):

Ind 10. The in charge remains current with assigned responsibilities.

Survey Process:

Check that the job description is available with the in charge and he is aware of assigned responsibilities. Also check that current orders particularly regarding reports and returns and the display of information are being complied with or not.

Scoring:

- If the in charge has the JD with him/her and is aware of responsibilities as described above, then score as **fully met.**
- If the in charge does not have the JD with him/her or is not aware of responsibilities as described above, then score as **not met.**

Ind 11. The RHC's mission statement is displayed.

Survey Process:

Observe that the mission statement developed and approved by the appropriate authority is displayed and it correlates with the scope of services. Interview the key staff members if they are aware of their mission.

Scoring:

- If the mission statement is displayed and key staff members are aware of the mission, then score as **fully met.**
- If there is no mission statement, or if the staff is not aware of it, then score as **not met.**

Ind 12. The management establishes the Hospital's *Organogram* and *appoints staff* accordingly[11].

Survey Process:

Review i. The chart that displays the hospital's organizational structure ii. The list of sanctioned / appointed / vacant staff list provides iii. The job descriptions (JDs)[12] iv. Attendance on duty and v.

[11] This indicator is applicable to every section of the Hospital/HCE hence scoring of this will be on overall assessment. In case of public sector HCEs there should be documented efforts including references to the appointing authority i.e Health Department Government of Punjab or the BOM in case of autonomous medical and Health institutes and in case of private sector, the BoG / owners management committee on the basis of approved positions. There has to be a list of authorized positions for each department and section of the HCE to match the portrayed services, depicting filled and vacant positions. A system/process to ensure staff appointments and their presence (Attendance register/movement register or a biometric attendance system) to provide services should be in place as a documented policy.

[12] Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff 2008-09, developed under The Punjab Devolved Social Services Programme (PDSSP) and notified by Govt. of the Punjab for Public Sector Hospitals/HCEs, provides a sound frame work which can be easily adapted to suit specific requirements.

The Credentials of the key Hospital Staff in that whether they fulfill the requirement of the job description. For example, review the roles and responsibilities of the individual who is heading the Hospital and assess if the incumbent has appropriate qualification/(s) and experience to manage the portrayed services and connected requirements e.g. an overall program under a policy, appointing qualified and experienced staff on every position under him / her, provision of infrastructure including equipment, and overall management. Similarly the heads of the departments / sections, specialists and nurses / paramedics etc. are to have qualifications / experience commensurate to their respective roles.

There should be a system in place to ensure proper incumbency as above.

Scoring:

- If a demonstrable system to ensure proper incumbency is in place, and 100% staff positions are filled as per job criteria then score as **fully met.**
- If a system to ensure proper incumbency is in place and 80% of the stated requirements are met, then score as **partially met.**
- If a system to ensure proper incumbency does not exist and/or less than 80% of the requirements are as described above, or the organogram does not exist, then score as **not met.**

Ind 13. There are arrangements for monitoring the attendance, presence and punctuality of the staff as per duty roster.

Survey Process:

The intent of this indicator is to ensure that once the staff required to be on duty reports and marks their attendance, then they are not permitted to leave the place of duty without taking permission so that management is able to make some other staff responsible for leaving persons job. This is done by first taking permission and then entering the details into the movement register which is then signed by the leave sanctioning authority/manager.

Scoring:

- If the movement register is maintained as above, then score as **fully met.**
- If the movement register is not maintained as above, then score as **not met.**

Ind 14. RHC in-charge is responsible to monitor and measure the performance of the RHC against the given targets.

Survey Process:

There should be objective indicators that allow monitoring of progress toward meeting the RHC's targets set by the relevant supervisory tiers and the RHC in-charge monitors the performance accordingly. Review DHIS record, monthly reports and minutes of prescribed meetings.

Scoring:

- If there is documented evidence of monitoring of the progress toward the RHCs given targets, then score as **fully met.**
- If there is no documentation, then score as **not met.**

Ind 15. The RHC in-charge addresses the RHC's social and community responsibilities.

Survey Process:

Look for documents that demonstrate that the RHC is aware and has shown sensitivity towards its community's healthcare needs. Also look for mandatory as well as voluntary "out-reach" activities catering for community's health needs such as health education sessions, immunization, school health services, medical camping, awareness campaigns and providing aid to people hit by calamities/epidemics etc while remaining with in the departmental organization policy & framework.

Scoring:

- If there is documented evidence that the RHC is complying its social and community responsibilities mentioned as above, then score as **fully met.**
- If there is NO evidence of compliance, then score as **not met**.

Standard 5. ROM-4: RHC premises support the scope of work / services.

Indicators (16-18):

Ind 16. The RHC space is in accordance with the minimum requirement[13].

Survey Process:

Observe that the clinical and non-clinical areas have space sufficient to cater for the minimum requirements and to allow performing the functions related to patient care and support services. The space allows comfortable sitting and movement for patients / staff between various areas[14]. Observe availability of residential area for the essential staff that support the scope of work.

Scoring:

- If the RHC has well demarcated portions to cater for the portrayed clinical and related support services and there is residential area for the essential staff, then score as **fully met.**
- If the RHC has well demarcated portions to cater for the portrayed clinical and related support services but no residential area for the essential staff, then score as **partially met.**
- If the RHC does not have well demarcated portions to cater for the portrayed services, then score as **not met.**

Ind 17. RHC has adequate facilities and civic amenities for the comfort of the patients and attendants.

Survey Process:

Observe the presence & functioning of the following during survey at the RHC:

I. General cleanliness.
II. Sitting arrangement in OPD, waiting areas & for bedside attendants.
III. Alternate arrangements of electricity in all patient care areas particularly emergency and labor room.
IV. Waste container /receptacle/s[15].
V. Proper ventilation.
VI. Mosquito and fly proofing (wire gauze).
VII. Clean drinking water.
VIII. Toilets with adequate washing and bathing facilities.

Scoring:

- If the RHC has facilities from I to VIII, then score as **fully met.**
- If any one of the facilities stated at I to VIII is not existing, then score as **not met.**

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[13] As provided in the Standard Design/Blue print of the RHC by the Government {24 kanals (108000 Sqft) including 7710 Sqft (service area}.

[14] Comfortable sitting may include a comfortable posture and not touching each other Comfortable movement may include not hitting / touching each other when crossing each other. Minimum 10 patients may be considered to be there in the waiting area at a time.

[15] As per EPA, Waste Management Rules amended to be to-date.

Ind 18. RHC has adequate arrangements for the privacy of patients during consultation/examination/procedures etc.

Survey Process:

Observe that arrangements for patient's privacy during consultation/examination and performing of procedures are respected[16]. It is unethical / undesirable to even take history when other unrelated persons are sitting close by and overhearing. The history taking and examination should not be visible to any unrelated person by any means.

Scoring:

- If the arrangements for patient's privacy during consultation/ examination/ performing of procedures are adequate, then score as **fully met.**
- If privacy arrangements are not available, then score as **not met.**

[16] Female patient and minors are not examined alone. In such an event another female should be requested to remain present. (Details to be seen in Reference Manual—for examination patient Verbal Consent (VCO) is obtained; conversation during history taking not audible and interview/examination place not visible to others not concerned.)

2.2 Facility Management and Safety (FMS)

Standard 6. FMS-1: The RHC in-charge is aware of and complies with the relevant regulations and bylaws.

Indicators (19-21):

Ind 19. The RHC in-charge is conversant with the relevant laws and regulations.

Survey Process:

Check to see that In-charge is conversant with the relevant laws and regulations including fire safety requirements, building codes/specifications, handling of contaminated, clean water supply, sanitation, ventilation and safe food etc.

Scoring:

- If there is clear evidence that the In-charge is conversant with the relevant by-laws and regulations etc. then score as **fully met.**
- If the in-charge is not conversant with relevant regulatory requirements, then score as **not met.**

Ind 20. The In-charge ensures implementation of these requirements.

Survey Process:

Check to see if the concerned staff is aware of the compliance requirements and the documentation supports implementation and that this is confirmed with observable examples.

Scoring:

- If the concerned staff is aware of the compliance requirements of prevailing laws and regulations and there is evidence of compliance, then score as **fully met.**
- If the concerned staff is aware of the compliance requirements of prevailing laws and regulations but the compliance is inconsistent, then score as **partially met.**
- If the concerned staff is not aware of the compliance requirements of prevailing laws and regulations and / or there is no compliance, then score as **not met.**

Ind 21. The RHC in-charge ensures periodic/instant repair & maintenance, renovation of building/s and raising demand/s for missing facility.

Survey Process:

Surveyors are required to observe the general upkeep status of the RHC buildings & fixtures. There should be a documentary evidence such as register duly maintained and updated by the concerned person showing entries of repair/maintenance of buildings & fixtures along with their functional status. Log book/s for all available general & electrical equipment (Furniture, Fans, AC, and Generator etc) with up to date record of their repair/maintenance with their functional status should be available. In case of non-functioning of any area/equipment correspondence/efforts to make it functional must be documented. The surveyors should review this documentation.

Scoring:

- If ALL the requirements for this standard are documented, then score as **fully met.**
- If any of the requirements are not documented, then score as **not met.**

Standard 7. FMS-2: The RHC has a system for clinical and support service equipment management.

Indicators (22):

Ind 22. The RHC in-charge ensures maintaining inventory, periodic inspection, service and proper functioning of equipment.

Survey Process:

There should be a documentary evidence such as stock register/ equipment log book/lists of condemned items duly maintained and updated by the concerned person showing entries of all available equipment like X-Ray units, Dental Chair, Laboratory Equipment, Sterilizer, wheel chairs, wheel stretchers and ambulance etc. with their functional status. In case of non-functioning of any equipment correspondence/efforts to make it functional must be documented. The surveyors should review this documentation.

Scoring:

- If ALL the requirements for this standard are documented, then score as **fully met.**
- If any of the requirements are not documented, then score as **not met.**

Standard 8. FMS-3: The RHC has arrangement to cater for fire and non-fire emergencies within the facilities.

Indicators (23-25):

Ind 23. The RHC has arrangements and provisions for i. Early detection and ii. Management of fire and non-fire emergencies.

Survey Process:

Review the arrangements to ensure that it addresses early detection and management in case of any fire and non-fire emergency. Fire extinguisher and/or buckets for sand /water and spades etc. must be made available. By observation and interview determine that all the necessary arrangements are available.

Scoring:

- If the arrangement are available according to the requirements and key staff is aware of, then score as **fully met**.
- If not as above, then score as **not met.**

Ind 24. The RHC has a safe exit (evacuation) arrangements in case of fire and non-fire emergencies.

Survey Process:

Observe the safe exit and evacuation arrangements in case of emergency are in place and the staff is aware of that.

Scoring:

- If the safe exit and evacuation arrangements are in place and the staff is aware of, then score as **fully met.**
- If the safe exit and evacuation arrangements are in place but about 20% staff are not aware of, then score as **partially met.**
- If not as above, then score as **not met.**

Ind 25. Simulation exercise is held at least once in a year and Staff members are trained for their role in case of such emergencies.

Survey Process:

The idea of this indicator is to ensure control / minimize the damage to human lives and the property in case of fire and non-fire emergencies. Look for documentation that "simulation" drills involving different areas and different staff have been done at least once in the past year. The activity report should depict date, time, the staff involved, activities carried out, major observations and any subsequent recommendation for improvement.

Scoring:

- If there is documented evidence that simulation drills have been held at least once in the past year as above, then score as **fully met.**
- If no drill has been conducted, then score as **not met.**

2.3 Human Resource Management (HRM)

Standard 9. HRM-1: The staff[17] joining the RHC are oriented to the environment, respective sections and their individual jobs.

Indicators (26-28):

Ind 26. Each regular/ contract based /short term employee, is appropriately oriented to the RHC's mission and goals as well as relevant department / service / program policies and procedures.

Survey Process:
The orientation should be in three parts: i. Orientation to the RHC (overall scope of services, fire and general safety, infection control and QA processes, ii. Orientation to the assigned department/service/program, and iii. Orientation to the specific job within that department. The content of each level of orientation should be written to ensure that whoever provides the orientation always covers the same topics.

Scoring:
- If there is documented orientation process covering all three areas, then score as **fully met.**
- If there are the orientation program covering the three areas but no details of what is to be covered or if it is partially conducted (Two out of three areas), then score as **partially met.**
- If there is no orientation process, then score as **not met.**

Ind 27. Each regular / contract based/ short time employee is made aware of their job description.

Survey Process:
The spirit of the indicator is to stress upon the importance of the existence and knowledge about the job descriptions (JDs) for effectively performing the assigned duties. Each individual employee is provided detailed job descriptions and is made fully aware of requirements given therein. The record bears the signatures of the relevant employees certifying that it has been read and fully understood.

Scoring:
- If the JDs are available and signed by all employees[18], then score as **fully met.**
- If the JDs are available but not signed by any one employee, then score as **not met.**

[17] Employees include all full time/regular or short term/outreach/employees or staff members as the case may be.
[18] Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff 2008-09 by PDSSP, Government of the Punjab be taken as a guideline and duly adapted as required for all appointments.

Ind 28. Each regular/contract based/short term employee is made aware of his /her rights/responsibilities and patient's rights/responsibilities.

Survey Process:

This standard would require that written job description (JDs)[19] of each staff member points to his /her responsibilities towards patients and others as well as his/her rights. Staff member's rights are detailed in the employee's JDs/file or other such documentation. The rights and responsibilities of the patients are available as Patient Charters and HCE's Charters. There should exist an evidence that the employee has been oriented/made aware of these.

Scoring:

- If evidence of orientation of each staff member as above exists, then score as **fully met.**
- If evidence of orientation of any of the staff member as above does not exists, then score as **not met.**

[19] Job Descriptions as in Ind. 18 and 19 to include responsibilities particularly towards patients.

Standard 10. HRM-2: The approved appraisal system for evaluating the performance of the employees is practiced at RHC.

Indicators (29-29):

Ind 29. Performance appraisal is carried out at pre-defined intervals & is regularly documented in their files.

Survey Process:

The administration department has defined the system and the frequency of performance appraisals of the staff. Customarily this is carried out annually for ALL employees. SMO is required to make sure that ACRs/PERs of all employees under his supervision are written regularly. The surveyors should evaluate two things: i. Has the RHC/Department carried out annual appraisal of all employees; and ii. What percent of employees have had copies of ACRs/PERs in their personal files? It is common that there is a schedule for periodic appraisals, but not being followed consistently. Select a representative sample of personal files and determine if there was a documented periodic appraisal and if it was done "on time".

Scoring:

- If the In-charge/staff is aware of the defined frequency of employees' appraisal and appraisals are carried out timely, then score as **fully met.**
- If the frequency of employees' appraisal is defined and there is evidence that appraisals of more than 80% employees have been completed timely, then score as **partially met.**
- If appraisal of more than 20% staff are still pending, then score as **not met.**

Standard 11. HRM-3: There is a documented personnel record for each staff member and process of credential verification exists.

Indicators (30-31):

Ind 30. The Employee's record/information regarding posting, qualification / education, in-service training, disciplinary background, job description, appraisal record and health status is maintained at the RHC.

Survey Process:

Although the personal files of the staff employed at the RHC are maintained at the district level in the office of the DOH /EDO (H), some personal information about the employees is also required to be maintained at the RHC. This may include information regarding the employee's posting orders, qualification / education, in-service training, disciplinary background, record regarding performance appraisal as applicable, health status and job description. Randomly select representative sample of employees (either from a list of ALL employees, or by name of personnel identified during visits to different sections of the RHC). Then determine if personal record of all of them are maintained and are available.

Scoring:

- If ALL reviewed files have all of the above mentioned information, then score as **fully met.**
- If the files are not complete or any file does not contain ALL the required information, then score as **not met.**

Ind 31. There is an evidence of verification of the credentials (education, registration, training and experience) of medical professionals including doctors and paramedics permitted to provide patient care without supervision.

Survey Process:

Only medical professionals permitted by law, regulation and the notification of the health department are to provide patient care without supervision as per the job description. The EDO (H) /DOH office has to ensure that the medical staff posted at the RHC has the appropriate and required qualification and documents demonstrating their legal permit to care for the patients. The EDO (H)/DOH office has to ensure through a process that the documents are verified from the primary source – such as the university or the training organization either by itself or by the Health Department and all Professionals are currently registered with their respective councils etc. to avoid fraudulent "credentials", multiple examples of which exist locally as well as internationally. The evidence in this regard is to be kept at the RHC also.

Scoring:

- If there is an evidence that the "credentials" of ALL staff members have been duly verified, by the relevant authority then score as **fully met.**
- Since this is an important legal and patient safety issue, if there is no evidence regarding validation of the "credentials", then score as **not met.**

2.4 Information Management Systems (IMS)

Standard 12. IMS-1: The RHC has a complete and accurate medical record of every patient/client.

Indicators (32-38):

Ind 32. Every medical record has a unique number / identifier[20].

Survey Process:
The requirement of the indicator is to allocate a unique number to the record of each patient/client to identify the patient. The record of the patient/client can be traced through this number even if RHC is using different numbers for different services (immunization, ANC, OPD etc). Surveyor needs to identify that each medical record has a unique identifier for each patient/client.

Scoring:
- If there is a clear mechanism to positively identify each patient/client record, then score as **fully met.**
- If not as above, then score as **not met.**

Ind 33. Only authorized person/s make entries in the record.

Survey Process:
The RHC In-charge will assign record maintaining task to the concerned staff according to their job description as per policy and authorization by health department. Name and designation of the doctor/health care provider writing the prescriptions and the person making entries in other record must be mentioned therein, in pen or by stamp and signed[21].

Scoring:
- If the person writing prescription or maintaining patient records can be identified by name and designation from the record checked, then score as **fully met.**
- If the person writing prescription or maintaining patient records can be identified as above in 80% of the record checked, then score as **partially met.**
- If the person writing prescription or maintaining patient records can be identified as above but in less than 80% of the record checked, then score as **not met.**

[20] An alpha/numeric system that gives each patient their own code number .e.g OPD no 0001/15 means first patient of 2015 and so on.

[21] Doctor himself or authorized staff. Details given in the Reference Manual; such as "The person responsible to prescribe medications & should advise the proper use of medication, dosage, etc" and use stamp under signatures.

Ind 34. Every record entry is legible, dated, timed and signed.

Survey Process:

This is a difficult standard to meet since the "timing" of ALL entries especially in the OPD and preventive services record may be difficult to achieve. All entries in the record are required to be legible, dated and signed by the authorized person making the entries. However the entries in the patient related record (Emergency, OPD, indoor, ante-natal, labor room etc) should also be timed. Surveyors should check the record for the last one quarter.

Scoring:

- If ALL entries are legible, dated, timed and signed as above, then score as **fully met.**
- If all entries are legible, dated and signed but are not timed, then score as **partially met.**
- If any entry is not legible, dated or signed then, score as **not met.**

Ind 35. The record contains information regarding patient/client identity, presenting complaint, diagnosis, action taken and details if shifted[22]/ referred/died as the case may be.

Survey Process:

Review DHIS registers and other preventive services record in order to ensure compliance of record keeping regarding patient/client identity, presenting complaint, diagnosis, action taken and details if shifted/referred/died as the case may be. Record should be accurate, legible and complete in all respects.

Scoring:

- If ALL the required elements mentioned above are documented in ALL the records, then score as **fully met.**
- If any of the required elements is missing in any record, then score as **not met.**

Ind 36. Weekly reports of notifiable vaccine preventable diseases are submitted regularly.

Survey Process:

Review OPD registers and other preventive services record/reports in order to ensure compliance regarding notifiable diseases, disease early warning system (DEWS) and vaccine preventable diseases (VPDs) as per requirement of the department from time to time. Even if no case is registered/recorded during the week, zero reporting for VPDs is required to be submitted by the in charge. Copies of the same should be available at the RHC record.

Scoring:

- If weekly zero reporting for notifiable VPDs are prepared & submitted regularly as per RHC record, then score as **fully met.**
- If any report is missing in record, then score as **not met.**

[22] Ask for the medical record of 3 or more patients who were transferred to another RHC. The date of shifting, the reason for the shifting and the name of the receiving RHC is recorded.

Ind 37. Monthly DHIS reports are submitted regularly

Survey Process:

Review RHC record/reports in order to ensure compliance regarding monthly District Health Management System (DHIS) as per requirement of the department time to time. Copies of the monthly reports must be available for each month at the RHC .

Scoring:

- If monthly DHIS reports are prepared & submitted regularly as per RHC record, then score as **fully met.**
- If report for any month is missing in record, then score as **not met.**

Ind 38. The medical records are reviewed regularly/periodically.

Survey Process:

The in-charge RHC should ensure regular periodic review of the representative sample of different curative and preventive services record in order to identify any deficiency / error in record keeping. The review should focus on accuracy, legibility, timeliness and completeness of the record by different service providers and duly documented by putting date of review and signatures on the margin of the reviewed record or by keeping formal minutes of the review process.

Scoring:

- If the RHC has a record of review process and a schedule complying the above, then score as **fully met.**
- If the RHC has a record of review process, but it is inconsistent, then score as **partially met.**
- If the RHC does not have a medical record review process, then score as **not met.**

2.5 Quality Assurance / Improvement (QA)

Standard 13. QA-1: The RHC has quality assurance / improvement system in place.

Indicators (39):

Ind 39. A quality assurance and internal monitoring system is in place.

Survey Process:

This indicator is to ensure that activities performed by the staff and the services/facilities portrayed/displayed to be provided are delivered to the patients according to the minimum required standards. The RHC In-charge should use a prescribed checklist to periodically check the performance of static and outreach staff and monitor how the patients are being received and managed. He should also check that the facilities for the comfort of patients like sitting arrangements, drinking water, ventilation etc., are intact. He/she shall assure quality of services through prescheduled monitoring by using checklist. The findings of the monitoring shall be compiled on weekly/monthly/yearly basis as the case may be, and corrective actions taken/recommended and documented accordingly.

Scoring:

- If there is a written record of periodical monitoring using prescribed checklist as per given schedule and corrective actions taken/recommended are documented then score as **fully met.**
- If there is no record, then score as **not met.**

Standard 14. QA-2: Sentinel events are assessed and managed.

Indicators (40-41):

Ind 40. The RHC has defined sentinel events.

Survey Process:
Review the written definition of a sentinel event and the availability of list of such possible events, which should include at least: i. All unexpected deaths including infants and mothers, ii. Serious adverse patient events that caused, or could have caused, harm to the patient, wrong-patient, wrong-site, wrong-procedure, medication error, iii. Patient violence against staff, iv. Violence against patients, and v. Infant abduction etc. Although not specifically required, it is good practice to also include "near misses".

Scoring:

- If there is a list of defined sentinel events with possible preventive strategies/actions, then score as **fully met.**
- If there is none as above, then score as **not met.**

Ind 41. Sentinel events are intensively analysed when they occur.

Survey Process:
Ask for any documentation of intense analysis of any sentinel event that has occurred in the past 12 months. (It is highly *unlikely* that none have occurred. If none were reported, the surveyors should explore the reporting process). Determine the corrective actions taken as a result of the analysis.

Scoring:

- If there was a reported sentinel event and it was intensively analyzed, including corrective action to prevent or reduce the likelihood of reoccurrence, then score as **fully met**
  OR if no sentinel event was reported, but it would have been reported and analyzed if one occurred, then also score as **fully met**.
- If there was a sentinel event, but there was either no analysis or the analysis was "superficial" such as limited to assigning of blame to an individual, then score as **not met.**

2.6 Access, Assessment, and Continuity of Care (AAC)

Standard 15. AAC-1: Services are provided as portrayed.

Indicator (42-42):

Ind 42. The services being provided at the RHC are displayed.

Survey Process:

This will require knowledge of the scope of services provided at the RHC and observation of the provision of displayed services both, on and off site. The Menu board should clearly display the scope of services as per the Essential Package of Health Services (EPHS) notified by the Health Department [23] which the patient should expect from a RHC.

RHCs being Primary Health Care centers should be providing preventive, promotive and curative services including health education, MCH services, immunization services, nutrition, control of communicable diseases, Sanitation, medico legal reporting etc., besides OPD based curative care regarding treatment of minor illnesses, minor surgical procedures, dental care, conducting normal deliveries (Basic EmONC), basic radiological and pathological diagnostic facilities and provision of drugs included in the level specific essential drug list (EDL). Homoeopathic and Tibbi Services are also provided where applicable under their specific standards.

Scoring:

- If the services being provided are displayed, then score as **fully met**
- If there is misleading information or no information about the services being provided, then score as **not met.**

[23] An example/format provided in the Reference Manual.

Standard 16. AAC-2: The HCE has a well-established patient management system.

Indicator: (43-46)

Ind 43. There is a well-established registration and management process.

Survey Process

Observe as well as check from the record that there is a well-established reception, registration and management process with written SOPs to cater for the needs of the patients. Patients access the reception comfortably and get registered as per SOPs. The reception staff is polite and guides the patients to the healthcare provider/service where they are to be examined/assessed for further management or explains such other requirement.

Scoring

- If the registration and management process based on written SOPs is being practiced, then score as **fully met.**
- If there are non-conformances to the above then, score as **not met.**

Ind 44. There is a well-established patient assessment process.

Survey Process:

Observe and check the records if patients are assessed by the doctor / designated healthcare services provider by documenting the presenting complaints, signs, symptoms and provisional diagnosis and relevant diagnostic evaluations[24], where applicable with the objective of providing quality care at outdoor or for referral within the facility or outside the facility, adhering to the prescribed code of ethics[25]. Check documented evidence by reviewing the record of few patients or by observation while the patients are being examined.

Scoring:

- If all checked records of the patients show documentation of patient's assessments according to the above, then score as **fully met.**
- If less than or up to 20% of the record is deficient on the above, then score as **partially met**.
- If the record shows more than 20% deficiency on the above, then score as **not met.**

[24] Clinical methodology to be adopted while examining the patients. Records must be completed once the examination/emergency is over.

[25] Available at the PM&DC website.

Ind 45. The health education is provided as per guidelines.

Survey Process:

The surveyor is required to look for the display of relevant health educational messages (on prevention of disease and promotion of health) and IEC material/the written instructions delivered to the patients by the care provider.

Scoring:

- If there is a display of relevant health educational messages/IEC material and consistent evidence that patients are guided on it, then score as **fully met.**
- If there is a display of relevant health educational messages/IEC material but inconsistent evidence that patients are guided on it, then score as **partially met.**
- If there is neither display of relevant health educational messages/IEC material nor any evidence that patients are guided on it, then score as **not met.**

Ind 46. The preventive services are provided as per guidelines26.

Survey Process:

The surveyor is required to look for the display of list of preventive services like immunization, family planning, TB DOTS, malaria control etc. being provided. The preventive services **if being provided** should conform to guidelines prescribed by the relevant program.

Scoring:

- If the list of services being provided is displayed and the services being provided conform to the prescribed guidelines, then score as **fully met.**
- If the list of services being provided is not displayed or is not complete but the services being provided conform to the Guidelines prescribed by the programs then score as **partially met.**
- If there is no list of services being provided and any one of the services being provided does not conform to the prescribed guidelines, then score as **not met.**

[26] Applicable only when portrayed.

Standard 17. AAC-3: Laboratory services are provided as per the requirements of patients.

Indicators (47-52):

Ind 47. Scope of the laboratory services is according to the clinical services provided by the RHC.

Survey Process:

This will require an understanding of the full scope of clinical services provided at the RHC and observation of the diagnostic facilities provided there, to see that the laboratory services are in accordance with the clinical services provided at the RHC. Check that RHC has the list of all available tests which are essentially required to cover the needs of the patients as per policy/as per portrayed services.

Scoring:

- If the RHC's laboratory services support the scope of services, then score as **fully met.**
- If the laboratory diagnostic procedures do not support the scope of services provided by the RHC then score as **not met.**

Ind 48. Adequately qualified and trained personnel perform and/or supervise the laboratory investigations.

Survey Process:

Review the personal files for laboratory technical and supervisory staff to determine if their credentials (qualifications, experience and training) match the requirements of the respective position[27] and the job description including handling the equipment being used. The lab staff should work under the supervision of the designated MO/SMO in charge.

Scoring:

- If qualifications and experience of the individual match the requirements in the job description, then score as **fully met**.
- If technician has the training/experience but does not have the required qualification by the job description, then score as **partially met**, provided that there is evidence of enhanced supervision or training of this individual.
- If technician does not have the required qualifications (in the job description) or training/experience, then score as **not met**.

[27] Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff, Punjab Devolved Social Services Programme, Govt. of the Punjab, 2008-09 defines the required level of training and experience for each job.

Ind 49. Policies and procedures guide the: i. collection, ii. identification, iii. handling, iv. safe transportation, v. processing and vi. disposal of specimens.

Survey Process:
Review the laboratory policy and procedure manual to validate that it covers ALL the 6 requirements. It is always important to verify that the policy or procedure is not just written, but is actually implemented and followed. Ask operational staff about the 6 policy requirements to establish if they are aware of the policies and procedures and have received appropriate orientation and training. Then, by observation check, how a patient whose blood is being drawn was positively identified and how the specimen was labelled.

Scoring:
- If there are documented policies and procedures for ALL the 6 requirements, and evidence that the training has been delivered and that the policies and procedures are followed, then score as **fully met.**
- Since this is significant for patient safety (misidentified patient and mislabeled specimens are a common source of laboratory errors), if the policies and procedures for ALL 6 requirements are not implemented, then score as **not met.**

Ind 50. Laboratory results are available within a defined time frame.

Survey Process:
Review the written definition of time frames for test results to be available. Then, see if the laboratory has data to show that the times are being met. While on visit, review records/Laboratory register and look for the time of receiving sample for the test, and compare with when the result was available.

Scoring:
- If there are defined times for results to be available and these timelines are met, then score as **fully met.**
- If there are defined time frames, but they are met in up to 80 percent cases, then score as **partially met.**
- If there are no defined time frames or they are met less than 80 percent of the time, then score as **not met.**

Ind 51. Critical results are reported immediately to the concerned personnel.

Survey Process:

The laboratory should have defined critical values for ALL relevant tests and should have documentation (such as a Laboratory Register) that the critical results were reported as soon as available. This is a significant patient safety issue.

Scoring:

- If there are defined critical values and there is documentation that they are reported as soon as available, then score as **fully met.**
- If the critical values are not defined or if there is no consistent and defined process to report them as soon as available, then score as **not met.**

Ind 52. Laboratory tests not available in the RHC are referred to laboratories, based on policy.

Survey Process:

Determine which referral laboratory or laboratories the RHC uses and then look for documentation that the referrals are being made as per policy to the designated laboratory or laboratories .The referral arrangements including turnaround times should be specified and documented in RHC's record. Check the arrangement for referral to the higher level facility (THQ/DHQ/Teaching Hospital) for lab tests not available in the RHC and validate from available record.[28]

Scoring:

- If there is documented evidence that the referral arrangements are available and being followed, then score as **fully met.**
- If there is no such arrangements, then score as **not met.**

[28] Patients should be informed about laboratory tests that are referred.

Standard 18. AAC-4: Imaging services are provided as per the clinical requirements of the patients.

Indicators (53-60):

Ind 53. Imaging services comply with legal and other regulatory requirements.

Survey Process:

There should be documentary evidence about compliance with ALL legal and regulatory requirements like licensing from PNRA (Pakistan Nuclear Regulatory Authority). Key staff should be aware of the regulatory requirements.

Scoring:

- If supporting documents regarding legal and regulatory requirements are present in the department and staff is aware of the content and is clearly applying the requirements, then score as **fully met.**
- If the documents regarding regulatory requirements are not present and relevant staff is unaware of their compliance obligations, then score as **not met.**

Ind 54. Scope of the imaging services is in accordance with the clinical services provided by the RHC.

Survey Process:

This requires an understanding of the full scope of services provided at the RHC and observation of the diagnostic facilities available at RHC. There must be clear display about the range of radiological services being provided as per policy guidelines with referral mechanism when some invasive procedures are involved.

Scoring:

- If the imaging services are available as per defined policy in accordance with the scope of RHC services, then score as **fully met.**
- If the imaging services are not available as per defined policy in accordance with the scope of RHC services, then score as **not met.**

Ind 55. Adequately qualified and trained personnel perform, supervise and interpret the radiological investigations.

Survey Process:

Review the personal files for radiology department technical and supervisory staff to determine if their credentials (qualifications, experience and training) match the requirements of the respective position[29] and the job description including handling of the equipment being used. The radiological staff should work under the supervision of the designated MO/SMO in charge.

Scoring:

- If qualifications and experience of the individual match the requirements in the job description, then score as **fully met**.
- If technician has the training/experience but does not have the qualification required by the job description, then score as **partially met**, provided that there is evidence of enhanced supervision or training of this individual.
- If technician does not have the required qualifications (in the job description) or training/experience, then score as **not met**.

Ind 56. Arrangements for identification and safe transportation of patients to imaging services exist.

Survey Process:

Review the arrangements to look for how the patient is positively identified and it is ensured that the correct imaging procedure is done. Look for availability of functional stretcher/wheelchair and an attendant if needed to accompany the patient during transportation to the imaging section and that the staff is trained to properly handle the patient during the procedure.

Scoring:

- If there are arrangements for patient identification, safe transportation and handling during process and are being followed, then score as **fully met.**
- If either there are no arrangements or there is no evidence that they are being followed, then score as **not met.**

Ind 57. Imaging results are available within a defined time frame.

Survey Process:

While visiting the radiology department, review their written definition of time frames both for the availability of the procedures and the availability of the reports. Then, see if the department has data to show that the time lines are being met. For further validation, review the medical records for the time of the order for the procedure, and compare with when the result was available.

[29] Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff, Punjab Devolved Social Services Programme, Govt. of the Punjab, 2008-09 defines the required level of training and experience for each job.

Scoring:

- If there are defined times for the procedures to be available and the results to be reported and these times are met, then score as **fully met.**
- If there are defined time frames, but they are met in up to 80 percent of the cases, then score as **partially met.**
- If there are no defined time frames or they are met in less than 80 percent of the cases, then score as **not met.**

Ind 58. Critical results are intimated immediately to the concerned personnel.

Survey Process:

Unlike the laboratory, critical findings on images depend to a great extent on the clinical judgment of the staff responsible for imaging services. However, there should be at the least, some general guidelines and a way to document that the findings were reported to the designated staff as soon as possible. This is a significant patient safety issue.

Scoring:

- If there are documented guidelines to manage critical findings and there is evidence that those are reported as soon as noted then score as **fully met.**
- If there is no understanding of what constitutes a critical imaging finding, or if there is no consistent and defined process to report those as soon as noted, then score as **not met.**

Ind 59. Quality assurance activities are evident in the imaging department.

Survey Process:

There should be documented evidence that a quality assurance (QA) System is implemented in the radiology. This should include observation of activities such as a register of repeat images due to image quality, related reasons and recording of adverse occurrences if any.

Scoring:

- If a QA System is in place along with evidence that the staff is aware of it and the associated activities, then score as **fully met.**
- If there is no evidence of a QA system or the staff is not aware of it, then score as **not met.**

Ind 60. Imaging tests not available in the RHC are referred, based on the policy.

Survey Process:

There should be documented evidence that the radiology services not available at RHC are referred to the designated higher level facilities as per policy. The referral arrangements including turnaround times should be specified and documented in RHC's record. Check the arrangement for referral to the higher level facility (THQ/DHQ/Teaching Hospital) for radiological tests not available in the RHC and validate from available record.[30]

Scoring:

- If there is documented evidence that the referral arrangements are available and being followed, then score as **fully met.**
- If there is no such arrangements, then score as **not met.**

[30] Patients should be informed about radiological tests that are referred.

2.7 Care of Patients (COP)

Standard 19. COP-1: Essential arrangements for emergency care exist.

Indicators (61-66):

Ind 61. The RHC has essential arrangements to cater for emergency care.

Survey Process:

Check for the availability of list of emergencies portrayed to be managed and the required arrangements like emergency / first aid kits[31].

Scoring:

- If the RHC has arrangements to **manage the portrayed/listed emergencies** then score as **fully met.**
- If any deficiency in the arrangements described as above exists, then score as **not met.**

Ind 62. Emergency services also address handling of medico-legal cases.

Survey Process:

Keeping in view **THE INJURED PERSONS (MEDICAL AID) ACT 2004**, emergency services policy should define how first aid will be provided to medico-legal cases along with reporting requirements and also define the referral protocols for such cases if required. The surveyor should review the record of reported cases, as well as interview the staff and assess how they have been managed.

Scoring:

- If there is documented evidence that define what types of cases are "medico-legal" and how to handle / refer such cases, then score as **fully met.**
- Since this is a legal requirement, if there is noncompliance, then score as **not met.**

Ind 63. The RHC has referral SOPs

Survey Process:

Check the availability and practice of written procedures (SOPs) for safe and speedy transfer of patients/victims in emergency which describe how a patient is cared during transportation and there is no confusion and delay in taking over at the receiving facility.

Scoring:

- If the RHC maintains and practices the referral SOPs as described above, then score as **fully met.**
- If the RHC does not maintain or practice the Referral SOPs as described above, then score as **not met.**

[31] List of Standard First Aid Kits/boxes/trays/trollies with guidelines/SOPs and listing of the types of emergencies portrayed to be managed **as the case may be** are included in the Reference Manual. Arrangements to manage; 1. Respiratory distress, 2. Anaphylactic shock, 3. Control of bleeding and 4. Splinting of fractures should be available at the RHC.

Ind 64. The RHC has list of contact numbers of the referral facilities, medico legal authorities, concerned police stations, ambulance/rescue services and the social services organizations.

Survey Process:
Check the availability of list of different referral hospitals/centers with contact numbers for transfer of patients/victims in emergency to obviate confusion and delay in transfers. The RHC should also maintain the address and contact numbers of concerned police stations, ambulance/Rescue services and social service organizations.

Scoring:
- If the RHC maintains list with contact numbers as described above, then score as **fully met.**
- If the RHC does not maintain list with contact numbers as described above, then score as **Not met.**

Ind 65. Discharge to home or transfer to another facility is documented.

Survey Process:
Review relevant medical records/registers/files or any other documentation (emergency services log book/referral slip prescribed under DHIS) of patients who were provided emergency service. Observe the records and determine the discharge process. Review the advice and information provided to the patient or referral facility and determine if it is adequate to ensure support, recovery, and continuity of care and follow-up treatment that is clinically required.

Scoring:
- If this is 100 percent implemented & documented, then score as **fully met**.
- If less than 20% cases fail to meet this requirement, then score as **partially met**.
- If 20% or more cases reviewed do not document this, then score as **not met**.

Ind 66. The Policy regarding home visit is portrayed and accordingly catered for.

Survey Process:
Essence of this indicator is to see whether the policy of the RHC caters for home visits in certain conditions or not and the same is displayed and practiced.

Scoring:
- If the RHC portrays provision of home based care and arrangements for the same exist, then score as **fully met.**
- If the RHC does not portray provision of home based care but arrangements for the same exist, then score as **partially met.**
- If the RHC portrays provision of home based care but the same is not practiced or arrangements for the same do not exist, then score as **not met.**

Standard 20. COP-2: RHC defines its policy and procedures for rational use of blood and/or blood products.

Indicators (67-68):

Ind 67. RHC defines policy and procedures for transfusion of blood and blood products.

Survey Process:

Review the policies and procedures which should cover any of the applicable: i. donor screening, ii. Processing of blood, iii. Storage of blood, iv. Administration of blood, v. use of blood products, vi. Identification and analysis of real or suspected transfusion reactions and vii. Disposal of blood and related products[32]. This is a significant patient safety issue.

Scoring:

- If the policies and procedures exists and are practiced (relevant to the scope of services available for the RHC's blood service), then score as **fully met.**
- Since blood services are such a critical patient safety issue, if any of the requirements (relevant to the scope of service for the RHC's blood service) are not present, then score as **not met.**

Ind 68. Informed consent is obtained for transfusion of blood and blood products.

Survey Process:

While reviewing, identify the medical records of those patients[33] who have received blood. Then review the medical records of these patients to determine if there is documented 'informed consent' and if the consent adequately informs the patient. It is important to note that evidence of informed consent can be either a signed form or a note by the Doctor/other HCP that the patient's verbal consent was obtained. Informed consent must be designed to ensure that people of ALL backgrounds truly understand the risks and options involved and the evidence provided must clearly support this. This includes information and education of the patient and their family, when present.

Scoring:

- If informed consent is obtained for 100 percent of cases, then score as **fully met**.[34]
- Since this is a significant medico-legal issue, if ANY case does not have a documented informed consent, then score as **not met.**

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[32] If the RHC is performing any of the 7 procedures related to transfusion as mentioned in the indicator, the HCE should have the SOPs regarding each applicable procedure, others will become not applicable.

[33] Surveyors should decide the representative sample size according to work load/size of the RHC.

[34] There are exceptions when the recipient is an emergency unconscious patient without family or guardians present at the time.

Standard 21. COP-3: Policies and procedures guide the care of obstetrical patients.

Indicators (69-73):

Ind 69. The RHC defines and displays whether high-risk obstetric cases and their neonates can be cared for or not.

Survey Process:

Since many obstetric patients /clients will not be aware of whether they are high risk or not, it is important that the RHC informs its obstetrical patients about the definition of **high risk** and its **capability/competence** to provide services for such cases and their neonates. The second important issue is that the RHC should inform those practitioners/CMWs/LHWs and the health facilities which might refer such patients, about the RHC's capability to provide care to high-risk obstetric cases.

There must be documentation of this information (such as letters to referring practitioners and meetings with CMWs/LHWs. RHC must provide information to its own obstetric patients regarding facilities and availability of competent doctors/staff[35]).

Scoring:

- If the RHC has informed its own obstetric patients and its referring practitioners/CMWs/LHWs and the health facilities about its capability to care for high-risk obstetric cases, then score as **fully met.**
- If the RHC has informed its own patients, but not the referring practitioners/CMWs/LHWs and the health facilities, then score as **partially met.**
- If the RHC has neither informed its own patients nor referring practitioners/CMWs/LHWs and the health facilities, then score as **not met.**

Ind 70. Staff caring for obstetric cases are competent and available.

Survey Process:

RHCs are mainly meant for providing Basic Emergency Obstetrical Care (Basic EmONC.) Surveyors should look for the duty roster and availability of obstetrical care services[36] (24 hours/day, 7days/week coverage: relevant to the scope of services available for the RHC's) by the staff who are qualified and trained in obstetric care and have documented experience. In addition, there should be evidence that the assisting staff also has documented experience in handling such cases under supervision[37].

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[35] Availability of 24 hours/day, 7 days/week coverage by the staff who are fully qualified in obstetrics and who have advanced training in high-risk obstetrics and documented experience. In addition, there should be evidence that members of the nursing staff who care for such patients have advanced qualifications and documented experience.

[36] This is the absolute minimum to provide 24hrs, 7 days per week service based on 3 shifts per day and 270 productive workdays per employee per year. There should be **On Call Arrangement of Key staff** members after the working hours.

[37] As per the JDs for ALL clinical staff in the Job Descriptions and Performance Evaluation Criteria for Medical, Nursing and Paramedical Staff, Punjab Devolved Social Services Programme, Govt. of the Punjab, 2008-09.

Scoring:

- If the staff is competent and available round the clock at RHC **OR On-call arrangements** have been made to provide care to obstetric patients after working hours, then score as **fully met.**
- If not as above, then score as **not met.**

Ind 71. Obstetric patients / clients and children under five are also assessed for nutritional status.

Survey Process:

This will be surveyed by review of the available record (antenatal obstetric register/ child health register/ growth monitoring card/prescription) of the obstetric patients / clients and children under five visiting at RHC for seeking health care.

Scoring:

- If record documents assessment of nutritional status of the obstetric patients / clients and children under five including corrective measures/advice (if needed), then score as **fully met.**
- If record document assessment of nutritional status of the obstetric patients / clients and children under five but corrective measures/advice is inconsistent then score as **partially met.**
- If not as above, then score as **not met.**

Ind 72. The RHC caring for obstetric cases has the facilities and technically competent staff to take care of neonates of such cases.

Survey Process:

Relevant to the scope of services available for the RHC, technically competent staff with the following minimum equipment (in working condition) should be present in order to resuscitate neonates of such cases: i. Emergency resuscitation drugs, ii. Ambu bag with iii. Appropriate neonatal size facemasks, iv. An oxygen cylinder v. Bulb Sucker/Suction machine vi. Neonatal resuscitation drugs etc.

Scoring:

- If ALL the above listed requirements are present in good working order and staff is competent to provide care, then score as **fully met.**
- If any as above not available, then score as **not met.**

Ind 73. No treatment is administered until the identity of the patient is ensured.

Survey Process:

The surveyor should look for a system[38] of safe patient identification and confirm that the administration of ALL treatments and therapies are preceded by confirming the identity of the patient (mother and newborn as the case may be).

Scoring:

- If the identification of the patient is clearly observable and fail safe for ALL patients and staff confirm identity, then score as **fully met.**
- If there is no fail-safe system of identification, then score as **not met.**

[38] For ALL patients the system employed must be permanently with the patient and fail-safe.

2.8 Management of Medications (MOM)

Standard 22. MOM-1: Policies and procedures exist for the prescription of medications.

Indicators (74-80):

Ind 74. The RHC should follow the prescribed policy as to who can write orders.

Survey Process:
The RHC should follow policy that identifies the healthcare providers/staff who may write medication orders in the medical record or on a prescription. The policy should also delineate the healthcare providers/staff who can prescribe restricted classes of drugs[39].

Scoring:

- If the clinical staff members are fully aware of the policy regarding their authorization and limitations as to what they can prescribe and what not and there is documentary evidence that the policy regarding writing medication orders is being followed, then score as **fully met.**
- If there is evidence of any confusion or the policy is not clear about who (which professionals) is permitted to order or prescribe medication, then score as **not met.**

Ind 75. Prescriptions are clear, legible, dated, timed, named/stamped and signed.

Survey Process:
Surveyors are required to check that prescriptions are legible, dated, timed, named, and signed by the doctor. Names of the medicines (trade or generic) are clearly written and there is no coding.

Scoring:

- If representative sample of prescriptions are as described above, then score as **fully met.**
- If only up to 20% prescriptions are not as above, then score as **partially met.**
- If more than 20% prescriptions are not as above, then score as **not met.**

Ind 76. Policy on verbal orders is documented and implemented.

Survey Process:
Interview charge nurse, LHV, dispensers & other paramedics who receive verbal orders. Observe a staff member receiving a verbal order. The policy and practice should clearly describe the process including writing down the verbal order and reading it back to ensure that it was clearly understood by both, the person who gave the order and the person who received the order.

Scoring:

- If there is a clear policy and practice for verbal orders, then score as **fully met.**
- If there is a policy but the process is not consistently followed, then score as **partially met.**
- If there is neither a policy nor a practice to verify verbal orders then score as **not met.**

[39] Example – chemotherapy or very expensive drugs or unlicensed drugs administered as part of a research program.

Ind 77. The RHC has the list of essential drugs to treat common diseases, as defined/notified by the government.

Survey Process:
Review the list defining the medicines to treat common diseases. The list must be readily available to staff. The list of such medicines may be approved by the government.

Scoring:
- If the RHC has the list of medicines as described above, then score as **fully met.**
- If the RHC has the essential drug list (EDL) list of medicines as described above but it is not updated, then score as **partially met.**
- If the RHC does not have list of medicines (EDL) as described above, then score as **not met.**

Ind 78. The RHC maintains appropriate stock of essential drugs to treat common diseases.

Survey Process:
Review the stock of the medicines to treat common diseases which must be readily available to staff and provided to patients when prescribed. The buffer stock level of each medicine should not fall below a certain level at all times which is usually sufficient for three months.

Scoring:
- If the RHC maintains stock of medicines as described above, then score as **fully met.**
- If the RHC has a deficient stock of medicines but the deficiency is not more than 20%, then score as **partially met.**
- If the RHC has a deficient stock of medicines and the deficiency is more than 20%, then score as **not met.**

Ind 79. The RHC defines a list of high-risk medication.

Survey Process:
Review the list defining the high risk medicine which must be readily available to staff. The list of high-risk medications must include at least: concentrated electrolytes such as steroids, KCl, very high cost drugs, look alike medications, sound alike medications, tranquillizers and psychotropics etc.

Scoring:
- If the RHC has a written list of high-risk medications, then score as **fully met.**
- If the RHC has a list of high-risk medications, but it does not include both look alike or sound alike medications, then score as **partially met.**
- If there is no list of high-risk medications, then score as **not met.**

Ind 80. High-risk medication orders are verified prior to dispensing.

Survey Process:

Interview dispensing staff since the safety issue is not just dispensing, but also administration.

Scoring:

- If there is a clear practice (based on interviews with dispensing personnel) of verifying the order for high-risk medications, then score as **fully met.**
- If there is no formally defined process, or if there is no list of high-risk medications, then score as **not met.**

Standard 23. MOM-2: Policies and procedures guide the safe storage and dispensing of medications.

Indicators (81-83):

Ind 81. Medicines are stored as per guidelines.

Survey Process:

The Guidelines for safe storage include interalia[40]: i. proper stacking in groups to differentiate common drugs, injections, look alike and sound alike medicines within the rack/cupboard; ii. Labelling. iii. Ventilation iv. Temperature control/refrigerator for sensitive drugs like vaccines/sera etc. v. Protection of high risk and narcotic drugs and vi. Record of expiry dates.

Scoring:

- If the medicines are stored as per above referred guidelines, then score as **fully met.**
- If implementation of parameters at serial nos. i, & iii only is inconsistent, then score as **partially met.**
- If implementation of any one of the parameters at serial nos. ii, iv, v & vi is inconsistent then score as **not met.**

Ind 82. Expiry dates/shelf life are checked prior to dispensing, as applicable

Survey Process:

Check 5 randomly selected medicines dispensed or to be dispensed. Verify that the medicines are within the expiry date printed on the label as per Drug Act/Rules.

Scoring:

- If all 5 randomly selected medicines dispensed or to be dispensed are within the expiry date, then score as **fully met.**
- If any of randomly selected medicines dispensed or to be dispensed are not within the expiry date, then score as **not met.**

Ind 83. Labelling requirement are implemented[41]

Survey Process:

The essence of the indicator is that medicines prescribed by a SMO/MO/WMO/DS etc. are correctly dispensed and utilized by the patient. Observe that the dispensed medicine/s, (bottle or sachet/envelope) indicate patient name/record number, instructions to use, dosage and date of issue. Check sample of 4-6 of dispensed medications to determine how they are labeled[42].

Scoring:

- If all medications are labeled as above, then score as **fully met.**
- If all medications are not labeled as above, then score as **not met.**

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[40] Full details available in the Drug Act 1976.

[41] Not applicable where the Practice is only to the extent of prescription writing.

[42] Understanding that till existing stocks of Medicine having no such instructions for use exhaust, they will be substantiated with handwritten instructions on the prescriptions/envelops which surveyors will check.

Standard 24. MOM-3: There are defined procedures for medication dispensing/administration.

Indicators (84-86):

Ind 84. Medications are dispensed/administered by those who are permitted by law and authorized to do so.

Survey Process:

The essence of the indicator is that the person made responsible to dispense/administer the medicines is either a qualified and registered professional or able to **correctly read** and **identify** the **medicines prescribed by the doctor from those in the store/cabinet**. He/she is **also able to correctly distinguish look alike and sound alike medicines and to dispense correctly under supervision of the doctor.**

Scoring:

- If all drugs are dispensed/administered by authorized staff only, then score as **fully met.**
- If there is an evidence of medication dispensed/administered by someone not authorized to do so, then score as **not met.**

Ind 85. Patient is identified prior to administration of a drug.

Survey Process:

Review the policy and procedure. At least 2 separate identifiers for positively identifying the patient should be used. Interview a paramedic to find out what is done in practice when dispensing/administering medication and observe how he/she identifies the patient. There should exist a system of identification that is reliable and is practiced at all times.[43]

Scoring:

- If 2 identifiers are routinely used, then score as **fully met.**
- If this practice is not uniformly followed (1 or more examples where there is failure to follow the procedure), then score as **not met.**

[43] For ALL patients the system employed must be permanently with the patient and fail-safe.

Ind 86. Medication is verified from the order prior to dispensing/administration.

Survey Process:

Observe paramedics preparing/administering medication and verify that the medication order was readily available and the type of medication was checked prior to preparing the medication. He/she is able to read from prescription and verifies dosage, route, timing, and expiry date etc. before dispensing/administering.

Scoring:

- If there is clear evidence that the order was checked as above by name, then score as **fully met.**
- If ANY example of medication not being checked against the order is seen, then score as **not met.**

2.9 Patient Rights and Education (PRE)

Standard 25. PRE-1: A system for obtaining consent for treatment exists at RHC.

Indicators (87-89):

Ind 87. The MO or other HCP obtains consent from a patient before examination[44].

Survey Process:

Healthcare Providers are required to politely seek permission from the patient/relative/parents before physical examination. The "Verbal Consent" so "Obtained" is required to be endorsed in the documentation/prescription at the minimum as **"VCO".** To validate the **"VCO"** the Surveyor is required to have an exit-interview of the patient who has undergone examination and also to review register/copy of prescription.

Scoring:

- If there is evidence of VCO then, then score as **fully met.**
- If there is evidence of VCO in up to 80% of cases, then score as **partially met.**
- If there is no evidence of VCO as above, then score as **not met.**

Ind 88. The situations where specific informed consent is required are listed as per prescribed policy.

Survey Process:

Review any written policy or list of situations where specific informed consent is required. Then review medical records of representative sample of patients who should have (by RHC policy) a specific informed consent to validate that it is documented in the record. This may include consent related to procedures and therapies with particular concern for blood transfusion, surgical procedures, IUCD, termination of pregnancy and high-risk medications etc.

Scoring:

- If ALL reviewed relevant records contain/document an informed consent, then score as **fully met.**
- Since this is also a medico-legal issue, if ANY record does not contain/document informed consent, then score as **not met.**

[44] This is to maintain the respect, dignity and honor of the patients while examining and providing care and to comply with the Patients Charters and the Code of Ethics.

Ind 89. The policy describes who can give consent when patient is incapable of independent decision-making.

Survey Process:

Review the policy to determine who is authorized to give consent when the patient is incapable of independent decision making e.g Patient is unconscious, mentally handicapped or a child etc.

Scoring:

- If there is a policy describing who, other than the patient, may give informed consent, then score as **fully met.**
- If there is no policy, then score as **not met.**

Standard 26. PRE-2: Patient and families have a right to information on expected costs.

Indicators (90):

Ind 90. The user charges list is available and patient/family is informed about the costs.

Survey Process:

Customarily the Purchi **Fee is displayed** or patients are informed about the OPD purchi fee/indoor/diagnostics/ambulance etc at the reception desk (as applicable) and the cost list/user charges list is shown if requested. The drugs available/provided at the RHC as per the EDL are displayed for the awareness of the patient/families to inform them that the drugs not included/available in the EDL have to be purchased by them at their own cost.

Scoring:

- If there is evidence of availability of user charges list and that the patients/families are informed about the applicable cost, then score as **fully met.**
- If the patients/relatives are not informed about the expected cost of treatment, then score as **not met.**

Standard 27. PRE-3: Patients and families have a right to refuse treatment and lodge a complaint.

Indicators (91-94):

Ind 91. Patients and families have a right to refuse the treatment

Survey Process:
Patient and families are expected to respect the instructions / medication order prescribed by the doctor but they have a right to refuse the treatment[45] and seek advice from any other doctor/HCE of their choice[46] as provided in the PHC charters[47]. In cases where patients refuse advice, procedures or treatment, it has to be recorded in the patients' record.

Scoring:

- Unless the surveyors have a reason to believe that the above provision of the charters are not being complied with, the score should default to **fully met**.

Ind 92. Patients and families have a right to complain and there is a mechanism to address the grievances.

Survey Process:
Patient and families have a right to complain and put forward their grievances on the spot on occurrence, with some delay, verbally, in writing or by any other means. There should be a mechanism to handle the complaints effectively. A functional **Complaint Box** or a **Complaint Register, availability of Complaint Form** and **File Record** are evidence of the system being in place.

Scoring:

- If there is a display which facilitates/guides the patients about their right of complaint and the system is being followed as above (including zero report recording in the register) then, score as **fully met.**
- If there is no display which facilitates/guides the patients about their right of complaint and or the system described above is not being followed then, score as **not met.**

[45] Provisions 12. (c), PM&DC Code of Ethics OF Practice For Medical and Dental Practitioners allows refusal to treat a patient.
[46] Provisions 12. (b) and 13., PM&DC Code of Ethics OF Practice For Medical and Dental Practitioners allows independent additional opinions.
[47] Details to be seen in reference manual.

Ind 93. The RHC uses the results of complaints investigations as part of the quality improvement process.

Survey Process:
Review the process and documentation to identify and observe actual examples of changes in the policy and procedures that have been made as a result of complaints analysis.
Scoring:

- If there is evidence of quality improvement process which uses complaint-handling data and reports in this regard are available, then score as **fully met.**
- If there is a quality improvement process to use complaint handling data but no evidence available how that data was used for improvement, then score as **partially met.**
- If there is no quality improvement process about using complaint-handling data, then score as **not met.**

Ind 94. HCE charter is displayed and patients/families are guided.

Survey Process:
Surveyor is required to see that HCE charters of rights and responsibilities of the patients and families are displayed at a prominent place in the RHC like waiting area or main entrance. Patient or families are expected to observe the social norms by waiting for their turn, avoid conflicting situation, follow instructions of the doctor regarding re-visit date and time. Also observe that guidance is provided on above aspects as a routine.
Scoring:

- If there is a board which displays HCE charters and evidence that the patients/ families are also guided to observe the same then, score as **fully met.**
- If there is no board to display HCE charters but there is evidence that the patients/ families are guided to observe the same then, score as **partially met.**
- If there is no board to display HCE charters and there is no evidence that the patients / families are guided to observe the same then, score as **not met.**

2.10 Infection Control (IC)

Standard 28. IC-1: The RHC has an infection control system in place.

Indicator (95-95):

Ind 95. The RHC has arrangement for infection control aiming at prevention and reducing risk of infections

Survey Process:

Observe if there are written instructions along with notification of infection control (IC) Nurse[48]. One of the posted Nurse should be trained in the Infection Control SOPs and Hospital Waste Management Rules (HWMR) 2014 and made responsible to ensure implementation of at least the following aspects;

I. Maintaining cleanliness/hygiene in the RHC premises.
II. Facility of hand washing before and after examination/procedure[49] with soap and water/a disinfectant as the case may be.
III. Facility of washing & sterilizing the equipment/instruments/linen in readiness for procedures.
IV. Arrangement for controlling/preventing/reducing the risk of infections during the process of patient assessment.
V. Use of disposable gloves and mask etc. by the Doctor/HCP while examining the patient for certain specific conditions[50].
VI. Abiding of above Infection Control instructions by the dispenser/medical assistant while assisting the doctor.
VII. Safe handling of medical/clinical Waste.[51]

Scoring:

- If there is evidence of observing the infection control procedures as above, then score as **fully met.**
- If there is a designated IC Nurse observing the infection control procedures up to 80% of above mentioned aspects, then score as **partially met.**
- If there is no designated IC Nurse and less than 80% of the above aspects are being practiced, then score as **not met.**

[48] Sample Procedure / instructions given in the Reference Manual.
[49] All instruments etc required/used for procedures should either be disposable and/or properly sterilized.
[50] Listed/explained in the Reference Manual.
[51] In the light of latest instructions on Clinical Waste Management issued by Environment Protection Agency as applicable locally. Details in Reference Manual.

Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part 4
MONITORING AND EVALUATION

(Weightage 10%)

SOME TOOLS, METHODS AND APPROACHES FOR MONITORING AND EVALUATION

PURPOSE

Monitoring and evaluation (M&E) of development activities provides government officials, development managers, and civil society with better means for learning from past experience, improving service delivery, planning and allocating resources, and demonstrating results as part of accountability to key stakeholders.

Within the development community there is a strong focus on *results*— this helps explain the growing interest in M&E. Yet there is often confusion about what M&E entails. The purpose of this *M&E Overview* is to strengthen awareness and interest in M&E, and to clarify what it entails.

You will find an overview of a sample of M&E tools, methods, and approaches outlined here, including their purpose and use; advantages and disadvantages; costs, skills, and time required; and key references. Those illustrated here include several data collection methods, analytical frameworks, and types of evaluation and review. The *M&E Overview* discusses:

- Performance indicators
- The logical framework approach
- Theory-based evaluation
- Formal surveys
- Rapid appraisal methods
- Participatory methods
- Public expenditure tracking surveys
- Cost-benefit and cost-effectiveness analysis
- Impact evaluation

This list is not comprehensive, nor is it intended to be. Some of these tools and approaches are complementary; some are substitutes. Some have broad applicability, while others are quite narrow in their uses. The choice of which is appropriate for any given context will depend on a range of considerations. These include the uses for which M&E is intended, the main stakeholders who have an interest in the M&E findings, the speed with which the information is needed, and the cost.

Performance Indicators

What are they?

Performance indicators are measures of inputs, processes, outputs, outcomes, and impacts for development projects, programs, or strategies. When supported with sound data collection—perhaps involving formal surveys—analysis and reporting, indicators enable managers to track progress, demonstrate results, and take corrective action to improve service delivery. Participation of key stakeholders in defining indicators is important because they are then more likely to understand and use indicators for management decision-making.

What can we use them for?

- Setting performance targets and assessing progress toward achieving them.
- Identifying problems via an early warning system to allow corrective action to be taken.
- Indicating whether an in-depth evaluation or review is needed.

ADVANTAGES:

- Effective means to measure progress toward objectives.
- Facilitates benchmarking comparisons between different organizational units, districts, and over time.

DISADVANTAGES:

- Poorly defined indicators are not good measures of success.
- Tendency to define too many indicators, or those without accessible data sources, making system costly, impractical, and likely to be underutilized.
- Often a trade-off between picking the optimal or desired indicators and having to accept the indicators which can be measured using existing data.

COST:

Can range from low to high, depending on number of indicators collected, the frequency and quality of information sought, and the comprehensiveness of the system.

SKILLS REQUIRED:

Several days of training are recommended to develop skills for defining practical indicators. Data collection, analysis and reporting skills, and management information system (MIS) skills are required to implement performance monitoring systems.

TIME REQUIRED:

Several days to several months, depending on extent of participatory process used to define indicators and program complexity. Implementing performance monitoring systems may take 6–12 months.

For more information

World Bank (2000). Key Performance Indicator Handbook. Washington, D.C.

The Logical Framework Approach

What is it?

The logical framework (LogFrame) helps to clarify objectives of any project, program, or policy. It aids in the identification of the expected causal links—the "program logic"—in the following results chain: inputs, processes, outputs (including coverage or "reach" across beneficiary groups), outcomes, and impact. It leads to the identification of performance indicators at each stage in this chain, as well as risks which might impede the attainment of the objectives. The LogFrame is also a vehicle for engaging partners in clarifying objectives and designing activities. During implementation the LogFrame serves as a useful tool to review progress and take corrective action.

What can we use it for?

- Improving quality of project and program designs—by requiring the specification of clear objectives, the use of performance indicators, and assessment of risks.
- Summarizing design of complex activities.
- Assisting the preparation of detailed operational plans.
- Providing objective basis for activity review, monitoring, and evaluation.

ADVANTAGES:

- Ensures that decision-makers ask fundamental questions and analyze assumptions and risks.
- Engages stakeholders in the planning and monitoring process.
- When used dynamically, it is an effective management tool to guide implementation, monitoring and evaluation.

DISADVANTAGES:

- If managed rigidly, stifles creativity and innovation.
- If not updated during implementation, it can be a static tool that does not reflect changing conditions.
- Training and follow-up are often required.

COST:

Low to medium, depending on extent and depth of participatory process used to support the approach.

SKILLS REQUIRED:

Minimum 3–5 days training for facilitators; additional facilitation skills required for use in participatory planning and management.

TIME REQUIRED:

Several days to several months, depending on scope and depth of participatory process.

For more information: World Bank (2000). The Logframe Handbook, World Bank: http://wbln1023/OCS/Quality.nsf/Main/MELFHandBook/$File/LFhandbook.pdf

Theory-Based Evaluation

What is it?

Theory-based evaluation has similarities to the LogFrame approach but allows a much more in-depth understanding of the workings of a program or activity—the "program theory" or "program logic." In particular, it need not assume simple linear cause-and-effect relationships. For example, the success of a government program to improve literacy levels by increasing the number of teachers might depend on a large number of factors. These include, among others, availability of classrooms and textbooks, the likely reactions of parents, school principals and schoolchildren, the skills and morale of teachers, the districts in which the extra teachers are to be located, the reliability of government funding, and so on. By mapping out the determining or causal factors judged important for success, and how they might interact, it can then be decided which steps should be monitored as the program develops, to see how well they are in fact borne out. This allows the critical success factors to be identified. And where the data show these factors have not been achieved, a reasonable conclusion is that the program is less likely to be successful in achieving its objectives.

What can we use it for?

- Mapping design of complex activities.
- Improving planning and management.

ADVANTAGES:

- Provides early feedback about what is or is not working, and why.
- Allows early correction of problems as soon as they emerge.
- Assists identification of unintended side-effects of the program.
- Helps in prioritizing which issues to investigate in greater depth, perhaps using more focused data collection or more sophisticated M&E techniques.
- Provides basis to assess the likely impacts of programs.

DISADVANTAGES:

- Can easily become overly complex if the scale of activities is large or if an exhaustive list of factors and assumptions is assembled.
- Stakeholders might disagree about which determining factors they judge important, which can be time-consuming to address.

COST:

Medium—depends on the depth of analysis and especially the depth of data collection undertaken to investigate the workings of the program.

SKILLS REQUIRED:

Minimum 3–5 days training for facilitators.

TIME REQUIRED:

Can vary greatly, depending on the depth of the analysis, the duration of the program or activity, and the depth of the M&E work undertaken.

For more information: *Weiss, Carol H. (1998). Evaluation. Prentice Hall, New Jersey, Second Edition.*
Weiss, Carol H. (2000). "Theory-based evaluation: theories of change for poverty reduction programs." In O. Feinstein and R. Picciotto (eds.), *Evaluation and Poverty Reduction*. Operations Evaluation Department, The World Bank, Washington, D.C.
Mayne, John (1999). *Addressing Attribution Through Contribution Analysis: Using Performance Measures Sensibly*. Office of the Auditor General of Canada working paper, Ottawa: http://www.oag-bvg.gc.ca/domino/other.nsf/html/99dp1_e.html

Formal Surveys

What are they?

Formal surveys can be used to collect standardized information from a carefully selected sample of people or households. Surveys often collect comparable information for a relatively large number of people in particular target groups.

What can we use them for?

- Providing baseline data against which the performance of the strategy, program, or project can be compared.
- Comparing different groups at a given point in time.
- Comparing changes over time in the same group.
- Comparing actual conditions with the targets established in a program or project design.
- Describing conditions in a particular community or group.
- Providing a key input to a formal evaluation of the impact of a program or project.
- Assessing levels of poverty as basis for preparation of *poverty reduction strategies*.

ADVANTAGES:

- Findings from the sample of people interviewed can be applied to the wider target group or the population as a whole.
- Quantitative estimates can be made for the size and distribution of impacts.

DISADVANTAGES:

- With the exception of CWIQ, results are often not available for a long period of time.
- The processing and analysis of data can be a major bottleneck for the larger surveys even where computers are available.
- LSMS and household surveys are expensive and time-consuming.
- Many kinds of information are difficult to obtain through formal interviews.

COST:

Costs will be significantly higher if there is no master sampling frame for the country.

SKILLS REQUIRED:

Sound technical and analytical skills for sample and questionnaire design, data analysis, and processing.

TIME REQUIRED:

Depends on sample size. The CWIQ can be completed in 2 months. The LSMS generally requires 18 months to 2 years.

SOME TYPE OF SURVERYS

Multi-Topic Household Survey (also known as Living Standards Measurement Survey—LSMS) *is a multi-subject integrated survey that provides a means to gather data on a number of aspects of living standards to inform policy. These surveys cover: spending, household composition, education, health, employment, fertility, nutrition, savings, agricultural activities, other sources of income.* ***Single-topic household surveys*** *cover a narrower range of issues in more depth.*

Core Welfare Indicators Questionnaire (CWIQ) *is a household survey that measures changes in social indicators for different population groups— specifically indicators of access, utilization, and satisfaction with social and economic services. It is a quick and effective tool for improving activity design, targeting services to the poor and, when repeated annually, for monitoring activity performance. Preliminary results can be obtained within 30 days of the CWIQ survey.*

Client Satisfaction (*or* ***Service Delivery) Survey*** *is used to assess the performance of government services based on client experience. The surveys shed light on the constraints clients face in accessing public services, their views about the quality and adequacy of services, and the responsive-ness of government officials. These surveys are usually conducted by a government ministry or agency.*

Citizen Report Cards *have been con-ducted by NGOs and think-tanks in several countries. Similar to service delivery surveys, they have also investigated the extent of corruption encountered by ordinary citizens. A notable feature has been the widespread publication of the findings.*

For more information: Sapsford, R. (1999). Survey Research. Sage, Newbury Park, CA.
Core Welfare Indicators Questionnaire: http://www4.worldbank.org/afr/stats/cwiq.cfm
LSMS: http://www.worldbank.org/lsms/
Client Satisfaction Surveys: http://www4.worldbank.org/afr/stats/wbi.cfm#sds
Citizen Report Cards: http://lnweb18.worldbank.org/ESSD/sdvext.nsf/60ByDocName/CitizenReportCardSurveysANoteontheConceptandMethodology/$FILE/CRC+SD+note.pdf

Rapid Appraisal Methods

What are they?

Rapid appraisal methods are quick, low-cost ways to gather the views and feedback of beneficiaries and other stakeholders, in order to respond to decision-makers' needs for information.

What can we use them for?

- Providing rapid information for management decision-making, especially at the project or program level.
- Providing qualitative understanding of complex socioeconomic changes, highly interactive social situations, or people's values, motivations, and reactions.
- Providing context and interpretation for quantitative data collected by more formal methods.

ADVANTAGES:

Low cost.
Can be conducted quickly.
Provides flexibility to explore new ideas.

DISADVANTAGES:

Findings usually relate to specific communities or localities—thus difficult to generalize from findings.
Less valid, reliable, and credible than formal surveys.

COST:

Low to medium, depending on the scale of methods adopted.

SKILLS REQUIRED:

Non-directive interviewing, group facilitation, field observation, note-taking, and basic statistical skills.

TIME REQUIRED:

Four to six weeks, depending on the size and location of the population interviewed and the number of sites observed.

Rapid Appraisal Methods

Key informant interview*—a series of open-ended questions posed to individuals selected for their knowledge and experience in a topic of interest. Inter-views are qualitative, in-depth, and semi-structured. They rely on interview guides that list topics or questions.*

Focus group discussion*—a facilitated discussion among 8–12 carefully selected participants with similar back-grounds. Participants might be beneficiaries or program staff, for example. The facilitator uses a discussion guide. Note-takers record comments and observations.*

Community group interview*—a series of questions and facilitated discussion in a meeting open to all community members. The interviewer follows a carefully prepared questionnaire.*

Direct observation*—use of a detailed observation form to record what is seen and heard at a program site. The information may be about ongoing activities, processes, discussions, social inter-actions, and observable results.*

Mini-survey*—a structured questionnaire with a limited number of close-ended questions that is administered to 50–75 people. Selection of respondents may be random or 'purposive' (inter-viewing stakeholders at locations such as a clinic for a health care survey).*

For more information: USAID. Performance
http://www.usaid.gov/pubs/usaid_eval/#02
K. Kumar (1993). Rapid Appraisal Methods. The World Bank, Washington, D.C.

Participatory Methods

What are they?

Participatory methods provide active involvement in decision-making for those with a stake in a project, program, or strategy and generate a sense of ownership in the M&E results and recommendations.

What can we use them for?

- Learning about local conditions and local people's perspectives and priorities to design more responsive and sustainable interventions.
- Identifying problems and trouble-shooting problems during implementation.
- Evaluating a project, program, or policy.
- Providing knowledge and skills to empower poor people.

ADVANTAGES:

- Examines relevant issues by involving key players in the design process.
- Establishes partnerships and local ownership of projects.
- Enhances local learning, management capacity, and skills.
- Provides timely, reliable information for management decision-making.

DISADVANTAGES:

- Sometimes regarded as less objective.
- Time-consuming if key stakeholders are involved in a meaningful way.
- Potential for domination and misuse by some stakeholders to further their own interests.

COST:

Low to medium. Costs vary greatly, depending on scope and depth of application and on how local resource contributions are valued.

SKILLS REQUIRED:

Minimum several days' training for facilitators.

TIME REQUIRED:

Varies greatly, depending on scope and depth of application.

Commonly Used Participatory Tools

Stakeholder analysis is the starting point of most participatory work and social assessments. It is used to develop an understanding of the power relation-ships, influence, and interests of the various people involved in an activity and to determine who should participate, and when.

Participatory rural appraisal is a planning approach focused on sharing learning between local people, both urban and rural, and outsiders. It enables development managers and local people to assess and plan appropriate interventions collaboratively often using visual techniques so that non-literate people can participate.

Beneficiary assessment involves systematic consultation with project beneficiaries and other stakeholders to identify and design development initiatives, signal constraints to participation, and provide feedback to improve services and activities.

Participatory monitoring and evaluation involves stakeholders at different levels working together to identify problems, collect and analyze information, and generate recommendations.

For more information: Guijt, I. and J. Gaventa (1998). Participatory Monitoring and Evaluation. Institute of Development Studies, University of Sussex, Brighton, U.K.: http://www.ids.ac.uk/ids/bookshop/briefs/brief12.html

http://www.worldbank.org/participation/partme

Public Expenditure Tracking Surveys

What are they?

Public expenditure tracking surveys (PETS) track the flow of public funds and determine the extent to which resources actually reach the target groups. The surveys examine the manner, quantity, and timing of releases of resources to different levels of government, particularly to the units responsible for the delivery of social services such as health and education. PETS are often implemented as part of larger service delivery and facility surveys which focus on the quality of service, characteristics of the facilities, their management, incentive structures, etc.

What can we use them for?

- Diagnosing problems in service delivery quantitatively.
- Providing evidence on delays, "leakage," and corruption.

ADVANTAGES:

- Supports the pursuit of accountability when little financial information is available.
- Improves management by pinpointing bureaucratic bottlenecks in the flow of funds for service delivery.

DISADVANTAGES:

- Government agencies may be reluctant to open their accounting books.
- Cost is substantial.

COST:

Can be high until national capacities to conduct them have been established.

SKILLS REQUIRED:

Sound technical and analytical skills for sample and questionnaire design, data analysis and processing, and good understanding of sector to be assessed.

TIME REQUIRED:

Five to six months (survey alone takes 1–2 months).

For more information: http://www1.worldbank.org/publicsector/pe/trackingsurveys.htm

Cost-Benefit and Cost-Effectiveness Analysis

What are they?

Cost-benefit and cost-effectiveness analysis are tools for assessing whether or not the costs of an activity can be justified by the outcomes and impacts. ***Cost-benefit analysis*** measures both inputs and outputs in monetary terms. ***Cost-effectiveness analysis*** estimates inputs in monetary terms and outcomes in non-monetary quantitative terms (such as improvements in student reading scores).

What can we use them for?

- Informing decisions about the most efficient allocation of resources.
- Identifying projects that offer the highest rate of return on investment.

ADVANTAGES:

- Good quality approach for estimating the efficiency of programs and projects.
- Makes explicit the economic assumptions that might otherwise remain implicit or overlooked at the design stage.
- Useful for convincing policy-makers and funders that the benefits justify the activity.

DISADVANTAGES:

- Fairly technical, requiring adequate financial and human resources available.
- Requisite data for cost-benefit calculations may not be available, and projected results may be highly dependent on assumptions made.
- Results must be interpreted with care, particularly in projects where benefits are difficult to quantify.

COST:

Varies greatly, depending on scope of analysis and availability of data.

SKILLS REQUIRED:

The procedures used in both types of analyses are often highly technical. They require skill in economic analysis and availability of relevant economic and cost data.

TIME REQUIRED:

Varies greatly depending on scope of analysis and availability of data.

For more information: Belli, P., et al. (2000). Economic Analysis of Investment Operations: Analytical Tools and Practical Applications. The World Bank, Washington, D.C.

GOOD PRACTICE EXAMPLES OF COST-BENEFIT ANALYSIS: http://kms.worldbank.org/edunet/TEN_DIMENSIONS/DIM_4/cb_ce.htm

Impact Evaluation

What is it?

Impact evaluation is the systematic identification of the effects – positive or negative, intended or not – on individual households, institutions, and the environment caused by a given development activity such as a program or project. Impact evaluation helps us better understand the extent to which activities reach the poor and the magnitude of their effects on people's welfare. Impact evaluations can range from large scale sample surveys in which project populations and control groups are compared before and after, and possibly at several points during program intervention; to small-scale rapid assessment and participatory appraisals where estimates of impact are obtained from combining group interviews, key informants, case studies and available secondary data.

What can we use it for?

- Measuring outcomes and impacts of an activity and distinguishing these from the influence of other, external factors.
- Helping to clarify whether costs for an activity are justified.
- Informing decisions on whether to expand, modify or eliminate projects, programs or policies.
- Drawing lessons for improving the design and management of future activities.
- Comparing the effectiveness of alternative interventions.
- Strengthening accountability for results.

ADVANTAGES:

- Provides estimates of the magnitude of outcomes and impacts for different demo-graphic groups, regions or over time.
- Provides answers to some of the most central development questions – to what extent are we making a difference? What are the results on the ground? How can we do better?
- Systematic analysis and rigor can give managers and policy-makers added confidence in decision-making.

DISADVANTAGES:

- Some approaches are very expensive and time-consuming, although faster and more economical approaches are also used.
- Reduced utility when decision-makers need information quickly.
- Difficulties in identifying an appropriate counter-factual.

COST:

A number of World Bank impact evaluations depend on program size, complexity and data collection. Simpler and rapid impact evaluations can be conducted for significantly less cost.

SKILLS REQUIRED:

Strong technical skills in social science research design, management, analysis and reporting. Ideally, a balance of quantitative and qualitative research skills on the part of the evaluation team.

TIME REQUIRED:

Can take up to 2 years or more. Rapid assessment evaluations can often be conducted in less than 6 months.

EXAMPLES OF IMPACT EVALUATION DESIGNS

Randomized evaluation designs, involving the collection of information on project and control groups at two or more points in time, provide the most rigorous statistical analysis of project impacts and the contribution of other factors. But in practice it is rarely possible to use these designs for reasons of cost, time, methodological or ethical constraints. Thus most impact evaluations use less expensive and less rigorous evaluation designs. The following table describes four approaches to impact evaluation designs in development evaluation. The first is an example of a randomized evaluation design; the second is a quasi-experimental design in which a "non-equivalent" control group is selected to match as closely as possible the characteristics of the project population; in the third example the project population is compared with a non-equivalent control group after the project has been implemented; and the fourth is a rapid assessment evaluation which combines group interviews, key informants, case studies and secondary data. Each successive model sacrifices methodological rigor, in return from which there are significant reductions in cost and time requirements.

For more information: Baker, J. (2000). Evaluating the Poverty Impact of Projects: A Handbook for Practitioners. The World Bank, Washington, D. C. http://www.worldbank.org/poverty/library/impact.htm

World Bank Web site on impact evaluation: http://www.worldbank.org/poverty/impact/

Roche, C. (1999) Impact Assessment for Development Agencies: Learning to Value Change. Oxfam, Oxford

4 Models of Impact Evaluation

Model	Design	Example	Indicative cost and time
1. Randomized pre-test post-test evaluation.	Subjects (families, schools, communities etc) are randomly assigned to project and control groups. Questionnaires or other data collection instruments (anthropometric measures, school performance tests, etc) are applied to both groups before and after the project intervention. Additional observations may also be made during project implementation.	Water supply and sanitation or the provision of other services such as housing, community infrastructure etc where the demand exceeds supply and beneficiaries are selected by lottery. Example: Bolivia Social Fund.	1-5 years depending on time which must elapse before impacts can be observed. Cost can range from $50,000 - $1million depending on the size and complexity of the program being studied.
2. Quasi-experimental design with before and after comparisons of project and control populations.	Where randomization is not possible, a control group is selected which matches the characteristics of the project group as closely as possible. Sometimes the types of communities from which project participants were drawn will be selected. Where projects are implemented in several phases, participants selected for subsequent phases can be used as the control for the first phase project group.	These models have been applied in World Bank low-cost housing programs in El Salvador, Zambia, Senegal and the Philippines.	Cost and timing similar to Model 1.
3. Ex-post comparison of project and non-equivalent control group.	Data are collected on project beneficiaries and a non-equivalent control group is selected as for Model 2. Data are only collected after the project has been implemented. Multivariate analysis is often used to statistically control for differences in the attributes of the two groups.	Assessing the impacts of micro-credit programs in Bangladesh. Villages where micro-credit programs were operating were compared with similar villages without these credit programs.	$50,000 upwards. The cost will usually be one third to one half of a comparable study using Models 1 or 2.
4. Rapid assessment ex-post impact evaluations.	Some evaluations only study groups affected by the project while others include matched control groups. Participatory methods can be used to allow groups to identify changes resulting from the project, who has benefited and who has not, and what were the project's strengths and weaknesses. Triangulation is used to compare the group information with the opinions of key informants and information available from secondary sources. Case studies on individuals or groups may be produced to provide more in-depth understanding of the processes of change.	Assessing community managed water supply projects in Indonesia.	$25,000 upwards (the Indonesia study cost $150,000). Some studies are completed in 1-2 months; others take a year or longer.

Additional Resources on Monitoring and Evaluation

World Wide Web sites

- World Bank Evaluation, Monitoring and Quality Enhancement: http://www.worldbank.org/evaluation/
- Monitoring & Evaluation Capacity Development: http://www.worldbank.org/oed/ecd/
- Monitoring and Evaluation News: http://www.mande.co.uk/

Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part 5
MANAGEMENT

(Weightage 10%)

MODERN MANAGEMENT THEORIES AND PRACTICES: A CRITICAL OVERVIEW

Introduction

Managing is one of the most important human activities. From the time human beings began forming social organizations to accomplish aims and objectives they could not accomplish as individuals, managing has been essential to ensure the coordination of individual efforts. As society continuously relied on group effort, and as many organized groups have become large, the task of managers has been increasing in importance and complexity. Henceforth, managerial theory has become crucial in the way managers manage complex organizations.

The central thesis of this paper is that although some managers in different parts of the world could have achieved managerial success without having basic theoretical knowledge in management, it has to be unequivocally emphasized that those managers who have mixed management theory in their day-to-day practice, have had better chances of managing their organizations more efficiently and effectively to achieve both individual and organizational objectives. Therefore, managers of contemporary organizations ought to appreciate the important role they play in their respective organizations if they are to achieve set goals. Secondly, there is need to promote excellence among all persons in organizations, especially among managers themselves.

To address these concerns, the paper will proceed along the following spectrum: management will be defined for purposes of conceptual clarity; management objectives, functions, goals, and essentiality, will be highlighted; the importance of managerial skills and the organizational hierarchy will be sketched; the importance of women in the organizational hierarchy will be emphasized; reasons for studying management theory will be enumerated; the different management theories, the core of the paper, will be discussed at length; the significance of management as a practice will be contextualized; and ‘the way forward’ in form of a conclusion will be offered.

Definition of Management

Management is the art, or science, of achieving goals through people. Since managers also supervise, management can be interpreted to mean literally “looking over” – i.e., making sure people do what they are supposed to do. Managers are, therefore, expected to ensure greater productivity or, using the current jargon, ‘continuous improvement’.

More broadly, management is the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims (Koontz and Weihrich 1990, p. 4). In its expanded form, this basic definition means several things. First, as managers, people carry out the managerial functions of planning, organizing, staffing, leading, and controlling. Second, management applies to any kind of organization. Third, management applies to managers at all organizational levels. Fourth, the aim of all managers is the same – to create surplus. Finally, managing is concerned with productivity – this implies effectiveness and efficiency.

Thus, management refers to the development of bureaucracy that derives its importance from the need for strategic planning, co-ordination, directing and controlling of large and complex decision-making process. Essentially, therefore, management entails the acquisition of managerial competence, and effectiveness in the following key areas: problem solving, administration, human resource management, and organizational leadership.

First and foremost, management is about solving problems that keep emerging all the time in the course of an organization struggling to achieve its goals and objectives. Problem solving should be accompanied by problem identification, analysis and the implementation of remedies to managerial problems. Second, administration involves following laid down procedures (although procedures or rules should not be seen as ends in themselves) for the execution, control, communication, delegation and crisis management. Third, human resource management should be based on strategic integration of human resource, assessment of workers, and exchange of ideas between shareholders and workers. Finally, organizational leadership should be developed along lines of interpersonal relationship, teamwork, self-motivation to perform, emotional strength and maturity to handle situations, personal integrity, and general management skills.

Management Objectives, Functions, Goals, and Essentiality

Management Objectives

There are basically three management objectives. One objective is ensuring organizational goals and targets are met – with least cost and minimum waste. The second objective is looking after health and welfare, and safety of staff. The third objective is protecting the machinery and resources of the organization, including the human resources.

Management Functions

To understand management, it is imperative that we break it down into five managerial functions, namely; planning, organizing, staffing, leading, and controlling.

- Planning involves selecting missions and objectives and the actions to achieve them. It requires decision-making – i.e., choosing future courses of action from among alternatives. Plans range from overall purposes and objectives to the most detailed actions to be taken. No real plan exists until a decision – a commitment of human and material resources – has been made. In other words, before a decision is made, all that exists is planning study, analysis, or a proposal; there is no real plan. People working together in groups to achieve some goal must have roles to play. Generally, these roles have to be defined and structured by someone who wants to make sure that people contribute in a specific way to group effort.

- Organizing, therefore, is that part of management that involves establishing an intentional structure of roles for people to fill in an organization. Intentional in that all tasks necessary to accomplish goals are assigned and assigned to people who can do them best. Indeed, the purpose of an organizational structure is to help in creating an environment for human performance. However, designing an organizational structure is not an easy managerial task because many problems are encountered in making structures fit situations, including both defining the kind of jobs that must be done and finding the people to do them.

- Staffing involves filling, and keeping filled, the positions in the organization structure. This is done by identifying work-force requirements; inventorying the people available; and recruiting, selecting, placing, promoting, appraising, planning the careers of, compensating, and training or otherwise developing both candidates and current

jobholders to accomplish their tasks effectively and efficiently.

- Leading is the influencing of people so that they will contribute to organization and group goals; it has to do predominantly with the interpersonal aspect of managing. Most important problems to managers arise from people – their desires and attitudes, their behavior as individuals and in groups. Hence, effective managers need to be effective leaders. Leading involves motivation, leadership styles and approaches and communication.

- Controlling, for example, budget for expense, is the measuring and correcting of activities of subordinates to ensure that events conform to plans. It measures performance against goals and plans, shows where negative deviations exist, and, by putting in motion actions to correct deviations, helps ensure accomplishment of plans. Although planning must precede controlling, plans are not self-achieving. Plans guide managers in the use of resources to accomplish specific goals; then activities are checked to determine whether they conform to the plans. Compelling events to conform to plans means locating the persons who are responsible for results that differ from planned action and then taking the necessary steps to improve performance. Thus, controlling what people do controls organizational outcomes.

- Finally, coordination is the essence of manager-ship for achieving harmony among individual efforts toward the accomplishment of group goals. Each of the managerial functions discussed earlier on is an exercise contributing to coordination. Because individuals often interpret similar interests in different ways, and their efforts toward mutual goals do not automatically mesh with the efforts of others, it, thus, becomes the central task of the manager to reconcile differences in approach, timing, effort, or interest, and to harmonize individual goals to contribute to organizational goals.

Although these management functions concern the internal environment for performance within an organization, managers must operate in the external environment of an organization as well. Clearly, managers cannot perform their tasks well unless they have an understanding of, and are responsive to, the many elements of the external environment – economic, technological, social, political, and ethical factors – that affect their areas of operation.

Goals of All Managers

- First and foremost, the logical and publicly desirable aim of all managers in all kinds of organizations, whether business or non-business, should be a surplus. Thus, managers must establish an environment in which people can accomplish group goals with the least amount of time, money, materials, and personal dissatisfaction or in which they can achieve as much as possible of a desired goal with available resources. In a non-business enterprise such as units of a business (such as an accounting department) that are not responsible for total business profits, managers still have goals and should strive to accomplish them with the minimum of resources or to accomplish as much as possible with available resources. A manager who achieves such an aim is said to be a strategic manager.

- The second goal or aim of all managers is that they must be productive. Indeed, government, and the private sector recognize the urgent need for productivity improvement. Productivity improvement is about effectively performing the basic managerial and non-managerial activities. Simply defined, productivity is about the output-input ratio within a time period with due consideration for equality.

- Lastly, productivity implies effectiveness and efficiency in individual and organizational performance. Effectiveness is the achievement of objectives. Efficiency is the achievement of the ends with the least amount of resources. Managers cannot know whether they are productive unless they first know their goals and those of the organization.

The Essentiality of Management in Any Organization

Managers are charged with the responsibility of taking actions that will make it possible for individuals to make their best contributions to group objectives. Thus, management applies to small and large organizations, to profit and not-for-profit enterprises, to manufacturing as well as service industries. However, a given situation may differ considerably among various levels in an organization or various types of enterprises. The scope of authority held may vary and the types of problems dealt with may be considerably different. All managers obtain results by establishing

an environment for effective group endeavor.

In addition, all managers carry out managerial functions. However, the time spent for each function may differ. Thus, top-level managers spend more time on planning and organizing than do lower-level managers. Leading, on the other hand, takes a great deal of time for first-line supervisors. The difference in the amount of time spent on controlling varies only slightly for managers at various levels.

The manager is, therefore, the dynamic, life-giving element in every business. Without the leadership of the manager, resources of production remain mere resources and never become production. In a competitive economy, the quality and performance of the managers determine the success of a business; indeed, they determine its survival.

Furthermore, today, we no longer talk of “capital” and “labor”, but we talk of “management” and “labor”. While the “responsibilities of capital” and the “rights of capital” have disappeared from our vocabulary, today we hear of the “responsibilities of management” or “prerogatives of management”.

Thus, the emergence of management as an essential, a distinct and a leading institution is a pivotal event in social history. Management is likely to remain a basic and dominant institution as long as human civilization itself survives. Management, which is the organ of society specifically charged with making resources productive, that is, with the responsibility for organized economic advance, reflects the basic spirit of the modern age. In fact, because management is indispensable, this explains why it grew so fast and with so little opposition. Hence, the developed and developing worlds have an immense stake in the competence, skill and responsibility of management.

Managerial Skills and the Organizational Hierarchy

Mangers require four main kinds of skills, namely: technical, human, conceptual and design. What do each of these skills mean?

- Technical skill is knowledge of and proficiency in activities involving methods, processes, and procedures. Thus, it involves working with tools and specific techniques
- Human skill is the ability to work with people; it is cooperative effort; it is teamwork; it is the creation of an environment in which people feel secure and free to express their opinions.
- Conceptual skill is the ability to serve the “big picture”. It is also about recognizing significant elements in a situation, and to understand the relationships among the elements.
- Design skill is the ability to solve problems in ways that will benefit the enterprise.

To be effective, particularly at upper organizational levels, managers must be able to do more than see a problem. In addition, they must have the skill of a good design engineer in working out a practical solution to a problem. Managers must also have that valuable skill of being able to design a workable solution to the problem in the light of the realities they face. It has, however, got to be mentioned that the relative importance of these skills may differ at various levels in the organization hierarchy.

For purposes of elaboration, technical skills are of greatest importance at the supervisory level and less at the middle-management level, human skills in the frequent interactions with subordinates at all levels, conceptual skills not critical for lower-level supervisors but gain in importance at the middle-management level. At the top management level, conceptual and design abilities and human skills are especially valuable, but there is relatively little need for technical abilities. The assumption, especially in large companies, that chief executives can utilize the technical abilities of their subordinates. In smaller firms, however, technical experience may still be quite important.

Women in the Organizational Hierarchy

In recent times, women have made significant progress in obtaining responsible positions in organizations. Among the reasons for this development are laws governing fair employment practices, changing societal attitudes toward women in the workplace, and the desire of companies to project a favorable image by placing qualified women in managerial positions.

However, in some organizations, women have difficulties in making it to the top. Besides historical reasons, discrimination has been one of the main reasons why women do not make it to the top.

Why Study Management Theory?

Theories are perspectives with which people make sense of their world experiences (Stoner et. al. 1995, pp. 31-2). Theory is a systematic grouping of interdependent concepts (mental images of anything formed by generalization from particulars) and principles (are generalizations or hypotheses that are tested for accuracy and appear to be true to reflect or explain reality) that give a framework to, or tie together, a significant area of knowledge. Scattered data are not information unless the observer has knowledge of the theory that will explain relationships. Theory is “in its lowest form a classification, a set of pigeon holes, a filing cabinet in which fact can accumulate. Nothing is more lost than a loose fact”(Homans 1958, p. 5).

However, the variety of approaches to management analysis, the welter of research, and the number of differing views have resulted in much confusion as to what management is, what management theory and science is, and how managerial events should be analyzed. This is why some scholars have called this situation “the management theory jungle”(Koontz 1961, pp. 174-188; 1962, p. 24; 1980, pp. 175-187). Since that time, the vegetation in this jungle has changed somewhat, new approaches have developed, and older approaches have taken some new meanings with some new words attached to them, but the developments of management science and theory still have the characteristics of a jungle.

There is a body of opinion that says that management theory evolved during and after Second World War; it has only been studied in-depth since then. The industrial revolution that brought in mass production, specialization, seeing people as critical resource, all intensified management as a critical area of discourse.

Principles in management are fundamental truths, explaining relationships between two or more sets of variables, usually an independent variable and a dependent variable. Principles may be descriptive or predictive, and not prescriptive. That is, they describe how one variable relates to another – what will happen when these variables interact.

Managers who apply theory to managing must usually blend principles with realities. Once managers know about theory, they will have the capacity to forestall future problems that may occur in the enterprise.

At this point it is worth distinguishing management theory from management techniques. Contrary to the theory we have discussed above, techniques are essentially ways of doing things; methods of accomplishing a given result. In all fields of practice, including management, they are important. Techniques normally reflect theory and are a means of helping managers undertake activities most effectively.

In the field of management, then, the role of theory is to provide a means of classifying significant and pertinent management knowledge. For example, in the area of designing an effective organization structure, there are several principles that are interrelated and that have a predictive value for managers. The theory of management is grouped into the five functions of management.

In sum, there are basically three main reasons why we have to study management theory. First, theories provide a stable focus for understanding what we experience. A theory provides criteria for what is relevant. Second, theories enable us to communicate efficiently and thus move into more and more complex relationships with other people. Third, theories make it possible – indeed, challenge us – to keep learning about our world. By definition, theories have boundaries.

Management Theories

Contemporary theories of management tend to account for and help interpret the rapidly changing nature of today's organizational environments. This paper will deal with several important management theories which are broadly classified as follows:

- The Scientific Management School comprising the works of Frederick W. Taylor and Lillian Gilbreth's motion study, among others;
- the Classical Organizational Theory School comprising the works of Henri Fayol's views on administration, and
- Max Weber's idealized bureaucracy, among others;
- Behavioral School comprising the work of Elton Mayo and his associates; the Management Science School; and
- Recent Developments in Management Theory comprising works such as Systems Approach, Situational or Contingency theory, Chaos theory, and Team Building approach.

Scientific Management School

The first management theory is what is popularly referred to as Frederick Taylor's Scientific Management. Frederick Taylor started the era of modern management. In the late nineteenth and early twentieth centuries, he was decrying the "awkward, inefficient, or ill-directed movements of men" as national loss. Taylor consistently sought to overthrow management "by rule of thumb" and replace it with actual timed observations leading to "the one best" practice. He also advocated the systematic training of workers in "the one best practice" rather than allowing them personal discretion in their tasks. He further believed that the workload would be evenly shared between the workers and management with management performing the science and instruction and the workers performing the labor, each group doing "the work for which it was best suited".

Taylor's strongest positive legacy was the concept of breaking a complex task down into a number of subtasks, and optimizing the performance of the subtasks; hence, his stop-watch measured time trials. However, many critics, both historical and contemporary, have pointed out that Taylor's theories tend to "dehumanize" the workers.

Nevertheless, Taylor's postulations were strongly influenced by his social/historical period (1856-1917) during the Industrial Revolution; it was a period of autocratic management that saw Taylor

turning to “science”(hence, his principles of scientific management) as a solution to the inefficiencies and injustices of the period. It has to be stated that scientific management met with significant success among which included: the science of cutting metal, coal shovel design that he produced at Bethlehem Steel Works (reducing the workers needed to shovel from 500 to 140), worker incentive schemes, a piece rate system for shop management, and organizational influences in the development of the fields of industrial engineering, personnel, and quality control.

It has to be acknowledged that from an economic standpoint, Taylorism was an extreme success. Application of his methods yielded significant improvements in productivity. For example, improvements such as his shovel work at Bethlehem Works, which reduced the workers needed to shovel from 500 to 140. Henceforth, Taylor proposed four great underlying principles of management.

First, there is need to develop a ‘science of work’ to replace old rule-of-thumb methods: pay and other rewards linked to achievement of ‘optimum goals’ – measures of work performance and output; failure to achieve these would in contrast result in loss of earnings. Second, workers to be ‘scientifically’ selected and developed: training each to be ‘first-class’ at some specific task. Three, the ‘science of work’ to be brought together with scientifically selected and trained people to achieve the best results. Finally, work and responsibility to be divided equally between workers and management cooperating together in close interdependence.

Alongside Taylor’s postulates is Gilbreth’s motion study. The ultimate result of this study led to the centrality of efficiency in organizations. Gilbreth was particularly interested in how he could reduce the unnecessary motions resulting from bricklaying at a construction site; he succeeded in reducing the motions from 18 to 4. He then proposed that each worker should be involved in doing his or her own work, prepare for the next higher level, and training their successors.

Classical Organizational Theory School

In this category of management theory are the works of Max Weber’s bureaucratic theory and Henri Fayol’s administrative theory. Weber postulated that western civilization was shifting from “wertrational” (or value oriented) thinking, affective action (action derived from emotions), and traditional action (action derived from past precedent) to “zweckational” (or technocratic) thinking. He believed that civilization was changing to seek technically optimal results at the expense of emotional or humanistic content.

Weber then developed a set of principles for an “ideal” bureaucracy as follows: fixed and official jurisdictional areas, a firmly ordered hierarchy of super and subordination, management based on written records, thorough and expert training, official activity taking priority over other activities and that management of a given organization follows stable, knowable rules. The bureaucracy was envisioned as a large machine for attaining its goals in the most efficient manner possible.

However, Weber was cautious of bureaucracy when he observed that the more fully realized, the more bureaucracy “depersonalizes” itself – i.e., the more completely it succeeds in achieving the exclusion of love, hatred, and every purely personal, especially irrational and incalculable, feeling from execution of official tasks. Hence, Weber predicted a completely impersonal organization with little human level interaction between its members.

Henri Fayol’s administrative theory mainly focuses on the personal duties of management at a much more granular level. In other words, his work is more directed at the management layer. Fayol believed that management had five principle roles: to forecast and plan, to organize, to command, to co-ordinate, and to control. Forecasting and planning was the act of anticipating the future and acting accordingly. Organization was the development of the institution’s resources, both material and human. Commanding was keeping the institution’s actions and processes running. Co-ordination was the alignment and harmonization of the group’s efforts. Finally, control meant that the above activities were performed in accordance with appropriate rules and procedures.

Fayol developed fourteen principles of administration to go along with management’s five primary roles. These principles are: specialization/division of labor, authority with responsibility, discipline, unity of command, unity of direction, subordination of individual interest to the general interest, remuneration of staff, centralization, scalar chain/line of authority, order, equity, stability of tenure, initiative, and esprit de corps. Fayol clearly believed personal effort and team dynamics were part of an “ideal” organization.

Fayol’s five principle roles (Plan, Organize, Command, Co-ordinate, and Control) of management are still actively practiced today. The concept of giving appropriate authority with responsibility is also widely commented on and is well practiced. Unfortunately, his principles of “unity of command” and “unity of direction” are consistently violated in “matrix management”, the structure

of choice for many of today's companies.

Behavioral School

The key scholar under this category is Elton Mayo. The origin of behavioralism is the human relations movement that was a result of the Hawthorne Works Experiment carried out at the Western Electric Company, in the United States of America that started in the early 1920s (1927-32). Elton Mayo and his associates' experiments disproved Taylor's beliefs that science dictated that the highest productivity was found in 'the one best way' and that way could be obtained by controlled experiment. The Hawthorne studies attempted to determine the effects of lighting on worker productivity. When these experiments showed no clear correlation between light level and productivity the experiments then started looking at other factors. These factors that were considered when Mayo was working with a group of women included rest breaks, no rest breaks, no free meals, more hours in the work-day/work-week or fewer hours in the work-day/work-week. With each of these changes, productivity went up. When the women were put back to their original hours and conditions, they set a productivity record.

These experiments proved five things. First, work satisfaction and hence performance is basically not economic – depends more on working conditions and attitudes - communications, positive management response and encouragement, working environment. Second, it rejected Taylorism and its emphasis on employee self-interest and the claimed over-riding incentive of monetary rewards. Third, large-scale experiments involving over 20,000 employees showed highly positive responses to, for example, improvements in working environments (e.g., improved lighting, new welfare/rest facilities), and expressions of thanks and encouragement as opposed to coercion from managers and supervisors. Fourth, the influence of the peer group is very high – hence, the importance of informal groups within the workplace. Finally, it denounced 'rabble hypotheses' that society is a horde of unorganized individuals (acting) in a manner calculated to secure his or her self-preservation or self-interest.

These results showed that the group dynamics and social makeup of an organization were an extremely important force either for or against higher productivity. This outcome caused the call for greater participation for the workers, greater trust and openness in the working environment, and a greater attention to teams and groups in the work place. Finally, while Taylor's impacts were the establishment of the industrial engineering, quality control and personnel departments,

the human relations movement's greatest impact came in what the organization's leadership and personnel department were doing. The seemingly new concepts of "group dynamics", "teamwork", and organizational "social systems", all stem from Mayo's work in the mid-1920s.

Recent Developments in Management Theory

Under this category of theory are the Systems Approach, Situational or Contingency theory, Chaos theory, and Team Building theory.

The systems theory has had a significant effect on management science and understanding organizations. A system is a collection of part unified to accomplish an overall goal. If one part of the system is removed, the nature of the system is changed as well. A system can be looked at as having inputs (e.g., resources such as raw materials, money, technologies, people), processes (e.g., planning, organizing, motivating, and controlling), outputs (products or services) and outcomes (e.g., enhanced quality of life or productivity for customers/clients, productivity). Systems share feedback among each of these four aspects of the system.

The Systems Theory may seem quite basic. Yet, decades of management training and practices in the workplace have not followed this theory. Only recently, with tremendous changes facing organizations and how they operate, have educators and managers come to face this new way of looking at things. The effect of systems theory in management is that it helps managers to look at the organization more broadly. It has also enabled managers to interpret patterns and events in the workplace – i.e., by enabling managers to recognize the various parts of the organization, and, in particular, the interrelations of the parts.

The situational or contingency theory asserts that when managers make a decision, they must take into account all aspects of the current situation and act on those aspects that are key to the situation at hand. Basically, it is the approach that "it depends". For example, if one is leading troops in Iraq, an autocratic style is probably best. If one is leading a hospital or University, a more participative and facilitative leadership style is probably best.

The Chaos theory is advocated by Tom Peters (1942). As chaotic and random as global events seem today, they are equally chaotic in organizations. Yet for many decades, managers have acted on the basis that organizational events can always be controlled. Thus, a new theory, known

as chaos theory, has emerged to recognize that events are rarely controlled. Chaos theorists suggest that systems naturally go to more complexity, and as they do so, they become more volatile and must, therefore, expend more energy to maintain that complexity. As they expend more energy, they seek more structure to maintain stability. This trend continues until the system splits, combines with another complex system or falls apart entirely. It will need an effective manager for the latter worst scenario not to happen.

The last management theory is the **Team Building approach or theory.** This theory emphasizes quality circles, best practices, and continuous improvement. It is a theory that mainly hinges on reliance on teamwork. It also emphasizes flattening of management pyramid, and reducing the levels of hierarchy. Finally, it is all about consensus management – i.e., involving more people at all levels in decision-making.

Other Management Theories

In this category are the works of Edward W. Deming and Douglas McGregor. Edward Deming is the founder of modern quality management and is regarded by the Japanese as the key influence in their postwar economic miracle. He postulated several assumptions: create constancy of purpose for continual improvement of products and service; adopt the new philosophy created in Japan; cease dependence on mass inspection; build quality along with price; improve constantly and forever every process planning, production, and service; institute modern methods of training on-the-job for including management; adopt and institute leadership aimed at helping people to do a better job; drive out fear, encourage effective two-way communication; breakdown barriers between departments and staff areas; eliminate exhortations for the workforce – they only create adversarial relationships; eliminate quotas and numerical targets; remove barriers to pride of workmanship, including annual appraisals and Management by Objectives; encourage education and self-improvement for everyone; and define top management's permanent commitment to ever-improving quality and productivity and their obligation to implement all these principles.

Douglas McGregor (1906-1964) postulated management ideas as contained in "Theory X" and "Theory Y". Using human behavior research, he noted that the way an organization runs depends on the beliefs of its managers.

“Theory X” gives a negative view of human behavior and management that he considered to have dominated management theory from Fayol onwards – especially Taylorism. It also assumes that most people are basically immature, need direction and control, and are incapable of taking responsibility. They are viewed as lazy, dislike work and need a mixture of financial inducements and threat of loss of their job to make them work (‘carrot and stick’ mentality).

“Theory Y”, the opposite of “Theory X”, argues that people want to fulfill themselves by seeking self-respect, self-development, and self-fulfillment at work as in life in general. The six basic assumptions for ‘Theory Y’ are: work is as natural as play or rest – the average human being does not inherently dislike work, whether work is a source of pleasure or a punishment (to be avoided) depends on nature of the work and its management. Second, effort at work need not depend on threat of punishment – if committed to objectives then self-direction and self-control rather than external controls. Third, commitment to objectives is a function of the rewards associated with their achievement. Satisfaction of ego and self-actualization needs can be directed towards the objectives of the organization. Fourth, the average human being learns, under proper conditions, not only to accept but to seek responsibility. Fifth, high degrees of imagination, ingenuity and creativity are not restricted to a narrow group but are widely distributed in the population. Lastly, under the conditions of modern industrial life, the intellectual potentials of the average human being are being only partly utilized.

Management as Practice

Managing, like all other practices – whether medicine, music composition, engineering, accountancy, or even baseball – is an art; it is know-how. It is doing things in the light of the realities of a situation.

Yet managers can work better by using the organized knowledge about management. It is this knowledge that constitutes science. However, the science underlying managing is fairly crude and inexact. This is true because the many variables with which managers deal are extremely complex. Nevertheless, such management knowledge can certainly improve managerial practice. Managers who attempt to manage without management science must put their trust to luck, intuition, or what they did in the past.

In managing, as in any other field, unless practitioners are to learn by trial and error, there is no place they can turn for meaningful guidance other than the accumulated knowledge underlying their practice; this accumulated knowledge is theory.

For practical purposes, all managers must develop three sets of skills, namely; conceptual, technical, and human (see Fleet and Perterson 1994, p. 25). Conceptual skills allow the manager to develop relationships between factors that other people may not see. Managers who have well-developed conceptual skills are able to apply different management theories to the same situation. For a manager to be technical, it implies that he or she should act professionally. Professionalism demands that the manager performs his or her duties within established procedures, rules and regulations. Any behavior that compromises the manager's professional etiquette is certainly bound to interfere adversely with the organization's productivity. Lastly, a manager should be able to see members of the organization as human beings who have needs and psychological feelings and emotions. These needs and feelings must be positively harnessed for the good of the organization; motivation of the employees, therefore, becomes a critical factor in increasing productivity.

Conclusion

In conclusion, it has to be restated that management is the process of designing and maintaining an environment for the purpose of efficiently accomplishing selected aims. Managers carry out the functions of planning, organizing, staffing, leading, and controlling. Managing is an essential activity at all organizational levels.

However, the managerial skills required vary with organizational levels. Although women have made progress in obtaining responsible positions, they still have a long way to go. The goal of all managers is to create a surplus and to be productive by achieving a favorable output-input ration within a specific time period with due consideration for quality. Productivity implies effectiveness (achieving of objectives) and efficiency (using the least amount of resources).

Managing as practice is art; organized knowledge about management is science. The development of management theory involves the development of concepts, principles, and techniques. There are many theories about management, and each contributes something to our knowledge of what managers do. Each approach or theory has its own characteristics and advantages as well as limitations. The operational, or management process, approach draws on each “school” and systematically integrates them.

Finally, the organization is an open system that operates within and interacts with the environment. The systems approach to management includes inputs from the external environment and from claimants, the transformation process, the communication system, external factors, outputs, and a way to reenergize the system. No doubt, a manager who makes serious attempts to translate theory into reality is bound to increase productivity more than a manager who chooses to use the ‘fire brigade’ or trial and error approach.

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Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part 6
HEALTH SECTOR LANDSCAPE IN PAKISTAN PROJECTS & PROGRAMS

(Weightage 10%)

Country Profile

This Chapter provides a background and overview of the economic landscape of Pakistan as the country hosting the Project. Starting with the macro view of the country and city of location, its economic and investment parameters are all briefly analyzed in this section. Pakistan is the 36th largest country in the world by area and, with over 195 million inhabitants, is the 6th most populous nation in the world. Pakistan's population grew about 1.9% in FY 2016, which is a growth rate higher than that of many other South Asian countries, and is expected to swell to 344 million by 2050. The country's population density is around 245 per square km, with an urban population accounting for about 40% of the total. The majority of Pakistan's population lives in Punjab and Sindh.
Key economic indicators point towards an improved economic situation in Pakistan over the past few years, buoyed by low oil prices, low interest rates, and rising foreign exchange reserves (see table below).

Table 2.1: Key Economic Indicators FY 2012 – FY 2016

	FY2012	FY2013	FY2014	FY2015	FY2016
Real GDP Growth	4.40%	3.70%	4.03%	4.04%	4.71%
Population (in Millions)	180.7	184.4	188	191.7	195.4
Per Capita Income (USD)	1,323	1,368	1,386	1,512	1,560
Aggregate GDP (USD Billion)	212.4	230.2	257.4	269	283.7
Foreign Exchange Reserves (USD Billion)	15.3	11	14.1	18.7	23.1
Federal Tax Collection (USD Billion)	19.9	19.6	22.8	28.6	32.6
Budget Surplus/(Deficit) (USD Billion)	-18.6	-18.4	-14.9	-13.4	-13.05
Inflation (CPI)	11.50%	7.50%	8.50%	4.80%	2.86%

Source: Pakistan Bureau of Statistics, Economic Survey of Pakistan, State Bank of Pakistan

Location and Geography of Pakistan

Pakistan is located in Southern Asia and borders China, Afghanistan, Iran and India. Rural and urban population account for 60% and 40% of the total population respectively, with a high urbanization rate. The country's 796,095 square kilometers - approximately the size of U.K and France combined and ranked 36th in the world by area2 - stretch from the Hindukush in the north to the Arabian Sea in the south, and from Taftan (Chaghai District) in the west to the city of Lahore in the east. Pakistan's geo-strategic position puts it at the cross-roads to Central and Southern Asia. It serves as the only port of call for the landlocked Afghanistan. Pakistan is linked with China and India through a historic road network, and a rail network with India also exists. The country has a number of domestic and international airport terminals providing passenger and cargo services.

Population of Pakistan

Pakistan is presently the sixth most populous nation in the world, with approximately 195.4 million people, growing at an average rate of 1.89% (which is higher than the average

growth rate witnessed in other South Asian countries)3. According to World Population Data Sheet 2015, Pakistan's population is expected to swell to 344 million by 2050. Population density is approximately 245 per square kilometer, and the majority of Pakistan's population lives in Punjab followed by Sindh.

About 60% of the population is rural and geographically scattered across the country. However, it is the urban population estimated at around 77.9 million, having grown at the rate of 3.64% in FY2016, which is gaining significance and also becoming more educated and economically affluent. During the past few decades, the towns and cities of Pakistan have been expanding their seams and, in some cases, have merged into other adjacent ones. Urban expansion which is a result of natural population growth as well as rural-to-urban migration is adding about 2.73 million more people every year to cities. Urban population is less dispersed than the rural population, with the ten largest cities in Pakistan accounting for nearly half of Pakistan's total urban population (see below).

Table 2.2: Population of Major Urban Centers of Pakistan

City	Population	Average Growth Per Annum
1. Karachi	13,902	3.45%
2. Lahore	7,626	3.32%
3. Faisalabad	2,947	3.58%
4. Rawalpindi	2,129	3.43%
5. Gujranwala	1,841	3.72%
6. Multan	1,583	2.94%
7. Hyderabad	1,683	2.62%
8. Peshawar	1,468	3.29%
9. Islamabad	990	5.76%
10. Quetta	874	4.09%
Total	**35,043**	**3.62%**

Source: Estimates based on statistics published in the latest available Statistical Pocket Book of the Punjab 2014 and annualized with growth rate for 2016 * Growth based on last population census carried out in 1998

Economy of Pakistan

Economic Overview

The Pakistan economy underwent a growth trajectory during FY2002-07, during which real GDP growth averaged at 6% per annum. Pakistan transformed into a stable economy through good macroeconomic policies along with structural reforms. However, subsequent energy, security and geo-political issues – intensified by the worldwide recession caused by the subprime mortgage crisis – adversely affected the economy. Pakistan's economy suffered and registered real GDP growth rates below its growth trajectory of 6% per annum. Average real GDP growth rate fell to 3.2% per annum for the period FY2008 to FY2012. In addition to external shocks, the economy had to weather a number of challenges, including the crippling energy crisis owing to circular debt accumulation, and internal security implications (for instance, an increasing number of internally displaced persons) in the wake of the country's proactive role in the global war against terrorism. The country also had to face an inadequate water supply situation that adversely impacted the agriculture sector's performance.

Since the 2013 general election, however, overall economic indicators point towards a more optimistic picture for future growth, buoyed by low oil prices, rising foreign exchange reserves, low interest rates, and low inflation. In particular, the USD 46 billion China-Pakistan Economic Corridor (CPEC) projects would enable completion of a number of major infrastructure projects, besides potentially mitigating the impact of the detrimental energy crisis. On the security front, the successful military operation 'Zarb-e-Azb', along with the Rangers operation in Karachi, has also contributed to an improved law and order situation.

In FY2016, real GDP grew by 4.71% (against a target of 5.50%), whereas key macroeconomic indicators including inflation, fiscal balance, and current account balance recorded a year-on-year improvement. Additionally, the outgoing fiscal year FY2016 has

seen more expansion in credit to private sector due to expansionary monetary policy stance by SBP. The SBP has gradually cut its policy rate to 5.75% in May, 2016 which is the lowest in 44 years.
Key economic indicators for the last five years are presented in Table 2.3 below.

Table 2.3: Key Economic Indicators

Key Economic Indicators	FY2012	FY2013	FY2014	FY2015	FY2016
Macroeconomics					
Real GDP Growth	4.40%	3.70%	4.03%	4.04%	4.71%
Agriculture Growth	3.45%	3.30%	2.70%	2.90%	-0.19%
Manufacturing Growth	2.13%	3.50%	4.50%	3.60%	5.00%
Agriculture as % of GDP	21.48%	21.40%	21.00%	20.90%	19.82%
Manufacturing as % of GDP	13.16%	13.20%	13.50%	13.30%	13.60%
Population (in Millions)	180.7	184.4	188	191.7	195.4
Per Capita Income (USD)	1,323	1,368	1,386	1,512	1,560
Aggregate GDP (USD Billion)*	212.4	230.2	257.4	269	283.7
Foreign Exchange Reserves (USD Billion)	15.3	11	14.1	18.7	23.1
Federal Tax Collection (USD Billion)*	19.9	19.6	22.8	28.6	32.6
Budget Surplus/(Deficit) (USD Billion)*	-18.6	-18.4	-14.9	-13.4	-13.05
Inflation (CPI)	11.50%	7.50%	8.50%	4.80%	2.86%
Exchange Rate (USD:PKR)	94.58	99.51	98.68	101.79	104.71

Sources: Economic Survey of Pakistan, State Bank of Pakistan, Pakistan Bureau of Statistics *Converted at the respective fiscal year-end exchange rates (Source: exchange-rates.org).

Credit Ratings

Pakistan's government debt credit ratings and ratings outlook, as reported by major credit rating agencies, are as follows:

Table 2.4: Government Debt Credit Ratings - Pakistan

Agency	Rating	Outlook	Date Assigned
Fitch	B	Stable	Sep 15, 2015
Moody's	B3	Stable	Jun 11, 2015
S&P	B-	Positive	May 05, 2015

Foreign Direct Investment

Foreign Direct Investment (FDI) plays a pivotal role in the development of any country and the Government of Pakistan has actively sought to encourage FDI in the country. From FY2002 to FY2008, FDI grew at an impressive 50% CAGR, backed by robust economic growth rates, low cost of borrowing, high returns on investment, and investor friendly policies. Foreign interest was notably witnessed in the Oil & Gas, Telecommunication, and Financial sectors. Telenor, Warid, China Mobile, Hong Kong Shanghai Banking Corporation, Barclays, Royal Bank of Scotland, and a host of other multinational corporations commenced operations in the country during this phase.
FDI was recorded at USD 1,281.1 million during FY 2016, higher almost 39% YoY. The power, oil & Gas Exploration, Telecom, and Tobacco & Cigarettes sectors were major FDI recipients; while Financial Business, Petro Chemicals, and Tobacco & Cigarettes witnessed

net outflows. China, United States of America, the United Kingdom and the United Arab Emirates were major FDI contributors during this period.

HEALTHCARE SECTOR OF PAKISTAN

An overview of the key parameters of the healthcare sector of Pakistan is provided in this Chapter to lay the base and understanding for establishing PHFMC and its importance for Punjab. The market landscape comprising the public and private healthcare sectors are analysed here.

Introduction

Healthcare sector plays a vital role in the socio-economic wellbeing of the society as it ensures a healthy and productive population. Government spending on healthcare is necessary to ensure equitable distribution so as to afford the lower income strata access to reasonable healthcare which would otherwise not be possible. Healthcare system in Pakistan is still in a nascent stage of development and there is a need to strengthen the policies and procedures to improve governance and service delivery. After the promulgation of the 18th Amendment in April 2010, a constitutional amendment that sought to scale back the role of the Federal Government, 'Health' has become a provincial subject. Most responsibilities for provision and regulation of health sector fall under the purview of health departments of respective provinces.

Pakistan is prone country to natural and man-made disasters requiring a robust healthcare system sponsored by public, private and humanitarian funding. Pakistan has recently suffered periodic major disasters starting from the massive earthquake of 2005 that left over 83,000 dead with severe infrastructure damage, the unprecedented floods in 2010 affecting close to 20 million people, and the 2013 floods in Sindh and Punjab affecting over 8 million people. Stagnant water in low lying areas increases the risk of cholera, jaundice, malaria and dengue.

Furthermore, militancy in the northern belt leading to armed conflict and internal population displacements; has been a cause of both communicable and non-communicable diseases, and also created security-compromised areas making access to healthcare problematic. The regular target killing of polio workers delivering vaccinations in various regions of Pakistan has also led to difficulties of solving the polio crisis in the country, at a time where globally the virus has been eradicated in most developed and developing countries alike. Pakistan also has the second highest number of people infected with the hepatitis C virus in the world, leading to a rapid increase in liver diseases. In an environment like Pakistan; there is a dire need for an organized, well- developed and well-resourced health sector in Pakistan and the public and private sectors both need to play their respective parts.

Human Development Indicators

Pakistan's technical partners on health issues, such as World Health Organization ("WHO") and United Nations ("UN"), place the country among the less developed countries in terms of human development indicators. According to the 2015 Human Development Report recently published by United Nations Development Program ("UNDP"), Pakistan remained among the group of countries with low human development. It was ranked at 147 on the Human Development Index ("HDI") out of a total 188 countries, showing little improvement from previous year while Bangladesh and India both showed some signs of improvement and ranked at 142 and 130 respectively7. Other countries in the region include Nepal ranked at 145 and Afghanistan at 171. Some key human development indicators for Pakistan are provided in the table below:

Table 3.1: Human and Health Development Indicators of Pakistan

Indicator	Prevalence	Year
Infant mortality rate	66 (per 1,000 births)	2015

Fertility rate	3.1 (per woman)	2016
Average life expectancy at birth (Both sex)	65 years	2015
Life expectancy at 60	17 years	2014
Population under 15	33.80%	2013
Population over 60	6.50%	2013
Adult (15+) Literacy Rate	54.90%	2009
Under-5 mortality rate	81 (per 1,000 live births)	2015
Maternal mortality ratio	178 (per 100,000 live births)	2015
Tuberculosis mortality rate,	34%	2014
Antenatal care (4+ visits)	28%	2012
Measles immunization (1 year olds)	83%	2013
Population without access to clean water	9%	2014
Vaccination Rates (% of DPT3 coverage)	72%	2013
Undernourished (%) 2011	20%	2011
Adult 15-49 HIV Prevalence %	10%	2012
Deaths due to HIV/AIDS	2 (per 100,000 population)	2012
Tuberculosis Prevalence	376 (per 100,000 population)	2012
Tuberculosis mortality rate	34%	2014
DOTS Coverage %	100%	2006
Malaria Cases Per 1,000	1.9 (per 1,000 population)	2012
Population without access to sanitation	52%	2014
Deaths due to HIV/AIDS	2 (per 100,000 population)	2012
Density of physicians 2010	0.827 (per 1,000 population)	2010
Density of nurses and midwives	0.573 (per 1,000 population)	2010
Density of Psychiatrists	0.31 (per 100,000 population)	2008
Raised blood glucose (aged 25 +)	12% male 14% female	2008
Raised blood pressure (aged 25+)	29% male, 28% female	2008
Tobacco use (aged 15+)	36% male, 7% female	2014

Sources: World Health Organization 2017, Economic Survey of Pakistan 2015-16, Ministry of Planning and Development 2013-16

Pakistan lags behind regional countries in certain key human development indicators according to the latest available data collected by the World Health Organization in 2012. Life expectancy at birth in Pakistan is 65.7 years compared to 65.8 years in India, 69.2 years in Bangladesh, 75.1 years in Sri Lanka and 73.7 years in China (see table 3.2 below). Similarly, population growth rate of Pakistan at 2.03% was much higher than that of regional countries. Slow progress in improving the indicators related to maternal health, child health, and morbidity and mortality caused by communicable diseases are the key reasons behind Pakistan's failure to achieve its Millennium Development Goals.

Table 3.2.: Regional Comparison of Human Development Indicators

Country	Life Expectancy (2012) Years	Infant Mortality Rate per 1000 Births (2012)	Under five morality per 1000 births (2012)	Maternal Mortality Per 100000 Births (2010)	Population Growth Rate % (2012)
Pakistan	65.7	69	86	260	2.03%
Bangladesh	69.2	33	41	240	1.58%
Sri Lanka	75.1	8	10	35	0.91%
India	65.8	44	56	200	1.31%
Nepal	69.1	34	42	170	1.77%
China	73.7	12	14	37	0.48%
Indonesia	69.8	26	31	220	1.03%

Sources: Pakistan Economic Survey & World Health Organization 2017

Pakistan Health System

A country's healthcare sector plays a vital role in the socio-economic wellbeing of its society as it ensures a healthy and productive population. Government spending on healthcare is necessary to ensure that the lower income strata also have access to healthcare services which would otherwise not be possible. The healthcare system in Pakistan is still in a nascent stage of development and there is a need to strengthen the policies and procedures to improve governance and service delivery. After the promulgation of the 18th Amendment in April 2010, a constitutional amendment that sought to scale back the role of the Federal Government, Health has become a provincial subject and most of the related responsibilities fall under the purview of the health departments of respective provinces.
According to the UN, Pakistan was ranked at 147 out of a total 188 countries on the Human Development Index in 2015, showing little sign of improvement from previous year; in contrast to regional countries such as Bangladesh and India both of which showed signs of improvement.
Pakistan has a multi-tiered and mixed healthcare delivery system. There are several programs, projects, interventions and facilities currently in process, many of which are fragmented and on a time bound basis. These are supported by different levels of government and/or development partners with overlapping geographical and thematic areas, which sometimes leads to duplication and wastage of resources. The system at the federal level has become quite fragmented, and after the promulgation of the 18th Amendment in April 2010, Healthcare has become a provincial subject. The healthcare delivery system includes both public & private and profit & not-for-profit service provision. The ratio of service volume between the public and private sector is estimated at about 20% and 80% respectively. In terms of financing, nearly 60% of healthcare is financed by private sources through out-of-pocket expenditure while 28% by the govt.
The public medical and healthcare services comprise primary, secondary and tertiary level health facilities. The two tiers of primary and secondary healthcare outlets are managed at the district level while the tertiary level healthcare includes large hospitals, intensive care units and advanced diagnostic services etc. Details of public healthcare infrastructure are listed in the table below.

Table 3.4: Public Healthcare Infrastructure

Year	Hospitals	Dispensaries	BHUs	MCHCs	RHCs	TB Centres	Total Beds	Pop. Per bed
2011	980	5,039	5,449	851	579	345	107,537	1,647
2012	1,092	5,176	5,478	628	640	326	111,802	1,617
2013	1,113	5,413	5,571	687	667	329	118,378	1,557
2014	1,143	5,548	5,438	670	669	334	118,170	1,591
2015 **	1,167	5,695	5,464	733	675	339	118,869	1,613

Sources: Ministry of Health, Planning Commission of Pakistan, Pakistan Bureau of Statistics
BHU's – Basic Health Units, RHC's – Rural Health Centres
*** Hospitals include Tehsil Headquarters Hospitals, District Headquarters Hospitals and General Hospitals**
**** Provisional Data**

Moreover, medical practitioners registered with the Pakistan Medical and Dental Council ("PMDC") includes 184,711 doctors and 16,652 dentists, equating to a doctor to person ratio of 1 to 1,057, slightly lower than the WHO's recommendation of 1 to 1000. There are 94,766

registered nurses in Pakistan, indicating a nurse to doctor ratio of almost one to two – the opposite of global industry practices.

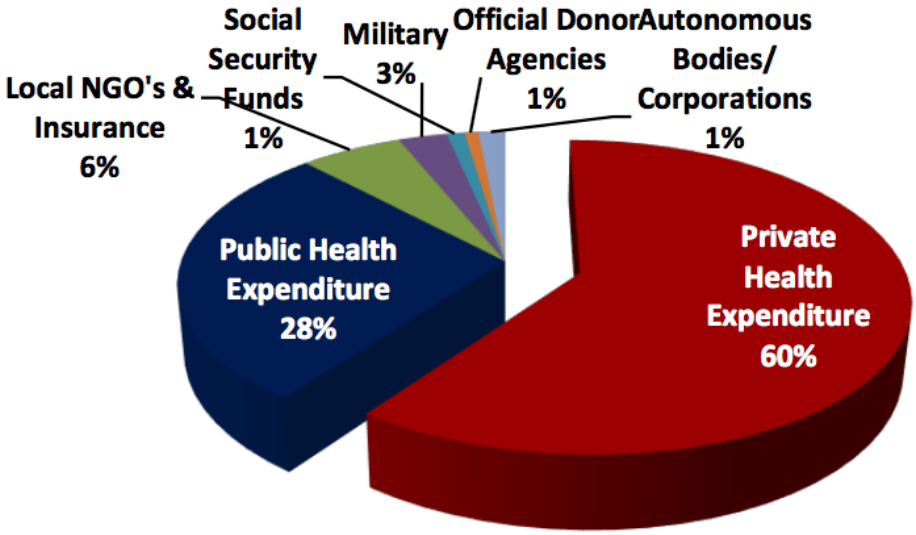
Therefore, public sector healthcare remains a neglected domain in Pakistan. Aggregate government spending, although having risen at a CAGR of 19.53% between FY2006 – FY2015, represented only 0.73% of GDP in FY 2015. Current level of government spending on healthcare is still inadequate to cater to the needs of Pakistan's growing population – especially in the wake of the country's peculiar health profile which is characterized by a dual burden of communicable and non-communicable diseases, high fertility, low life expectancy, a young age structure, high maternal and child mortality, high incidence of communicable diseases and wide prevalence of malnutrition among children and women.

The private healthcare sector in Pakistan operates in parallel to the public sector, providing basic and tertiary healthcare facilities to the public at large. Despite the size and breath of the sector, it is largely undocumented and unregulated. Nevertheless, private sector hospitals are relatively more organized and consumer-oriented than public sector hospitals.

As per estimates, only about 20% of the population is reported to use the public healthcare system and average visit is less than 1 per capita per annum. Non-standardized services, poor quality of care and inconvenient location results in underutilization of public healthcare facilities. Hence, this poor performance of public sector facilities, coupled with rapid urbanization, increased awareness of healthcare and growing middleclass have given rise to high demand for the private healthcare system – especially in the more developed urban centres in Pakistan. Up to 80% of the population relies on the private sector for their healthcare needs. Private sector primarily follows fee-for- service model and are financed by out-of-pocket expenses. Total private sector expenditure on healthcare is estimated at 60% of total spending on healthcare.
The number of total private health centres in Pakistan is not publicly available; however, broad estimates suggest 95% of private health centres can be categorized as SME's and vary widely in their size, offerings and quality of service.

Pakistan has a multi-tiered and mixed healthcare delivery system. It has grown exponentially during the past three decades, and there are several programs, projects, interventions and facilities currently in process; many of which are fragmented and on a time bound basis. These are supported by different levels of government and/or development partners with overlapping geographical and thematic areas, which sometimes leads to duplication and wastage of resources. Following the dissolution of the Ministry of Health and devolution of its responsibilities to provincial Departments of Health after the 18th Amendment, the system at the federal level has become quite fragmented. The sector is also marked by urban-rural disparity with imbalance in manpower and infrastructure.

Fig 3.1: Funding Sources for Healthcare



Source: Pakistan Bureau of Statistics 2013 - 2014

The healthcare delivery system includes both public and private; and profit and not-for-profit service provision. The provincial and district health departments, para-state organizations, social security institutions, non-governmental organizations (NGOs) and private sector finance and provide services mostly through vertically managed disease-specific mechanisms. The ratio of service volume between the public and private sector is estimated at about 20% of healthcare services being provided by the public sector and nearly 80% by the private sector12. In terms of financing, nearly 60% of healthcare is financed by private sources through out-of-pocket expenditure while 28% is funded by the government through public health expenditure13. Funding sources for healthcare in Pakistan are provided in Fig 3.1 above.

Public Healthcare Sector

The public medical and health services comprise primary, secondary and tertiary level health facilities. The two tiers of primary and secondary healthcare outlets are managed at district level while at tertiary level healthcare includes large hospitals, intensive care units and advanced diagnostic services etc. Consequently, the public healthcare infrastructure comprises of Basic Health Centers ("BHC"), Rural Health Centers ("RHC"), Tehsil Headquarters Hospital ("THQ") and District Headquarters Hospital ("DHQ"). BHC's are the primary healthcare centers formed at the union council level and they provide essential care to population of up to 10,000 people. Their services include basic medical and surgical care, and preventive care to control the spread of diseases like malaria and hepatitis.

[12] Source: Pakistan Institute of Development Economics (2010) *Healthcare Spending and Government Spending in Pakistan*, Islamabad [13] Source: Pakistan Bureau of Statistics 2013-14

Together with BHC, RHC are also part of the primary health delivery system. They also have 10 to 20 inpatient beds and serve a population of up to 100,000 people. RHCs also provide medico-legal, dental and ambulance services. Their role is primarily curative however they are inadequately staffed and equipped and do not offer comprehensive treatment for community ailment needs. As of yearend 2015 there were 5,464 BHUs and 675 RHCs in Pakistan (see Table 3.3). RHCs and BHU also provide clinical logistical and managerial support to Lady Health Workers ("LHW") and community midwives ("CMW"). Responsibilities of LHW include identifying pregnant women, providing them maternity advice and multivitamin supplements, and referring them to a suitable RHC or BHC. In 2015, there were about 16,448 registered LHW and over 34,688 registered CW providing services to people in rural and remote areas of the country.

THQ and DHQ are part of secondary healthcare delivery system and provide services at sub-district and district level respectively. They offer advanced treatment to patients; usually through referral services from primary healthcare centers. THQ serve a population of 0.5 million to 1 million people and their facilities include 40-60 beds, medical, clinical and diagnostic facilities. THQ have a specialist staff of three doctors including an obstetrician, gynecologist, a pediatrician and a general surgeon. DHQ serve a population of 1 million to 3 million and have up to 150 beds. Their staff customarily comprises eight specialists including an obstetrician and an anesthetist. In most cases these facilities also house a 24-hour Emergency Center. There are a total of 1,167 hospitals in Pakistan, including THQs, DHQs and larger general hospitals[14] (see table below).

Table 3.5: Public Healthcare Infrastructure

Year	Hospitals	Dispensaries	BHUs	MCHCs	RHCs	TB Centres	Total Beds	Pop. Per bed
2011	980	5,039	5,449	851	579	345	107,537	1,647
2012	1,092	5,176	5,478	628	640	326	111,802	1,617
2013	1,113	5,413	5,571	687	667	329	118,378	1,557
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2015 **	1,167	5,695	5,464	733	675	339	118,869	1,613

Sources: Ministry of Health, Planning Commission of Pakistan, Pakistan Bureau of Statistics BHU's – Basic Health Units, RHU's – Rural Health Units * Hospitals include Tehsil Headquarters Hospitals, District Headquarters Hospitals and General Hospitals ** Provisional Data

There are 32 full scale public sector general hospitals in the country according to The Pakistan Medical and Dental Council that also provide sub-specialty treatments such as cardiology, urology or cancer treatment. Such general hospitals are concentrated in provincial capitals or other large cities of the country. They also house teaching facilities for undergraduate and graduate medical studies (See table 3.5 below). The public sector also has wide-service specialty hospitals that focus on specific fields, diseases, treatments or demographics e.g. Lady Aitchison Hospital which provides tertiary care, curative and preventive services to Gynecology and Obstetrical cases or Punjab Institute of Cardiology which is a tertiary care hospital providing comprehensive cardiac care services.

[14] Source: Pakistan Economic Survey 2015- 2016

Table 3.6: Key General Hospitals in the Public Sector

Hospital	Hospital
Punjab	**Sindh**
1. Jinnah Hospital, Lahore	1. Chandka Medical College Hospital,
2. Sir Ganga Ram Hospital, Lahore	2. Civil Hospital, Karachi
3. Mayo Hospital, Lahore	3. Jinnah Postgraduate Medical Centre,
4. Services Hospital, Lahore	4. Abbasi Shaheed Hospital, Karachi
5. Shaikh Zayed Hospital, Lahore	5. Liaquat University Hospital, Jamshoro
6. Lahore General Hospital, Lahore	6. Peoples Medical College Hospital
7. Holy Family Hospital, Rawalpindi	7. Sindh Government Lyari General Hospital
8. Military Hospital, Rawalpindi	8. GMMC Teaching Hospital, Sukkur
9. Shaikh Zayed Hospital, R. Y. Khan	**Khyber Pakhtunkhawa**
10. Allied Hospital, Faisalabad	1. Ayub Teaching Hospital, Abbottabad
11. Nishtar Hospital, Multan	2. Khyber Teaching Hospital, Peshawar
12. Bahawal Victoria Hospital, Bahawalpur	3. Saidu Teaching Hospital, Swat

13. Allama Iqbal Memorial Hospital, Sialkot	4. Government Hayatabad Medical Complex,
14. Gujranwala Civil Hospital, Gujranwala	5. Mardan Medical Complex, Mardan
15. Government General Hospital, Faisalabad	6. Khalifa Gul Nawaz Teaching Hospital,
Islamabad Capital Territory	**Baluchistan**
1. Pakistan Institute of Medical Sciences,	1. BMC Hospital, Quetta
Azad Jammu & Kashmir	
1. Shaikh Khalifa Bin Zayed Hospital,	

Source: Pakistan Medical & Dental Council[15]

Moreover, medical practitioners registered with the Pakistan Medical and Dental Council ("PMDC"), the regulatory body for healthcare professionals, includes 184,711 doctors and 16,652 dentists. This equates to one doctor for 1,057 people, which is slightly lower than the WHO's recommendation of one doctor for 1,000 people. There are 94,766 registered nurses in Pakistan, which indicates a nurse to doctor ratio of almost one to two – a reverse situation than the recommended industry practice as registered nurses are much fewer than the doctors (see Table 3.6 below). Total number of hospital beds available at public healthcare facilities is 118,869, or about one bed for 1,643 people. However, lack of medical staff, non-standardized and poor quality of services and inconvenient location for great majority of the population results in underutilization of public healthcare facilities.

Only about 20% of the population is estimated to use public healthcare facilities with studies suggesting people on average visiting public healthcare units less than once every year for treatment[16]. In recent years; however, in provinces such as Punjab, per capita OPD visits to public sector healthcare facilities has been increasing and was recorded at 1.2 in 2015[17].

[15] Source: Pakistan Medical and Dental Council (2014) List of hospitals, http://www.pmdc.org.pk/AboutUs/ListofHospitals/tabid/111/Default.aspx [16] Source: The Pakistan Development Review (2009), *Demand for Public Health Care in Pakistan* [17] Source: District Health Information System 2015, Government of Punjab

Table 3.7: Registered Medical and Paramedical Personnel

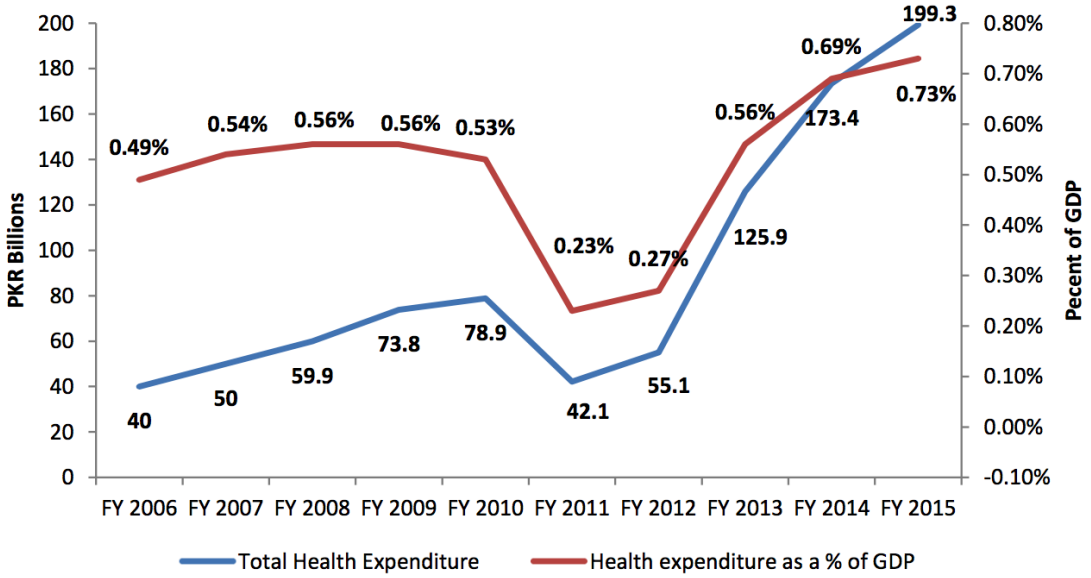
Year	Reg. Doctors	Reg. Dentists	Reg. Nurses	Reg. MWs	Reg. LHWs	Pop. Per Doctor	Pop. Per Dentist	Pop. Per nurse
2011	152.368	11,649	77,683	30,722	12,621	1,162	15,203	2,200
2012	160,880	12,692	82,119	31,503	13,678	1,123	14,238	2,139
2013	167,759	13,716	86,183	32,677	14,388	1,099	13,441	2,182
2014	175,223	15,106	90,276	33,687	15,325	1,073	12,447	2,124
2015	184,711	16,652	94,766	34,668	16,448	1,038	11,513	2,062

Sources: Pakistan Economic Survey, Planning Commission of Pakistan, Pakistan Bureau of Statistics

Public Health Expenditure

Like most developing countries, public sector healthcare remains a neglected domain in Pakistan. With a population of over 195 million, aggregate government spending (by both Federal and Provincial governments) was PKR 199.3 billion for FY2015[18], equivalent to 0.73% of GDP. Public healthcare spending saw a declining trend in terms of percentage of GDP following the budgetary uncertainty among provinces and donor agencies, in the aftermath of the 18th Amendment, up until FY2012 (see Fig 3.2 below). The current trend; however, seems to be moving towards a positive direction as overall healthcare expenditure was 0.73% of the overall GDP in FY2015, the highest in a decade. Overall CAGR has been rising modestly, clocking in at 19.53% between FY2006 – FY2015.

Fig 3.2: Public Healthcare Spending in Pakistan



The table below gives a detailed breakdown of the actual total expenditure on healthcare by the federal government and each provincial government from the period FY2013 – FY2016.

[18] Source: *Pakistan Economic Survey 2015 - 2016*

Table 3.8: Actual expenditure Breakdown of Total Health Expenditure in PKR Billions

Expenditure Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Federal	11.4	34.7	36.2	15.3	
Punjab	47.8	55.1	67.7	59.7	
Sindh	43.5	46.6	51.2	29.6	
KPK	12.8	24.5	30.8	16.9	
Baluchistan	10.4	12.5	13.5	9.4	
Total	**125.9**	**173.8**	**199.3**	**133.9**	

Source: Pakistan Economic Survey, 2015 – 2016 * Provisional (July - March only)

Current level of government spending on healthcare, however, is still inadequate to cater to the needs of Pakistan's growing population – especially in the wake of the country's peculiar health profile which is characterized by a dual burden of communicable and non-communicable diseases, high fertility, low life expectancy, a young age structure, high maternal and child mortality, high incidence of communicable diseases and wide prevalence of malnutrition among children and women.

According to a WHO report using 2012 figures, Pakistan's annual public spending on healthcare per capita is USD 12 which lags behind other regional countries[19]. Spending on health sector; however, has been seen to rise in the provinces as provincial governments take responsibility of healthcare provision after the passage of 18th Constitutional Amendment.

[19] Source: World Health organization (2015), World Health Statistics 2015

Private Healthcare Sector

Public spending is inadequate to cater to the needs of the growing population and high disease burden caused by epidemiological transition in Pakistan. Despite Government's efforts and programs run by multilateral and bilateral humanitarian organizations, significant gaps continue to persist in Pakistan's healthcare sector leaving large segments of population with inadequate healthcare access. Public sector facilities are frequently found to be ill-equipped, poorly maintained, inconsistent in coverage and inadequate in capacity. Shortage of trained health workers and rising population pressure on public health institutions leaves a large demand-supply gap in the healthcare sector to be filled by the private sector.

.As per estimates, corroborated by Heartfile – a respected non-profit healthcare think tank, only about 20% of the population is reported to use public healthcare system and average visit is less than 1 per capita per annum. Non-standardized services, poor quality of care and inconvenient location results in underutilization of public healthcare facilities. Hence, this poor performance of public sector facilities, coupled with rapid urbanization, increased awareness of healthcare and growing middleclass have given rise to high demand for the private healthcare system – especially in the more developed urban centres of Pakistan. Up to around 80% of the population relies on private sector for their healthcare needs. Private sector primarily follows fee-for-service model and are financed by out-of-pocket expenses. Total private sector expenditure on healthcare is estimated at 60% of total spending on healthcare.

The private healthcare sector is perceived to offer better quality service than their public sector counterpart at much higher price; however, there exists a wide range of disparity in the services, treatment and quality of private sector establishments. The type, nature and quality of healthcare demand – and therefore the service - varies from rural to urban areas, and within urban areas from more developed to less developed cities and towns, depending on the availability of public healthcare facilities and the socio-economic demographic of resident population. Furthermore, the quality of private healthcare facilities varies widely within a particular urban city; with more upscale neighbourhoods having access to highest quality healthcare in the country.

The private healthcare sector in Pakistan operates in parallel to the public sector, providing basic and tertiary healthcare facilities to the public at large. Despite the size and breath of the sector, it is largely undocumented and unregulated. Nevertheless, private sector hospitals are relatively more organized and consumer-oriented than public sector hospitals. Sales are generated predominantly through individual patients. A number of larger private hospitals are on the panel of corporate health insurance companies and therefore also generate a proportion of sales from corporate accounts.

The number of total private health centres in Pakistan, including hospitals and clinics, is not publically available given the lack of regulation and documentation in the sector. Broad estimates suggest 95% of private health centres can be categorized as small and medium enterprises (“SME’s”) and vary widely in their size, offerings and quality of service. According to a survey carried out in 2011, on small and medium sized private hospitals and clinics in Karachi and Lahore, by International Finance Corporation (“IFC”) and State Bank of Pakistan, about 55% of such facilities are small-scale with less than 10 employees, and about a third are small-to-medium sized with between 10 and 50 employees; and 12% employ over 50 people20.

Large, first rate general hospitals in the private sector house modern facilities and adopt technically sophisticated systems and practices. These include general hospitals such as The Aga Khan University Hospital in Karachi and Doctors Hospital in Lahore. Additionally, hospitals like Shaukat Khanam Memorial Cancer Hospital and Research Centre which specializes in treating cancer patients, offer high quality specialty treatments to patients at a fraction of the cost of treatment abroad. Hospitals such as Shaukat Khanam deploy an innovative business model as a result of which a large percentage of their patients receive free or subsidized treatment by charging more affluent patients the full cost of treatment to cross-subsidize costs for lower income socio-economic groups.

While estimating an accurate number of clinics or smaller private health centre may not be possible, research shows that there are more than 300 medium to large hospitals in Pakistan including 51 teaching hospitals in the private sector as listed in table below. These 51 major large scale private general hospitals in the country – 3 in Islamabad, 24 in Punjab, 14 in Sindh, 8 in KPK and one each in Baluchistan and AJK – provide a range of specialty and sub-specialty treatments as well as academic training in Medicine. In addition, there are several large specialty hospitals providing tertiary care in particular fields, diseases, treatments or to a class of demographic (e.g. oncology or paediatrics). Major private sector teaching hospitals from across Pakistan are listed in the table below.

20 Source: International Finance Cooperation (2011) *Health and Social Work - Private Sector Hospitals*, Washington

Table 3.9: Major Private Sector Teaching General Hospitals in Pakistan

Hospital	Location
Islamabad Capital Territory	
1 Shifa International Hospital	Islamabad
2 Al-Nafees Medical College Hospital	Islamabad
3 Rawal General & Dental Hospital	Islamabad
Punjab	
1 Fatima Memorial Hospital	Lahore
2 Fauji Foundation Hospital	Rawalpindi
3 Islamic International Medical College Trust Railway Hospital	Rawalpindi
4 Ghurki Trust Teaching Hospital	Lahore
5 POF Hospital	Wah
6 Madina Teaching Hospital	Faisalabad
7 Nawaz Sharif Social Security Hospital	Lahore
8 Combined Military Hospital	Lahore
9 PESS Institute/ Islamabad Medical & Dental College	Rawalpindi / Islamabad
10 Independent University Hospital	Faisalabad
11 Sharif Medical City Hospital	Lahore
12 Ch. Rehmat Ali Memorial Trust Hospital	Lahore
13 Akhtar Saeed Trust Teaching Hospital	Lahore
14 Bhatti International Teaching Hospital	Kasur
15 Ibn-e-Siena Hospital & Research Institute	Multan
16 Shalamar Hospital	Lahore
17 Avicenna Hospital	Lahore
18 Cantonment General Hospital	Rawalpindi
19 Arif Memorial Teaching Hospital	Lahore
20 Islam Teaching Hospital	Sialkot
21 Kishwar Fazal Teaching Hospital	Sheikhupura
22 Surraya Azeem Hospital	Lahore
23 Social Security Hospital	Lahore
24 Khair-Un-Nisa Hospital 24 Aziz Fatimah Hospital	Lahore
25 Aziz Fatimah Hospital	Faisalabad
Sindh	
1 The Aga Khan Hospital	Karachi
2 Baqai University Fatima Hospital	Karachi
3 Isra University Hospital	Hyderabad
4 Hamdard University Hospital (Taj Medical Complex)	Karachi
5 Jinnah Medical College Hospital	Karachi
6 Sir Syed Hospital	Karachi
7 Ziauddin University Hospital	Karachi
8 Muhammad Medical College Hospital	Mirpurkhas
9 Darul Seht Hospital	Karachi
10 Liaquat National Hospital	Karachi
11 PNS Shifa	Karachi
12 Al-Tibri Medical College Hospital	Karachi
13 Creek General Hospital	Karachi
14 Memon Charitable Hospital	Tando Muhammad Khan
Khyber Pakhtunkhwa	
1 DHQ Teaching Hospital	Mansehra
2 Naseer Teaching Hospital	Peshawar
3 Benazir Bhutto Shaheed Teaching Hospital	Abbottabad
4 Kuwait Teaching Hospital	Peshawar
5 DHQ Teaching Hospital	Haripur
6 DHQ Teaching Hospital	Charsada
7 Peshawar Institute of Medical Sciences	Peshawar

8 Rehman Medical Institute	Peshawar
Baluchistan	
1 Quetta Institute of Medical Sciences/ Quetta CMH	Quetta
Azad Jammu and Kashmir	
1 Mohiuddin Islamic Medical College/ DHQ Hospital	Mirpur

Sources: Pakistan Medical & Dental Council and Abacus research

Details for registered doctors, nurses, and other staff are provided above (see Table 3.6). Medical practitioners employed in the public sector are also available to practice in the private sector after their official duty hours. While the number of qualified human resource has grown over the years – with an output of about 6,000 medical graduates every year from public and private medical colleges in Pakistan – the Population-per-Doctor ratio of 1,057 is still slightly below the WHO recommended ratio of a doctor for every 1,000 persons.

Charitable Healthcare Sector

Introduction

Pakistan has a rich culture of charitable giving and the country was ranked 9th in World Giving Index 2015, for the number of people providing monetary assistance to an unknown person. Pakistan's total charitable giving is estimated up to 1% of the GDP[21]. Muslims are obligated to make a charitable donation known as 'Zakat' to the economically under-privileged citizens living in society. Citizens have a choice to either donate their zakat to the government social security fund or exercise choice with respect to who would be the recipient of their zakat donations. The vast majority of zakat funds throughout the country are hence usually given to credible NGO's and Trust Hospitals such as Edhi Foundation, Shaukat Khanum and Sindh Institute of Urology and Transplantation as citizens prefer to exercise their discretion of funds.

The Bait-ul-Mal ("PBM") is the designated public sector social security fund that utilizes government collected zakat payments and provides financial assistance to poor, widows and special needs families to meet their medical needs, among other requirements from government. Outlays by PBM are estimated to be around PKR 773 million in FY2014[22]. The average disbursements; however, are small and insufficient to meet the expenses of major medical procedures as allocation for healthcare from the fund is only a small portion (only 11% in 2010).

[21] Source: Shah, B (2014) Generosity Amid Want. NY Times, http://www.nytimes.com/2014/02/14/opinion/shah- generosity-amid-want.html?_r=1 [22] Source: Pakistan Bureau of Statistics 2013 – 2014

Role of NGOs and Trusts in the Healthcare Sector

Non-Governmental Organizations

NGOs play an important role in provision of healthcare services to the poor. It is difficult to ascertain the exact number of NGOs currently working in healthcare sector or their spending as the sector lacks robust regulatory oversight; however, one study identified at least 1,800 NGO's operating throughout the country providing some sort of subsidized healthcare treatment[23]. Traditionally, the sector has a poor track record of governance, transparency and accountability; however, there are a number of well-reputed organizations in the country which are not only working to provide healthcare to the poor but also towards improving healthcare systems in the country (see table 3.10 below). Heartfile, for example, is one such NGO working towards an innovative technology based solution for healthcare financing for poor. Their system, Heartfile Health Financing ("HHF"), seeks to ensure poor have access to financing for healthcare spending to prevent overspending and reliance on exploitative sources. HHF ascertains applicant's poverty status from National Database Registration

Authority (“NADRA”) and ensures need requirement by conducting interviews through volunteers.

Similarly, the Edhi Foundation is one of the largest organizations providing social welfare services in Pakistan. Their services include provision of ambulances, free treatment at clinics and hospitals, rehabilitation centers, orphan houses, education centers and free kitchens. Many organizations, in the public, private and non-governmental sectors, are involved in healthcare provision to marginalized segments of the society.

Trust Hospitals and Organizations

Trust hospitals play an important role in delivering tertiary healthcare services to the lower income-strata especially with respect to expensive medical and surgical treatment procedures such as organ transplantation or oncology. Many hospital run well publicized campaigns to solicit donations and work on a community-based donations partnership and cross-subsidy model to maximize the treatment of poor patients. One such general hospital is Indus Hospital in Karachi which opened its doors in 2007 with a capacity of 150 in-patient beds. Indus is the country’s first multidisciplinary tertiary care hospital categorized as “Cash Less” and “Paper Less” and has thus far conducted 52,000 surgeries and treated nearly 2.3 million patients free of cost.
Several organizations, foundations and individual philanthropists have also established healthcare facilities which provide specialist medical treatments to a large cross section of the society. The Sindh Institute of Urology and Transplantation (“SIUT”) is one such hospital set up as a charitable trust that provides specialized care for kidney and liver diseases including related cancers and transplantations in line with national regulations and is the leading tertiary healthcare facility by volume for kidney transplants. The institute began as an 8 bed ward to one of the leading transplantation centers in the region and provides free service to over 1,000,000 patients every year, irrespective of their financial status by primarily relying on donations from individuals, entrepreneurs, businesses and other sources to ensure patients are not burdened financially for their treatment and up to 60% of their funding is financed through this medium whereas 40% is provided by the provincial and federal governments.
[23] Source: Regional Health Systems Observatory, World Health Organization. *Health System Profile—Pakistan*.; 2007. http://gis.emro.who.int/ HealthSystemObservatory/Profile/Forms/ frmProfileSelectionByCountry.aspx.

Shaukat Khanum Memorial Cancer Hospital & Research Center (“Shaukat Khanum” or “SKM”), regions first specialized cancer treatment facility has employed an innovative financial model to meet its operational and expansion needs.

Table 3.10: List of Major NGO’s and Trust Hospitals in Pakistan

	Name		Name
1	Acid Survivors Foundation	34	Kaghan Memorial Trust
2	Al Falah Health Organization	35	Karachi Relief Trust
3	Al-Khidmat Foundation Pakistan	36	Khubaib Welfare
4	Al-Shifa Trust Hospital	37	Layton Rahmatullah Benevolent Trust
5	Akhtar Saeed Trust Teaching Hospital	38	Kidney Centre
6	Arif Memorial Teaching Hospital	39	Layton Rahmatullah Benevolent Trust
7	Aurat Foundation	40	MA Ayesha Memorial Centre
8	Bahria Town Hospital	41	Marie Adelaide Leprosy Centre
9	Bedari	42	The Mehnaaz Welfare Organization
10	Behdud Association	43	Muslim Aid Pakistan
11	Bargad Youth Development	44	Noble Aims Welfare Association
12	Child Care Foundation of Pakistan	45	Pakistan Kidney Institute
13	Rehmat Ali Memorial Trust Hospital	46	Pakistan Disabled Foundation
14	Citizens Foundation	47	Pakistan Foundation Fighting Blindness
15	Diplex Smile Again Foundation	48	Pakistan Red Crescent Society
16	Disaster Response Team	49	Pakistan Society
17	Edhi Foundation	50	Pakistan Cleft Lip and Palate Association
18	Ehsas Pakistan	51	RAHMA Islamic Relief Pakistan
19	Fatima Memorial Trust Hospital	52	Rizing Era
20	Fatma Welfare Foundation	53	Rozan
21	Fauji Foundation	54	Sachet
22	Ghurki Trust Teaching Hospital	55	Sahara for Life Trust
23	Heartfile	56	Sarim Burney Welfare Trust
24	Health & Nutrition Society	57	Shaukat Khanum Memorial Cancer Hospital
25	Hashoo Foundation	58	Sindh institute of urology and transplantation
26	Hawa Ilm-ul-Shifa	59	Shalamar Trust Hospital
27	Helping Hands Foundation	60	Umeed-e-Noor
28	Health and Education Organization	61	Village Health Organization
29	Health Oriented Preventive Education	62	VOICEH
30	Humanity Organization	63	Wadep
31	Imran Khan Foundation	64	Waheed Relief Organization
32	Indus Hospital and Resource Centre	65	Wermany
33	Islamic International Trust Hospital	66	Zubeda Khaliq Memorial Trust

Autonomous Healthcare Providers

Employee Social Security ("ESS") is the health coverage system for labour workforce in Pakistan. Employers who meet a set of criteria are required to contribute to the Fund which maintains and runs its own healthcare infrastructure. About 1.2 million workers, or 3.06% of the total workforce, are covered under this scheme. Additionally, a number of other organizations have established their own autonomous healthcare system for benefit of their employees. Large public sector organizations like Pakistan International Airline Cooperation ("PIAC"), Pakistan Railways ("PR"), Water and Power Development Authority ("WAPDA"), Oil and Gas Development Company Limited ("OGDCL") and the Army are among organizations which provide medical services to their employees and dependents. Spending by these autonomous bodies constitutes around 1.5% of total health care expenditure in the country.

Health Insurance in Pakistan

Health insurance penetration in Pakistan remains low and is estimated at 1%. Premium for the health insurance sector were recorded at PKR 4.1 billion in 2014, a mere 2.5 % of total premium of the insurance industry[24]. Health insurance in Pakistan is offered mostly by private sector organizations through group insurance schemes to employees of the corporate sector. Its penetration has remained low in Pakistan because of lack of awareness

and relatively high cost of service. Additionally, challenges remain to provide insurance coverage to the informal sector, which forms the largest segment of Pakistan's economy. Moreover, lack of transparency and standardization in healthcare costs has also hampered the development of the sector.

The incumbent government; however, has taken a positive step in this regard by bringing coverage to highest poverty struck population in various districts of Pakistan; by launching a federal public health insurance scheme known as the 'Prime Ministers National Health Programme'. The scheme aims to create social welfare reforms by bringing poverty stricken segments in various districts under health insurance coverage. The programme been rolled out in seven districts thus far including - Islamabad, Muzaffarabad, Quetta, Kotli, Skardu and Rahim Yar Khan; with further plans to gradually expand the programme to other targeted districts. During the initial stage, the eligibility criteria for citizens to be covered includes: i) those individuals earning less than USD 2 per day and ii) must be a resident of identified districts.

The government issues a "sehat card" to all eligible candidates which will entitle the recipient or his immediate family coverage to receive treatment at any hospital listed on the panel. A maximum amount of PKR 50,000 has been set for secondary healthcare treatment which includes the inpatient treatment at partnering hospital for maternity checkups and deliveries, fracture/ injuries, and other emergency treatment cases. Similarly, a maximum amount of PKR 250,000 has been set for treatment of priorities diseases which includes diabetes mellitus, burns, heart diseases, end- stage renal disease, chronic infections, organ failure and cancer procedures.

Table 3.11: Empanelled Healthcare Institutions enrolled in Prime Minister's Health Programme

Secondary Treatment Hospital		Tertiary Treatment Hospital	
1	Life Care Hospital, Islamabad	1	Shifa International Hospital, Islamabad
2	Begum Jan Hospital, Islamabad	2	Rawal Institute of Cardiology, Islamabad
3	Rawal Institute of Health Sciences	3	Heart and General Hospital, Quetta
4	Al- Nafees Hospital, Islamabad	4	Sharif Medical City Hospital, Lahore
5	Shifa International Hospital, Islamabad	5	Farooq Hospital, Lahore
6	Anwar Memorial, Kotli	6	Ittefaq Hospital (Trust), Lahore
7	Younas Medical Center, Kotli	7	Pervez Elahi Institute of Cardiology,
8	Alam Memorial, Kotli	8	Bakhtawar Amin Hospital, Multan
9	Parveen Akhtar, Kotli	9	Multan Ibn-e-Sena Hospital, Multan
10	Muzaffarabad General Hospital	10	Faisalabad Institute of Cardiology
11	Kashmir Surgical Hospital, Muzaffarabad		
12	Shaheen Hospital, Muzaffarabad		
13	PIMA Hospital, Muzaffarabad		
14	AIMS, Muzaffarabad		
15	Mehraj Surgical Center, Muzaffarabad		
16	Baltistan Surgical Hospital, Skardu		
17	Abdullah Hospital, Skardu		
18	Zubaida Khaliq, Skardu		
19	Rahat Medical Complex Hospital, Quetta		
20	Gillani Hospitals, Quetta		
21	Jillani Hospital, Quetta		
22	Sangeen Khan Hospital, Quetta		
23	Rehmat Medical Complex, Rahim Yar		

24	Tehseen Hospital, Rahim Yar
25	Ali Nawaz Hospital, Rahim Yar
26	Bakhtawar Hospital, Rahim Yar
27	Millat Hospital, Rahim Yar
28	Hassan Hospital, Rahim Yar
29	Saad Abdullah Hospital, Rahim Yar
30	Tahir General Hospital, Rahim Yar

Source: Prime Minister's Health Programme

[24] Source: Business Recorder (2014), SECP Issues Third party Administrator for Health Insurance, http://www.brecorder.com/pakistan/business-a-economy/162239-secp-issues-third-party-administrator-for-health-insurance-regulations.html

Punjab Health Sector

The province's revised healthcare budget for FY2016 was set at PKR 92.7 billion, a 17.5% increase from FY2015. Overall expenditure on health has grown at a CAGR of 30.8% between FY 2012 and FY 2016.

Lahore is the administrative capital of Punjab and the second largest city of Pakistan after Karachi. In terms of healthcare, Lahore is home to at least 15 teaching hospitals in the public and 20 in the private sector, the highest number of medical institutes in any city in Pakistan. In addition, there are 2 District Headquarters Hospitals and 4 Tehsil Headquarters Hospitals in the city, with 6 Rural Health Centers and 37 Basic Health Centers. The number of private clinics and hospitals is estimated to have crossed 200 units. Despite the massive infrastructure, the city still has significant gaps and room for expansion given the rapidly growing population, with greater disposable income, higher quality of life, awareness and exposure to science and modern technology. Furthermore, given the facilities and infrastructure offered by Lahore, the City also attracts medical tourists from adjacent towns and villages in Punjab and KPK.

The province of Punjab constitutes more than half the population of Pakistan – officially stated as 105.7 million while unofficial estimates place it at more than 120 million. Despite an extensive network of healthcare facilities, health indicators of Punjab are below the desired level – and in many cases worse than the overall national statistics. Reasons behind poor health indicators are poverty, low level of education especially among women, inadequate sanitation and potable water facilities.

The province of Punjab constitutes more than half the population of Pakistan – officially stated as 105.7 million[25]. Despite an extensive network of healthcare facilities, the health indicators of Punjab are below the desired level – and in many cases worse than the overall national statistics (see table below). According to the Punjab Health Department, there are about four million malnourshied children in Punjab, and about a third of all pregnant women are estimated to have iron deficiency anemia. Over 34% of children under 5 years are short for their age; over 10% are underweight for their age and over half anemic. Malnutrition is a major contributor to infant and maternal deaths. Reasons behind poor health indicators are poverty, low level of education especially among women, inadequate sanitation and potable water facilities. Another major reason, of course, is the deficiencies in healthcare services, both in public and private sectors.

[25] Source: Economic Survey of Pakistan 2015 – 2016, unofficial estimates place Punjab's population at close to 120 million.

Table 3.12: Punjab's Human Development Indicators

Indicator	Prevalence
Fertility Rate	4.7 (per woman)
Infant mortality rate	77 (per 1,000 live births)
Life expectancy at birth (Both sexes)	64 years
Under 5 mortality rate	112 (per 1,000 live births)

Maternal mortality ratio	300 (per 100,000 live births)
Percentage of under-nutrition(<5 years)	34%

Source: Health Department, Government of Punjab

The public healthcare infrastructure in Punjab consists of primary, secondary and tertiary healthcare facilities that fall under the administration of either a provincial government department or a state-owned institution. The public health infrastructure's total combined bed capacity was 56,914 beds from a total of 5,209 health care institutions in 2014[26] (see table below). The health infrastructure consisted of 363 hospitals, 1,325 dispensaries, 341 RHCs, 2,547 BHUs, 308 Sub-Health Centers ("SHCs"), 280 Maternity and Children Healthcare Clinics ("MCHCs") and 45 TB clinics. Overall bed capacity has been increasing at a CAGR of 3% from 2010 to 2014.

Table 3.13: Historical Trend of Total Number of Public Healthcare Institutions in Punjab

Type of Healthcare Institution	2010	2011	2012	2013	2014
Hospitals*	328	329	340	357	363
Dispensaries	1,323	1,347	1,201	1,304	1,325
Rural Health Centers	336	337	337	348	341
TB Clinic	40	40	42	45	45
Basic Health Centers	2,535	2,540	2,606	2,535	2,547
Sub-Health Centers	541	545	388	403	308
M.C.H Centers	360	369	282	282	280
Total Healthcare Institutions	**5,464**	**5,507**	**5,196**	**5,274**	**5,209**

Total Bed Capacity	**50,481**	**51,010**	**50,667**	**57,037**	**56,914**

Source: Punjab Development Statistics 2015 and 2016 Statistical Handbook of the Punjab *Note: A hospital is defined as a health institution defined as a tertiary care facility by the government with at least 10 in patient's beds.

Out of the 363 public sector hospitals Punjab; the Health department is the key administrative body for 208 or 79% of all beds in the public healthcare sector in Punjab (see table below).

Table 3.14: Hospital and Bed Strength Segmentation by Administrative Control – 2014

Administrating Body	No. Hospitals*	No. Beds	Avg Hospital to Bed Ratio	Share of Total Beds
Health Department	208	35,934	173	78.80%
Home Department	51	1,189	23	2.60%
Auqaf Department	1	125	125	0.30%
Local Government	21	801	38	1.80%
Social Security	15	2,040	136	4.50%
Pakistan Railways	19	950	50	2.10%
WAPDA	6	470	78	1%
Other Organizations	42	4,081	97	9%
Total	**363**	**45,590**	**126**	**100%**

Source: Punjab Development Statistics 2015 and 2016 Statistical Handbook of the Punjab *Note: A hospital is defined as tertiary care facility by the government with at least 10 in patient's beds.

In terms of human resource availability, there were a total of 59,162 doctors and 58,324 nurses working in the public healthcare sector as of 2014. The supply of doctors, dentists, nurses, LHVs and Midwives has been rising steadily in the province at a CAGR of 5.8%, 10.2%, 4.2%, 5.5% and 7.2% respectively over the period between 2010 and 2014.

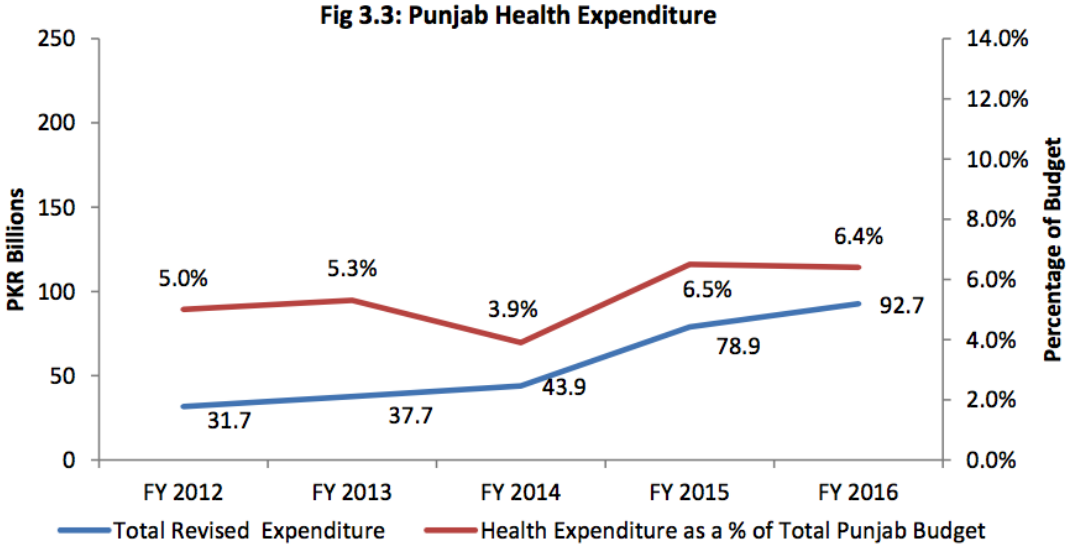
Table 3.15: Healthcare Facilities and Manpower in Punjab

Year	No. of Facilities	No. of Beds	Doctors	Dentists	Nurses	LHVs	MWs
2010	1,651	39,102	47,221	3,928	49,529	9,522	6,455
2011	1,676	39,466	50,164	4,270	51,577	10,148	7,112
2012	1,541	39,623	52,486	4,602	53,906	10,770	7,680
2013	1,661	45,799	55,696	5,208	56,115	11,279	8,100
2014	1,688	46,042	59,162	5,792	58,324	11,788	8,520

Source: Punjab Development Statistics 2015 and 2016 Statistical Handbook of the Punjab *Note: Facilities include Hospitals and Dispensaries

Total revised healthcare expenditure in Punjab, was PKR 92.7 billion in FY2016, a 17.5% nominal increase from the PKR 78.9 billion allocated in FY2015. Overall expenditure on health has grown at a CAGR of 30.8% between FY 2012 and FY 2016 (See table below).

Fig 3.3: Punjab Health Expenditure



Source: Finance Department Punjab (2016) Budget White Paper 2013 - 2016

Supply Side: Regulatory Framework and Health Statutory Bodies

In the aftermath of devolution of power, provision, management and oversight of the health sector is the responsibility of health departments of respective provinces. The Health Department of Government of Punjab is mandated to provide delivery of essential health services, development of health sector manpower, maintenance of information management

system and resources, adoption of appropriate health technology, financing of basic healthcare provision and reform of health sector administration in the province of Punjab.

Punjab healthcare commission

Overview

The Punjab Healthcare Commission (PHC) is an autonomous health regulatory body established under the PHC Act 2010. The PHC aims to improve the quality, safety and efficiency of healthcare service delivery for all Public and Private Healthcare Establishments (HCEs) including Allopaths, Homeopaths and Tibbs in the province of Punjab. To do this, the PHC is developing and enforcing Minimum Service Delivery Standards (MSDS) at all levels of healthcare, to improve the quality of healthcare services and foster a culture of Clinical Governance. All Healthcare Establishments are required to implement MSDS to acquire a License to deliver healthcare services in Punjab. The PHC is then responsible for the monitoring and evaluation of the MSDS standards that have been implemented by the hospitals.

Objective
Continually raise standards of Healthcare Service delivery throughout Punjab

Roles and Activities

In aiming to improve the quality and efficiency of healthcare services, PHC fulfils the following roles and responsibilities in the health sector
- Maintain register of all healthcare service provider
- Grant, revoke and renew Licenses – impose and collect fees
- Monitor, enforce and regulate the implementation of Minimum Service Delivery Standards (MSDS)
- Enquire and investigate into maladministration, malpractice, medical negligence and system failures
- Advocate rights and responsibilities of recipients and providers of the healthcare services
- Take cognizance of harassment of Healthcare Service Provider or damage to a Healthcare Establishment (HCE)
- Promote healthcare establishments' capacity- building and organizational learning
- Conduct awareness activities
- Grade Healthcare Establishments
- Take necessary steps to ban quackery
- Conduct third party evaluation – independent performance audit of HCEs
- Take measures and devise strategy to address counter sale of drugs without prescription
- Take measures and devise strategy to address counter sale of drugs without prescription
- Develop Accreditation programs for healthcare service providers and grant accreditation

Activities
Licensing
Licensing is a grant of permission issued to a Healthcare Establishment (HCE) by the Punjab Healthcare Commission (PHC) under the PHC Act 2010 for the use of any premises or conveyance as a Healthcare Establishment.
A Healthcare Establishment means a hospital, diagnostic center, medical clinic, nursing home, maternity home, dental clinic, homeopathic clinic, tibb clinic, acupuncture clinic,

physiotherapy clinic or any other premises or conveyances wholly or partly used for providing healthcare services.

Licensing is a mandatory process and no Healthcare Establishment can function or operate without prior permission from the PHC. Licensing focuses on the enforcement of Minimum Service Delivery Standards (MSDS) for delivery of healthcare services. It sets out standards that a Healthcare Establishment must observe and implement in order to operate and deliver quality healthcare services.

MSDS

The MSDS define a set of the benchmarks for minimum level of mandatory services that a Healthcare Establishment (HCE) is responsible to achieve and patients have a right to expect. It entails a package of yardsticks essential for all Categories of the Healthcare Establishments i.e. at Primary, Secondary and Tertiary levels in Punjab and encompasses all the disciplines of healthcare and focuses on ensuring Quality Healthcare Services.

The MSDS and Reference Manual for Category I HCEs have been developed by the Punjab Healthcare Commission through a consultative process, bringing together healthcare experts, practitioners from medical fraternity and other key stakeholders from Public and Private Health Sectors.

The MSDS and Reference Manual are provided to the HCEs on submission of formal application for the license. Extra copies are made available on additional subscription as and when demanded. So far MSDS, Reference Manual and Self-Assessment Tools for Category I HCEs i.e. Hospitals having 51 or more beds have been developed. Such material for other Categories (II and III) of HCEs is being developed in a phased manner.

Directorate General Health Services

Overview

Directorate General of Health Services is the main programmatic coordination, implementation and monitoring arm of the provincial Health Department of the Government of Punjab and is headed by the Director General Health Services (DGHS).

The Directorate is responsible for overseeing provision of Primary and Secondary Health Care services throughout the province and liaises with all 36 district health offices in the province. It also provides support and leadership in responding to emergency health and medical issues in the province, especially for communicable disease prevention and control. Collection and dissemination of information, advice to the provincial health department and working with donor partners on their approved agendas with the Department of Health, Government of the Punjab, are also included in the functions of the DGHS
.

Objectives

Objective of Directorate General Health Services Punjab is to improve health status through:
- Ensuring implementation of global, national and provincial health policies
- Maintaining delivery of preventive, pro-motive, curative & rehabilitative health services particularly at primary and secondary levels of care
- Capacity building and monitoring of districts in planning and Implementation of health services

Activities

Preventive & Pro-motive
- Prevention and control of communicable diseases: Malaria, TB, Polio, Measles,

- Diphtheria, Pertussis, Tetanus, Hepatitis, AIDS, ARI, Diarrhoeal Diseases,
- Typhoid, Meningitis, Hemorrhagic Fever, Dengue Fever, Leishmaniasis, Rabies,
- Plague, Influenza, Bird Flu, SARS
- Prevention & control of epidemics
- Emergency Preparedness & Response
- Maternal Neonatal and Child Health including Family Planning
- Health Education & Nutrition Development

Administrative Activities

- Technical assistance, logistic support, monitoring & evaluation of PHC Programmes, special institutions and district health system
- Monitoring & supervision of curative and rehabilitative health services at primary and secondary levels of care in districts
- Staff and Services Management
- Collection, compilation, and analysis of vital health statistics (DHIS)
- Supporting alternate medicine (Hikmat & Homeopathy)

Regulatory Activities

-Monitoring of Drugs Quality Control (Licensing, Sampling, DQCB, DTL, PQCB, prosecution, narcotics control)
-Monitoring of Food Quality Control (District Governments / Public Analyst)
-Scrutiny of invalidation cases (Invalidation Committees at district level)

Epidemic Control Activities

- Diseases likely to cause epidemics include Measles, Poliomyelitis, Acute
- Gastroenteritis, Typhoid, Malaria, Meningitis, Infective Hepatitis, Hemorrhagic Fever, Dengue Fever, Leishmaniasis, Diphtheria & Pertussis, Influenza (Human & Avian)
- Epidemic Forecasting
- Disease Surveillance
- Disease Early Warning System (DEWS)
- Epidemic Response
- District Epidemic Control Committee
- Provincial Epidemic Control Committee
- Coordination with line departments

Target Areas

Reduce Child Mortality
- Improve Maternal Health
- Combat HIV/AIDS
- Malaria and Other Diseases
- Reduce Child Mortality

Specialized healthcare and medical education department

Specialized healthcare department is responsible for all tertiary care hospitals and all the medical colleges and universities that come with them.

Tertiary care is specialized consultative health care, usually for inpatients and on referral from a primary or secondary health professional, some problems which fall in tertiary care are:

Head and neck oncology
Perinatology (high-risk pregnancies)
Neonatology (high-risk newborn care)
PET scans
Organ transplantation
Trauma surgery
High-dose chemotherapy for cancer cases
Growth and puberty disorders
Neurology and neurosurgery
Following two types of hospitals fall in this category:

a major hospital that usually has a full complement of services including paediatrics, general medicine, various branches of surgery and psychiatry.

a specialty hospital dedicated to specific sub-specialty care (paediatric centres, Oncology centres, psychiatric hospitals). Patients will often be referred from smaller hospitals to a tertiary hospital for major operations, consultations with sub-specialists and when sophisticated intensive care facilities are required.

The working of the Medical Education also comes under the SHC&ME department. This include all medical colleges and universities in Punjab, Including nursing schools. Following is the list of all teaching hospitals that fall under the department

Primary and secondary healthcare department

The Primary and secondary healthcare department has the following healthcare services in its ambit.

Primary Healthcare
Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

Essential Components of Primary Health Care

There are eight essential components of Primary Health Care approach. These are given below:

- Education concerning prevailing health problems and the methods of preventing and controlling them.
- Promotion of safe food supply and proper nutrition
An adequate supply of safe water and basic sanitation.
Maternal and child health care, including Family Planning.
Immunization against major infectious diseases.
Prevention and control of locally endemic diseases.
Appropriate treatment of common diseases and injuries.

Provision of essential drugs.

Following health facilities are mainly working to provide Primary Health Care(PHC)

Basic Health Unit (BHU)

The BHU is located at a Union Council and serves a catchment population of up to 25,000. Services provided at BHU are promotive, preventive, curative and referral. Outreach/community based services are part of package provided by the BHU. BHU provides all PHC services along with integral services that include basic medical and surgical care, CDD, CDC, ARI, malaria and TB control. MCH services are also part of the services package being provided at BHU. BHU provides first level referral to patients referred by LHWs. BHU refers patients to higher level facilities as and when necessary.

The BHU also provides clinical, logistical and managerial support to the LHWs. It also serves as a focal point, where community and the public sector health functionaries may come together to resolve issues concerning health.

Rural Health Centre (RHC)

The RHCs have 10-20 inpatients beds and each serves a catchment population of up to 100,000 people. The RHC provides pro-motive, preventive, curative, diagnostics and referral services along with inpatient services. The RHC also provides clinical, logistical and managerial support to the BHUs, LHWs, MCH Centers, and Dispensaries that fall within its geographical limits. RHC also provides medico-legal, basic surgical, dental and ambulance services.

Secondary Healthcare

Hospital at the first referral level serving a district or a tehsil. Secondary Health Care is an intermediate level of health care, that is concerned with the provision of specific technical, therapeutic or diagnostic services. Specialist consultation procedures and hospital admissions fall into this category of care. These services are episodic and usually focused on a particular health problem.

Continuity of care is less critical. The role of a district hospital in primary health care has been expanded beyond being dominantly curative and rehabilitative to include promotional, preventive and educational roles as part of a primary health care approach.

Following health facilities are mainly working to provide Secondary Health Care(SHC).

Tehsil Head Quarter

Tehsil Head Quarter (THQ) hospital is located at each THQ and serves a population of 0.5 to 1.0 million. At present majority of THQ hospitals have 40 to 60 beds. The THQ hospital provides promotive, preventive, curative, diagnostics, in patients, referral services and also specialist care. THQ hospitals are supposed to provide basic and comprehensive Emergency Obstetric and New born Care (EmONC). THQ hospital provides referral care to the patients including those referred by the Rural Health Centers, Basic Health Units, Lady Health Workers and other primary care facilities.

District Head Quarter

The District Head Quarters (DHQ) Hospital is located at District headquarters level and serves a population of 1 to 3 million, depending upon the category of the hospital. The DHQ hospital provides promotive, preventive, curative, advance diagnostics, inpatient services, advance specialist and referral services. All DHQ hospitals are supposed to provide basic and comprehensive EmONC. DHQ provides referral care to the patients including those referred by the Basic Health Units, Rural Health Centers, Tehsil Head Quarter hospitals along with Lady Health Workers and other primary care facilities.

To improve primary and secondary Health the Department has taken up vertical programs as well as special campaigns to improve the quality of primary and secondary healthcare. Vertical programs include the following.

Vertical Programs

i. Hepatitis Control Program

This programmed was launched in the year 2009. Its main task is prevention and control of Hepatitis in Punjab. Spread of Hepatitis has reached alarming proportions in the province with an estimated 2.4% prevalence of Hepatitis B and 6.7% prevalence of Hepatitis C. The overall goal of the project is to reduce morbidity and mortality due to Hepatitis B&C by improvements in hospital waste management, infection control and injection safety practices in public sector health facilities. The programmed aims to improve access to quality diagnostic services and effective hepatitis B&C case management in the public sector health facilities. Furthermore, efficient and effective implementation of Preventive Programmed requires strengthening of the existing infrastructure and support system at Provincial and District level.

ii. AIDS Control Program

Main responsibilities of Punjab AIDS Control Program are to control or reverse the spread of HIV among the most at risk groups and to keep the epidemic from establishing among the bridging groups and the general population and to create an environment in the country where People Living with HIV can access medical and social services and enjoy life without facing stigma or discrimination. It is also our responsibility to coordinate a multispectral, comprehensive and sustainable response to HIV that is based on evidence, transparency and accountability and involves the various line ministries, the civil society and the main target beneficiaries (the PLHIV and the most at risk groups).

iii. TB Control Program

The Punjab having population of 97 Million which is 56% of the total population of Pakistan. Contributes 63% of the total TB case load of the country. ¼ of the total disease burden of EMRO region is borne by Punjab. To increase the number of annual notified TB cases from 194,628 in 2014 to at least 217,570 annual notified TB cases by 2018 while maintaining the treatment success rate at 85%. To reduce, by at least 5% per year by 2018, the prevalence of DR-TB among TB patients. Strengthen programmatic and operational management capacity of the TB Control Program while enhancing public sector support for TB control by 2018.

iv. IRMNCH Program

The National Program for Family Planning and Primary Health Care, also known as the Lady Health Workers Program (LHWP), launched in 1994. The Program

objectives contribute to the overall health sector goals of improvement in maternal and newborn child health and provision of Family Planning services. This country wide initiative extended outreach health services to rural populations and urban slum communities through deployment of over 46,000 Lady Health Workers (LHWs) and 1850 Lady Health Supervisors (LHSs) in all over the Punjab are working with 70% coverage (37% in Urban and 85% in Rural area) and contributed to bridge the gap between health facilities and communities.

v. Malaria Control Program

Malaria control has always been a priority in Pakistan. National Malaria Control Program was started in 1950. In 1961, Malaria control Program was converted into Malaria Eradication Program under the auspices of WHO with the financial and technical support from WHO, UNICEF and USAID. In 1977 Malaria Control Program was integrated into health services as part of Communicable Disease Control in Punjab Province. This program forges consensus among key actors in malaria control, harmonizes action and mobilizes resources to fight malaria in endemic areas. Its aim is to reduce the malaria associated morbidity and mortality by keeping malaria under effective control. The program has also been involved in Dengue prevention and control activities. As a result of concerted efforts the incidence of malaria has reached its lowest level in the province. Moreover, the same staff is working for prevention and control of avian pandemic influenza (AH1N1), Congo Crimean Hemorrhagic Fever (CCHF), Leishmaniasis.

vi. Infection Control Program

Malaria control has always been a priority in Pakistan. National Malaria Control Program was started in 1950. In 1961, Malaria control Program was converted into Malaria Eradication Program under the auspices of WHO with the financial and technical support from WHO, UNICEF and USAID. In 1977 Malaria Control Program was integrated into health services as part of Communicable Disease Control in Punjab Province. This program forges consensus among key actors in malaria control, harmonizes action and mobilizes resources to fight malaria in endemic areas. Its aim is to reduce the malaria associated morbidity and mortality by keeping malaria under effective control. The program has also been involved in Dengue prevention and control activities. As a result of concerted efforts the incidence of malaria has reached its lowest level in the province. Moreover, the same staff is working for prevention and control of avian pandemic influenza (AH1N1), Congo Crimean Hemorrhagic Fever (CCHF), Leishmaniasis.

vii. National Program for prevention of control of influenza

Influenza is a viral infection that affects mainly the nose, throat, bronchi and, occasionally, lungs. Infection usually lasts for about a week, and is characterized by sudden onset of high fever, aching muscles, headache and severe malaise, non-productive cough, sore throat and rhinitis. The virus is transmitted easily from person to person via droplets and small particles produced when infected people cough or sneeze. Influenza tends to spread rapidly in seasonal epidemics. Most infected people recover within one to two weeks without requiring medical treatment. However, in the very young, the elderly, and those with other serious medical conditions, infection can lead to severe complications of the underlying condition, pneumonia and death.

viii. Expanded Program for Immunization

The Expanded Program on Immunization (EPI) is a disease prevention activity aiming at reducing illness, disability and mortality from childhood diseases preventable by immunization.

These diseases are referred as 8 EPI target diseases and cause millions of ailments, disabilities & deaths each year.

- Poliomyelitis
- Neonatal Tetanus
- Measles
- Diphtheria
- Pertussis (Whooping Cough)
- Hepatitis-B
- Hib Pneumonia & Meningitis
- Childhood Tuberculosis

Demand Side: Incidence of Disease

The focus of this Chapter is on the demand for more and better healthcare facilities in Pakistan and particularly in Punjab. The section discusses the factors influencing the demand and reasons behind the rising incidence of diseases related to major common ailments.

Although no national health registry exists to evaluate the incidence of disease cases in the country, the more progressive provincial governments, such as the Government of Punjab are implementing District Health Information Systems ("DHIS") in their respective jurisdictions. DHIS collects data from all primary and secondary public healthcare facilities to assess the percentage of out-patient department ("OPD") visits related to a suspected diseases classification to help improve service delivery through evidence based planning and management.

The indicators are a measure of the annual number of cases according to specified disease classification attending the out-patient department ("OPD"). The component breakdown of reported of all OPD visits in Punjab reported through the DHIS are given in the table below. A total of 113,034,447 OPD visits were recorded; translating into 1.2 visits per capita to an OPD facility in the province of Punjab out of which 49% OPD visits were classified as one of the 43 priority diseases in the province.

Table 4.1: Disease Cases Reported in Public Sector OPD Visits in Punjab – 2015

Disease Group		Total Number of OPD Visits
Respiratory disease		
1	Acute (upper) respiratory infections	15,365,353
2	Pneumonia < 5 yrs.	288,928
3	Pneumonia > 5 yrs.	222,697
4	TB Suspects	734,092
5	Chronic Obstructive Pulmonary Disease	640,290
6	Asthma	1,824,421
Gastrointestinal Disease		
7	Diarrhea / Dysentery < 5 yrs	2,428,264
8	Diarrhea / Dysentery > 5 yrs	2,315,660
9	Enteric / Typhoid Fever	315,231
10	Worm Infestations	966,275
11	Peptic Ulcer Disease	2,737,535
12	**Cirrhosis of Liver**	**160,422**
Urinary Tract Disease		
13	**Urinary Tract Infections**	**1,306,485**
14	**Nephritis / Nephrosis**	**62,759**
15	**Sexually Transmitted Infections**	**68,713**
16	**Benign Enlargement of Prostrate**	**69,645**
Other Communicable Diseases		
17	Suspected Malaria	797,645
18	Suspected Meningitis	4,698
19	Fever due to other causes	4,219,952
Vaccine Preventable Disease		
20	Suspected Measles	7,750
21	**Suspected Viral Hepatitis**	**354,366**
22	Suspected Neonatal Tetanus	312
Cardiovascular Diseases		
23	Ischemic heart disease	521,702

Disease Group		Total Number of OPD Visits
24	**Hypertension**	**2,076,239**
Skin Diseases		
25	Scabies	2,754,452
26	Dermatitis	1,350,343
27	Cutaneous Leishmaniasis	9,020
Endocrine Disease		
28	**Diabetes Mellitus**	**1,771,800**
Neuro-Psychiatric Diseases		
29	Depression	430,691
30	**Drug Dependence**	**42,888**
31	Epilepsy	71,755
Eye & ENT		
32	Cataract	593,217
33	Trachoma	126,876
34	Glaucoma	79,298
35	Otitis Media	979,370
Oral Diseases		
36	Dental Caries	1,885,073
Injuries/Poisoning		
37	Road traffic accidents	1,551,728
38	Fractures	263,685
39	Burns	108,426
40	Dog bite	174,294
41	Snake bite (with signs/symptoms of poisoning)	9,559
Miscellaneous Disease		
42	Acute Flaccid Paralysis	649
43	Suspected HIV/AIDS	3,875
Others		
44	All Other Diseases	58,067,295
Total OPD Visits		**113,034,447**

Source: District Health Information System Annual Report 2015

Rising Incidence of Disease

There are many factors contributing towards the rise in non-communicable ("NCDs") and communicable diseases in Pakistan. Tobacco use alone accounts for one in six of all deaths resulting from non-communicable disease. Despite the fall in consumption of tobacco products in many high-income countries, it is rapidly increasing in low and middle income countries like Pakistan. The country faces a double burden of tobacco use with high prevalence of smoking and use of chewing tobacco. The World Health Organization ("WHO") reports smoking prevalence among population of over 15 years of age to be 38% for men and 7% for women in Pakistan[48]. Additionally, up to 9.5% of the population is estimated to use chewing tobacco in the country. High level of tobacco consumption is a key driver behind many diseases related to the urinary system including bladder and prostate cancer in the country.

Low physical inactivity is another key risk factor contributing to increase in non-communicable diseases and is one of the most important drivers behind the huge rise in the incidence of diabetes Miletus. WHO standards classify physically activity as 30 minutes of moderately intense physical activity every day. People who are physically inactive have a 20% to 30% increased risk of all causes of mortality compared to physically active people. About 150 minutes of physical activity of moderate intensity per week is reported to reduce risk of ischemic heart disease by 30%, the risk of diabetes by 27% and the risk of breast and colon cancer by 21 to 25%[49].

[48] Source: World Health Organization (2016), *World Health Statistics 2016*, Geneva
[49]Source: World Health Organization (2016) Prevalence of insufficient physical activity, http://www.who.int/gho/ncd/risk_factors/physical_activity_text/en/ [50] Source: World Health organization (2016), World Health Statistics 2016, Geneva

Fevers

Fevers are very common in many districts of Punjab and often include ordinary fevers, typhoid, influenza and other seasonal fevers, including malaria. These fevers are the result of infections, unhealthy living and imbalanced diet, leading to low resistance. The causes of these fevers have become almost chronic and it is extremely difficult to eradicate them. In the past, these fevers were cured with various medicines, including quinine.

Respiratory Diseases

Respiratory diseases, which are the most common diseases in Punjab, are responsible for many deaths as well. These are mainly caused by different types of smokes, smog, fumes vapors of chemical gasses releases by the burning of charcoal, coke, etc. these gasses pollute the surrounding atmosphere all the time, thus affecting the health of the people. Smoke irritates the eyes, the throat and the lungs constantly. The insanitary conditions in the slums also cause the outbreak of these diseases.

The extensive smog experienced in Lahore in November 2016 kick-started a long overdue conversation about the importance of air quality in the country. The diseases that are causally linked with exposure to ambient PM 2.5 are ischemic heart disease, cerebrovascular disease, chronic obstructive pulmonary disease (COPD), lung cancer, and lower respiratory infections (LRI's). A recent report by the State of Global Air states that while 92% of the world's population lived in areas with unhealthy air in 2015, China, India, Pakistan and Bangladesh experience the most extreme concentrations of air pollution.

In 2015, 4.2 million deaths took place due to long term exposure to PM 2.5, accounting for 7.6% of global deaths. Pakistan currently has the 5th largest number of deaths because of PM 2.5 exposure and is ranked 6th in the world for the most number of deaths from COPD (Chronic obstructive pulmonary disease0 in 2015.

To avoid such there should be a proper disposal of gases entering the atmosphere and any harmful effluents should be removed to far-off places, where they do not adversely affect the health of the people. Proper diagnostic facilities available in dispensaries and at the public health centers, hospitals, provision of institutional facilities, domiciliary treatment and follow-up of cases from diseases such as tuberculosis and chronic bronchitis have brought down the mortality figures considerably and these diseases have topped the chart for many years now, signaling that increased efforts and focus are warranted.

Communicable Diseases

Communicable diseases still account for 38 percent of the total burden of disease in Pakistan. The main ones, in terms of their disease burden, include diarrheal diseases (12.5 percent of total BOD), respiratory infections (8 percent of BOD), tuberculosis (5 percent of BOD), the childhood cluster of immunizable diseases (measles, pertussis, poliomyelitis, diphtheria, tetanus; 6.7 percent of BOD), and sexually transmitted diseases (2.2 percent of BOD). Diarrheal diseases, respiratory infections, and the childhood cluster of immunizable diseases, take their greatest toll from young children (under five years of age). Tuberculosis affects both children and adults.

Integrated Management of Childhood Illness (IMCI) approach was piloted in a few Districts of Pakistan and has been proved to be a cost effective strategy. This could be scaled up in the whole province of the Punjab.

The government should adopt a very proactive stance on preventing and treating communicable diseases. An important part of this effort should be health education together with public health measures. Government also should seek actively to identify and treat those already affected by communicable disease, and to maintain high levels of immunization coverage on a sustained basis. Government's health staff should take advantage of all available opportunities. For instance, when a mother brings her sick child to an outpatient facility for treatment, the staff should seize the opportunity to find out whether the child has been fully immunized. Presently only 33% of the natal care is being provided by a skilled birth attendant. 15% of the pregnant women suffer from pregnancy related complications and only 5% of these reach a health facility (UNFPA: CPA Report 2000). Therefore, RHCs should be equipped to provide Basic EmONC and comprehensive EmONC services should be provided at THQ and DHQ hospitals. Most interventions to address communicable diseases, and maternal and child services, would be provided most cost effectively at the lower levels of the health system (in the household themselves, in the communities, and at first-level health care facilities). However, reliable referral services are also needed to handle emergencies and more serious cases. For most people in the Punjab, the first level of referral is Tehsil and District Headquarters hospitals.

Non-communicable diseases

Cardiovascular diseases account for another 10 percent of the total BOD. Other important problems are Diabetes Mellitus, cardiovascular diseases, Rheumatoid arthritis, and different causes of blindness, Obesity, Mental and conditions associated with aging (geriatric problems). These diseases are less easily treatable; the most promising approach would be health education campaigns to prevent their onset and promoting healthy life style behaviors. Anti-smoking campaigns and nutrition education to promote a healthier diet would be the main types of health education aimed at preventing cardiovascular diseases.

Also important are injuries, which account for about 11 percent of the total BOD. Their incidence could be reduced through public education programs on accident prevention, better work safety requirements, better automobile safety requirements, and other similar preventive measures.

Urinary Tract Infections
Urinary tract infections ("UTI") have a large incidence of disease in Pakistan and while no national registry exists to know the prevalence nationwide, more than 1.3 million cases were reported in Punjab alone through the provinces district health information system in 2015[88].

[88] Source: DHIS 2015

Factors Influencing Demand

Various direct and indirect factors may be identified as attributing to the growing demand for healthcare services related to kidney and liver ailments. These are discussed in detail below.

Population Growth

Pakistan's population is estimated at about 195.4 million, growing at the rate of 1.89% per annum. At this rate, which is comparatively higher than regional South Asian countries, the population is expected to cross 200 million by 2018 and cross 231 million by 2025.

Population of Punjab is also seen to grow at the rate of 1.77%, with Lahore growing at 3.32% per year. All things remaining equal, growth in population is directly proportional to the growth in demand for all goods and services including kidney and liver healthcare services. In a country where healthcare facilities are already scarce, such high population growth rates can put additional pressure on demand which consequently also means higher service rates.

Growing Income and Urbanization

Population of Pakistan is becoming more urbanized, growing at a higher rate than overall population growth. Despite the temporary slowdown in recent years, Pakistan has witnessed positive growth in economic and industrial activity during the last five years as its GDP growth from FY2012 to FY2016 averaged at 4.01%. However, the growth rate is likely to improve and continue into the future on account of improvement in energy production, security situation and relatively stable macroeconomic situation of the country. The World Bank has projected Pakistan to maintain GDP growth rate of 4.8% in 2017, with a gradual increase in the growth rate over the subsequent years[108]. Annual per capita income in Pakistan for FY2016 was USD 1,561 compared to USD 1,323 in FY2012[109]. Therefore, disposable income for Pakistanis has risen over the years on the back of growing economy. As of 2011, International Monetary Fund ("IMF") and the World Bank ("WB") have also upgraded Pakistan's ranking from low income to lower-middle income group.

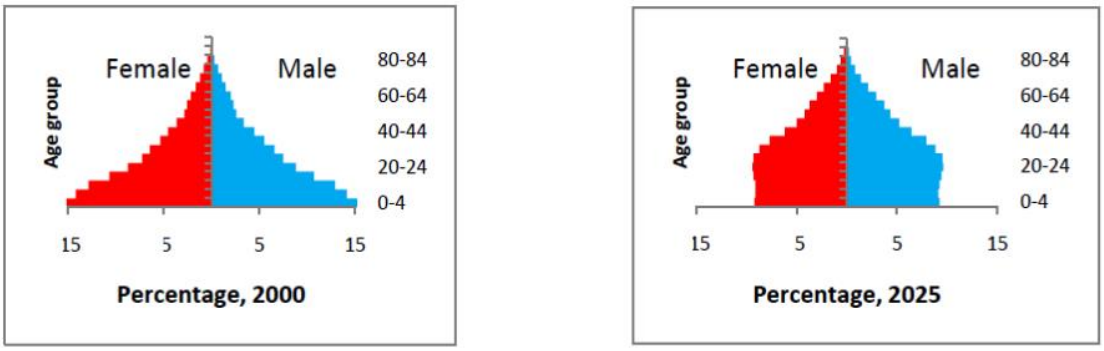
Increasing income and purchasing power is a major driver of demand for healthcare services. Economic development results in greater incidence of non-communicable diseases of kidney and liver due to rapid urbanization, change in life styles and change in mortality and disease pattern. Rapid urbanization which has accompanied economic progress in Pakistan has brought both opportunities and challenges for healthcare provision. It promises better access to healthcare services and other social and development services; however, recent evidence shows that migrant population to urban settings is more susceptible to various health conditions and disease[110].

Main contributing factors for this change are change in food intake from high fiber diet, balanced and regular intake to consumption of refined and unhealthy foods at irregular times. Reduction in physical activity is also an important contributing factor as people forego healthy commuting options including walking and cycling in favor of faster and convenient automobiles.

Ageing Population

Even though the population of the country is relatively young with a median age of 23, the young composition is expected to change in the future. There has been a relative reduction in fertility rate over the past decade. Despite high population growth rate, the reduction in fertility rate results in fewer child births to replace the aging population. As life expectancy increases; it leads to the growth of the proportion of older people in the population. Decrease in population growth rate and increasing life expectancy are expected to result in significant increase in the population of those people who are over age of 50. Proportion of population 50 years and older is particularly more prone to kidney and liver diseases.[111]. These changes are expected to significantly alter the age group structure of the country (See Fig 5.1 below).

Fig 5.1: Population Pyramid of Pakistan



Source: The World Bank[112]

[108] Source: The World Bank (2014) [Online] *Pakistan Economy – Need To Accelerate Growth*, http://www.worldbank.org/en/news/press-release/2016/04/28/pakistans-economy-need-to-accelerate-growth [109] Source: *Pakistan Economic Survey 2015-16* [110] Source: World Health Organization (2012) *Effects of Urbanization on Incidence of Non-communicable Diseases*, Cairo [111] Source: Government of Punjab (2010) *Population Situation in Punjab*, Lahore

Social and Lifestyle Changes

Pakistan has rapidly transformed since the start of the new millennium which has resulted into a wide array of social and lifestyle changes especially in the urban areas. These changes can be widely attributed to the country's largely young population who now demand a different set of consumer goods and lifestyle choices from earlier generations of Pakistani citizens. Consumers have now become more fashion oriented, crave more entertainment and experience based activities, and are more likely to spend on luxury goods such as expensive automobiles and electronics which subsequently has led to a booming consumer market in the country. While some of these changes are largely positive towards the growth in the overall economy - modern consumption patterns also led to a scenario which is an ideal breeding ground for many kidney and liver diseases.

A prime example of this has been the increase in the number of fast food outlets in most of Pakistan's urban areas subsequently leading to a higher consumption of unhealthy foods. In addition to this, frozen food products are becoming a part of modern eating habits among the urban areas especially the children aged below 10, and there has been an exceptional growth of consumption of soft drinks as per witnessed by the increase in production capacity in the food & beverage industry. While the consumption of these goods in moderation is a part of modern urban life around the world, in Pakistan these goods are now becoming a part of everyday life; and in many cases a substitute for healthy living habits - which has the potential to create a number of problems related to kidney diseases including the development of diabetes type 2 and kidney stones amongst the population. The effects of urbanization and poverty are also leading to increasing levels of stress among the countries population which leads to the development of hypertension – a medical problem that can lead towards the development of chronic kidney disease and subsequently ESRD.

In addition to consuming unhealthy foods and beverages, the country's largely young population are also more prone towards the consumption of illicit drugs, cigarettes, and alcohol in their lifetime compared to earlier generations- and with the increase in stress and depression levels in Pakistani society; it is common for people to turn towards consumption of these narcotics as a method of escapism. Alcohol consumption has increased in Pakistan over the past few decades especially among the youth and given that alcohol abuse is one of the leading causes of liver cirrhosis; it is likely that the incidence of liver disease could further worsen in Pakistan if alcohol abuse patterns continue to increase beyond current levels. It must be noted; however, that compared to most countries in the region, Pakistan

has a much lower per capita alcohol consumption rate, with the average Pakistani consuming 1.2 litters of alcohol per annum[113].

Being a major drug transit route for the international drug market combined high levels of poverty, feeling of hopelessness amongst the poorest segments in the population, and depression in our society, the populace of Pakistan is highly susceptible to drug addiction. According to the Pakistan Anti-Narcotics Force, there are 7 million drug addicts in Pakistan and nearly 700 people die from drug consumption related complications every day. The consumption of drugs such as heroin, crystal meth, ketamine and opium often done through injections; leading to rise in the number of communicable diseases spreading such as hepatitis and HIV since large percentage of drug users share needles to save money and buy more even drugs. According to a study done by Memon et al 2012, Injection drug users ("IDU"'s) are 46 times more likely to have the hepatitis virus than healthcare workers, and IDU's have the highest prevalence of hepatitis B and C than any other group[114]. Given Pakistan's largely youth population and its alarmingly high drug consumption rates, the pattern of disease related to hepatitis is likely to rise. In addition, the changing attitudes and increase in the activity of sex with multiple partners amongst the youth and lack of knowledge around contraception and sex education can also increase chances of being infected with communicable diseases such as urinary tract infections, hepatitis, HIV, syphilis and other sexually transmitted infections ("STI's).

Finally, the lack of physical activity and exercise is also a major cause for concern as this can lead to the onset of kidney related problem; especially with respect to hypertension and diabetes. Urbanization usually leads to a faster pace of life and residents are likely to travel on quicker modes of transportation like automobiles rather than cycling or walking. Lack of physical activity is particularly a major issue among Pakistan's adolescents who spend more time indoors playing video games and watching television instead of playing outside and participating in other outdoor activities

[112] Source: The World Bank (2011) *Non-Communicable Diseases - Pakistan's Next Major Health Challenge*

Part 1:
Essential Package of Health Services for Primary Health Care in Punjab

Part 2:
MSDS Reference Manual for BHUs

Part 3:
MSDS and Indicators for Rural Health Centers (RHCs)

Part 4:
Monitoring & Evaluation

Part 5:
Management

Part 6:
Health Sector Landscape in Pakistan Projects & Programs

Part 7:
Social Sector & Health Sector Challenges

Part 7
SOCIAL SECTOR AND HEALTH SECTOR CHALLENGES

(Weightage 10%)

INTRODUCTION

Rationale

Collectively, the people of Punjab are healthier now than at any other point in history. However, despite this progress in the recent decades, there are some important differences in the health of individuals and populations. So whilst the overall health has been improving, the health of the least and less well off has been getting worse. This is what we mean by health inequalities.[1] A number of districts in Punjab experience greater levels of deprivation, and as such experience a greater burden of poor health within the population. Health is influenced by many factors including healthcare services (the focus of much of this strategy document), individual behavior as well as the wider determinants of health such as literacy, income, employment, housing, security, macroeconomic situation and environmental factors.[2] Tackling the determinants or causes of health inequalities requires a different approach to simply tackling the determinants or causes of ill health. It is about ensuring fairer and more equal society, where people with the least access to resources and opportunities are able to enjoy the standard of living and the opportunities that many take for granted.

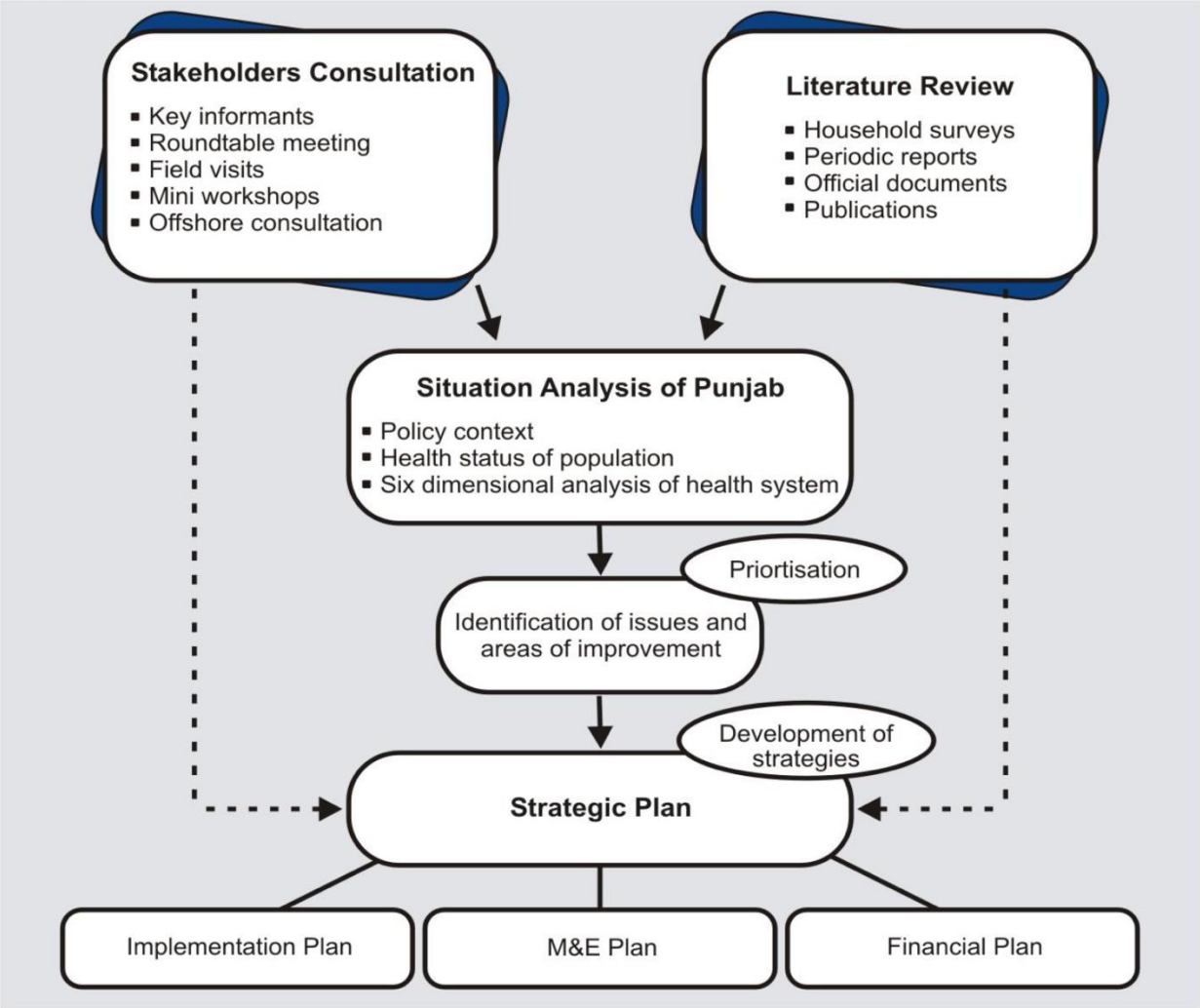
The Punjab Government is committed to the principle of universal health care for all members of the society - combining mechanisms for health financing and service provision - and improving the health status of the population. In 2010, Draft National Health Policy was developed but erstwhile to its approval, the 18th Constitutional Amendment decentralized health as a subject to the provinces. There was a need of reviewing the current situation of health sector in Punjab and establishing priorities for delivery of healthcare services. Punjab Health Sector Strategy (hereafter referred as “the Strategy”) is designed to pull together the big strands of work that will help make Punjab a healthier place to live in years to come. The Strategy will support the Department of Health (DoH) to progress further with a sense of direction, purpose and urgency by prioritizing policy related interventions consistent with availability of financial resources. In keeping with aid effectiveness principles, development partners will be encouraged to align their investments with the Strategy.

However, a strategy alone will not achieve this. If we are to be successful we must use all the means at our disposal to implement the measures set out in this strategy in order to achieve the targets. Whilst this is a health sector strategy, it is important to recognize that we have to engage other governmental departments, community groups, civil society organizations and above all the general public. Improving health is not just the business of the Department of Health, but everybody.

Process of Strategy Development

The Strategy is the outcome of a great deal of thinking, debate, evidence gathering and consultation across a wide range of stakeholders including governmental departments, health managers, service providers, private sector organizations, NGOs, development partners, individuals and local communities. This has been accompanied by national and international experience and evidence, as there are many interventions from which we can learn a great deal.

Figure 1: The Process



The first step in development of the Strategy is a participatory analysis of current situation of various aspects of health sector in Punjab (Refer to report on “Situation Analysis”). Since, it is important to learn the lessons from implementing previous strategies and to build an evidence-base of what has worked in context of Punjab. Therefore, Situation Analysis lays out the policy context of health interventions in Punjab and analyses the major factors contributing to results in the health sector. The report includes quantitative and epidemiological data as well as information on quantitative and felt needs regarding the health situation, main risks and determinants, trends, and how disease impacts on different groups within Punjab (by gender, age, socio-economic status, geographical location, ethnicity, etc.). Situation Analysis further contains a six dimensional analysis of healthcare in Punjab. The six dimensions reviewed are Service Delivery, Governance and Accountability, Health Workforce, Health Information Systems, Essential Medicines, and Healthcare Financing.

Box: Themes arising from consultations

- Action and accountability on health is urgent and long overdue in Punjab.
- Action will need strong contribution from outside as well as within the health sector, and may involve new partnerships.
- A coordinated and comprehensive approach is needed, rather than the piecemeal approach adapted to date.
- Strong leadership will be needed to drive and coordinate action and achieve targets.
- There will need to be stronger partnerships between all tiers of government, non-government organizations, the private sector and communities, as well as action by individuals and families to improve their own health.
- Emphasis should be placed on the social determinants of health within the Strategy. These determinants should be linked with priorities and action.
- Achieving results will require sustained and significant investment for many years but will ultimately be cost effective and deliver benefits for individuals, families and communities as well as governments.
- Through the situation analysis of Punjab, key issues, challenges and areas of improvement are identified. This information has formed the basis for planning a pertinent, appropriate, and comprehensive health sector strategy. The Strategy Development Team received very positive and encouraging feedback from its consultative processes, confirming broad support for the approaches proposed in the discussions. The important themes emerging from these discussions are outlined in Box 1, and they include a range of calls for action on guaranteeing equitable healthcare.

Current state of affairs in Punjab

The burden of ill health on the population of Punjab is longstanding and well documented. There is now a greater focus on improving the health of our population than ever before. However, it is unlikely that the province will achieve health related Millennium Development Goals (MDGs) by 2015. There has been some improvement in terms of health outcomes. Maternal and child health services have been underemphasized within the health system, resulting in a high rate of maternal and child deaths. From childhood to old age, communicable diseases account for a large proportion of deaths and disability in the province. Among children, burden of disease is largely associated with diarrhea, pneumonia and vaccine preventable diseases, whereas in adults, TB and hepatitis are major contributors to communicable disease burden. While communicable diseases still account for a dominant share of morbidity and mortality in the province, prevalence of non-communicable diseases (NCDs) is rising rapidly. NCDs and injury are amongst the top ten causes of death and disability in Punjab. Yet few significant attempts have been made to study NCD patterns in Punjab and existing data sources do not monitor the incidence and prevalence of NCDs very well. Nutritional status of the population is generally poor especially for the children, women of reproductive age and the elderly. Similarly, micronutrient deficiencies are also frequent and there is widespread lack of awareness about malnutrition.

Challenges in Service Delivery

- Access to healthcare is a major challenge in achieving health outcomes for the

populations. Limited access to essential health services is mainly affecting the population residing in rural areas due to persistent urban-rural bias exists in physical accessibility to health services.

- The absence of a well defined package of services to be delivered by the public sector and specific areas where the private sector will be involved is a serious impediment to the achievement of universal coverage of health services to the population.
- There is a glaring absence of urban primary health care in the public sector that is a necessity as life styles urbanize and life expectancy increases. There are changing patterns and burden of nutritional, communicable and non-communicable diseases, which can be managed at the primary and preventive level.
- Serious gaps exist in the availability of emergency services at all levels due to lack of availability of skilled staff, equipment, emergency drugs and consumables, and ambulance services. While in the rural communities, there is lack of patient transport services to the health facilities.
- Quality of health care both at the public and private health facilities remains largely questionable. Implementation of government notified MSDS has not really taken place in the true context at the primary and secondary level, while MSDS for tertiary level facilities and private sector have yet to be officially notified.
- Preventive component of primary healthcare is strengthened through vertical programmes but there is lack of functional and management integration among programmes with similar focus.

Challenges for efficient health sector governance and accountability

- Health department is overstretched managing service delivery in 36 districts while attending to multiple roles including policy making, planning, resource allocation, responses to emerging situations and leading priority government programmes. Similarly, Health Department is overstretched in its responsibilities especially due to direct management of health programmes, lacking data systems to guide implementation of health policy, weak monitoring of outcomes and response to emerging situations and weak institutional capacity to orchestrate implementation of health policy through decentralization and autonomous entities. Further, Population Welfare Department is providing services in parallel to service delivery arrangements of Health Department. There is an emergent need to merge Health and Population Welfare Departments to avoid duplication of efforts and resources.
- Current centralized system has leaded to systemic delay, lack of initiative at lower tiers and loss of information in decisions making. Autonomy given to hospitals suffered from roll back in some cases. Decentralization could not become optimally functional due to absence of elected local governments since 2009. After the 18th constitutional amendment, the province has been bequeathed with additional responsibilities in the shape of federal health programmes and health policy and planning responsibilities.
- Regulation of healthcare delivery remains weak in Punjab in the absence of well-developed regulatory framework and limited outreach of regulatory bodies. Currently there is no registration and licensing system for private health facilities.

- Institutional and individual performance remains obscure in Punjab and incentives for performance are consequently affected and remain weak. This in turn adversely affects institutional and individual performance toward achievement of health goals.
- There is a serious lack of capacity to produce nurses and allied health professionals and this further aggravates the poor availability of skilled human resource in difficult areas.
- Accountability for performance suffers due to absence of appropriately delineated processes and data. Weak systems also lead to varied application of accountability. Further, corruption in the public sector is perceived as widespread, systemic and deeply entrenched at all levels. Lack of standardized procedures for internal means of supervision and control, minimal information provision to the public, protection of government decision and processes from critical scrutiny are the key weaknesses leading to corruption. Traditional public accountability mechanisms such as expenditure audits and legislative reviews seem unequal to the task of ensuring accountability at the micro level.
- Perks and privileges system plays a factor in corruption in many ways. There are significant differences between the benefits of the same grade in different postings leading to political interference and corruption through influence.

Challenges for availability of adequate health workforce

- There is absence of well-defined, coherent, need based and demand driven human resource strategy, policy guidelines, adequate institutional structures and mechanisms, standard protocols and procedures relating to HR development and management. Similarly, coordination mechanisms between HRH-related constituencies reflect a fragmented structure.
- At the level of production, education for all cadres including doctors, nurses (including midwives, LHVS and nurse auxiliaries) and allied health professionals has its challenges. While the number of medical colleges and doctors have increased manifold in the recent years, questions of quality still remain due to outdated curricula and inadequate faculty who are not trained in teaching methodology. Further, the training of doctors and nurses does not include the “community and needs” oriented perspective.
- There are a number of impediments to acquisition of skills by workforce in Punjab. There is a lack of induction and orientation trainings for different cadres in the health sector. Further, continued medical education (CME) programmes are deficient in the province.
- Health workforce is deficient in many areas in Punjab. There is a serious lack of capacity to produce nurses and allied health professionals and this further aggravates the poor availability of skilled human resource in difficult areas.
- Staff shortages are evident at all levels of healthcare delivery but are most prevalent outside large cities especially in rural ad hard-to-reach areas leading to impaired provision of essential life-saving interventions and effective response to various health challenges. Several factors contribute to this shortage and migration of health workers to industrialized countries as well as exit from health sector to other professions has proved to be a significant factor. Similarly, rapidly increasing population of the province leads to increased demand for services, which further exacerbates the existing shortages of health workforce.
- Retention of HR is a major issue as there is dissatisfaction among doctors and allied health

professional's community due to non-favorable contractual recruitment policy. Poor remuneration in public sector has resulted in dual job holdings by the healthcare providers, resulting in poor attention to their jobs in public hospitals.

- Health management, though an important field, is not taken as a specialized field and there are few opportunities for quality professional training in health management in the province.

Challenges in Health Information Systems

- Overall information system in the province is fragmented as existing systems for facility based and community based information suffer lack of integration at district level. Therefore, planning process aiming at informed decision-making remain without this important component of analysis.
- There is no standardized and regular reporting mechanism for autonomous tertiary hospitals in Punjab. Similarly, current HIS does not cover private sector hospitals and healthcare facilities, which deliver healthcare services to a larger proportion of population in Punjab.
- There is no integrated disease surveillance system in the province, which is owned and implemented by the DOH or DGHS. WHO introduced Disease Early Warning System (DEWS) has limited implementation and poor integration in public health facilities. Further, there is no inclusion of private sector for establishing an extensive disease surveillance mechanism in the province.
- Despite a number of surveys and research studied conducted every year, there is no mechanism for central storage of data at the provincial level.
- There is no mechanism available for public dissemination of performance of health sector based on information collected through health information system.
- Health related research in the province is still not catering to the research and information needs of the province. Research infrastructure in the province is poorly developed due to lack of expertise, resources and incentives

Challenges in Essential Drugs and Medical Technologies

- Most public sector hospitals and healthcare facilities in Punjab suffer from frequent stock-outs of essential drugs. Issues in supply chain management and lack of quantification skills among the facility staff, cumbersome procurement process, lack of budget, inadequate storage capacities and delayed supplies are associated with stock outs of essential medicines.
- There has been no periodic review of Essential Drugs List (EDL) since 1998. Currently, EDL is out- dated and there is no mechanism for periodic update of the EDL.
- There is lack of storage capacities at district levels as Medical Store Depots (MSDs) are not available in number of districts in Punjab. Similarly, there are poor storage capacities for vaccines, contraceptive and medicines in the districts, resulting in interrupted supply of the essential medicines to the healthcare facilities.
- Drug regulatory system in the province suffers from serious issues of quality because of problems of inadequate staff, low skill level, lack of proper equipment, and inadequate

implementation of existing laws. Large quantities of spurious drugs are being supplied in the market as well in the public hospitals. Further, there is little control on the quality assurance of alternative drugs used by hakims and homeopaths.

Challenges in Healthcare Financing

- Health care in Punjab is underfunded (with low government funding); inequitable (overly dependent on out-of-pocket household expenditure); low in population coverage; and low in productivity. Per capita government investment in the health is low as per international standards, currently estimated to be between $6.5 and $7.5 per person per year in 2010-11.
- Out of pocket (OOP) expenditure in Punjab is high and OOPE further increases poverty and reduces access to quality services. OOPE is over 70% of the total health expenditure in Punjab.
- Measurement of efficiency, effectiveness and economy are not part of regular management practice. Funds utilization rate at the provincial level is between 70% and 80% of budget. As per 2007- 08 and 2008-09 data, around 36% of the districts were able to utilize more than 90% of the original budget allocated. Overall, the budget utilization ratio in districts on health is below 90%.
- The budget allocation is geared towards tertiary care and 50% of the expenditure is at the provincial level (mostly tertiary care), as a result the secondary and primary care services suffer from a serious lack of resources.

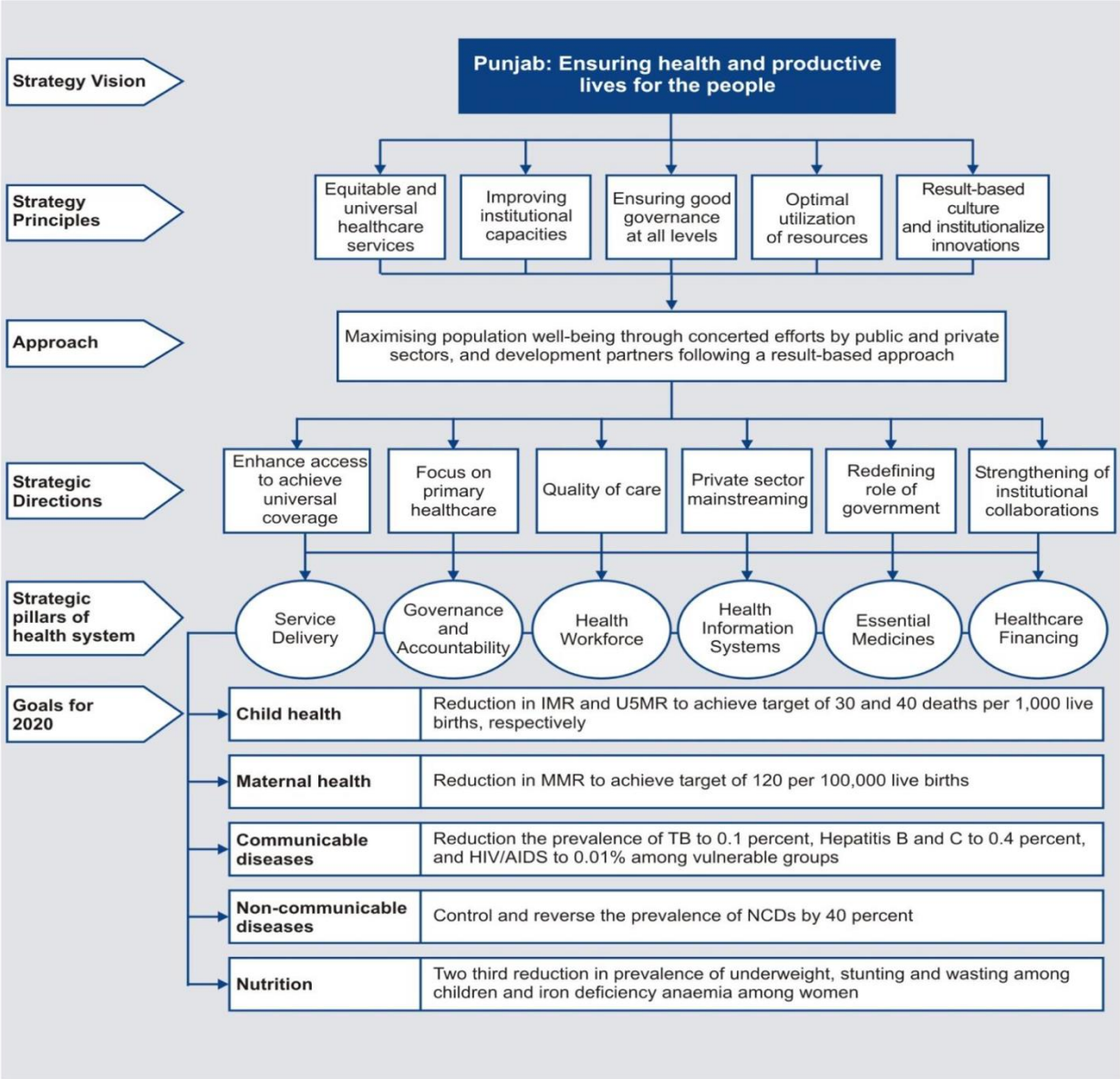
- The execution rate of salary budget is above 90% while for the non-salary it is around 63%.

- The proportion of development expenditure at the district level is 11% out of total development expenditure.
- Provision of health services in the public sector is mainly by the department of health with comparatively less emphasis on purchaser-provider split. Little investment is made on contracting of health care services.
- Private Public Partnership options for off budget investments in areas such as Medical Education and specialized curative care have not been explored. These may enhance resource availability in a resource starved situation and also bring about higher levels of entrepreneurship and efficiency gains in the health care system, whereas, government may take care of equity considerations through subsidization or voucher schemes.

Strategic Plan – The Roadmap

The purpose of the Strategy is to improve the health, wellbeing and life expectancy of the people of Punjab, and to remedy disadvantages in health status across various population groups. Within this context, the components of the Strategy are based on the roadmap for action outlining the themes, targets and strategic directions that will bring about the desired results.

Figure 2: The Roadmap for action



Principles

- The principles underpinning the Strategy have been identified from evidence from the research literature, and confirmed through consultations conducted by the Strategy Development Team. In this Strategy, these principles guide actions in relation to enhance health status and productive lives of the people of Punjab.
- Equitable and universal healthcare services – by building a roadmap with staged approaches for matching differential needs with recognition and response to the causes and effects of health inequality for a wide range of population groups, especially for the vulnerable and disadvantaged.
- Improving institutional capacities – by means of progressive development and retention of high quality individual and institutional capacities in the public sector.
- Ensuring good governance at all levels - promotion of meritocracy and transparency in every aspect of a responsive health care management.
- Optimal utilization of resources – through adoption of health outcomes as achievable programmatic gains by identifying appropriate solutions and efficient deployment of available physical, financial and human resources.
- Promotion of a results based culture and institutionalization of innovations – for garnering maximum health benefits in areas requiring urgent actions. Targeted and innovative interventions drawing improvements in the health sector performance should be institutionalized for providing immediate benefits.

Strategic Directions

- Based on situation of health status of the people of Punjab and performance of health sector, strategic directions to guide the process of strategy development are set six fold:
- Enhance access to achieve universal coverage – by increasing operations in multiple dimensions to remove barriers for meeting the specific needs of various population groups.
- Focus on primary healthcare – will be rolled out through improving public expenditures aiming at delivery of essential package of health services for all members of society.
- Improve quality of care – through adoption of service standards and making investments in strategic health infrastructure as well as key areas of human resource development.
- Private sector mainstreaming – for maximizing health benefits for the population, specifically highly specialized care; and optimizing their service delivery through provision of appropriate regulatory framework.
- Redefining role of government– from provider of healthcare services to purchaser and regulator through taking up a facilitating position.
- Strengthening of institutional collaborations– for achieving efficiency gains, which are otherwise beyond the scope of health sector.

Expected results

- Based on the roadmap for action, the Strategy will be providing a comprehensive motivation for actions in health sector of Punjab and its wide scope will be focusing on outcomes for each of the six pillars of health system, which shall be achieving the following health-related results:
- Child health – reduction in IMR and U5MR to achieve target of 30 and 40 deaths per 1,000 live births, respectively
- Maternal health – reduction in MMR to achieve target of 120 per 100,000 live births
- Communicable diseases – Reduction the prevalence of TB to 0.1 percent, Hepatitis B and C to 0.4 percent, and HIV/AIDS to 0.01% among vulnerable groups
- Non-communicable diseases – Control and reverse the prevalence of NCDs by 40 percent
- Nutrition – Reduction in prevalence of underweight from 30.1 percent to 10 percent, stunting from 17.6 percent 6 percent, wasting from 14 percent to 5 percent among children, and iron deficiency anemia among women from27 percent to 10 percent

Strategy for 2020

Strategic plan is based on issues and areas of improvement identified through the situation analysis of the province. Strategic Plan contains strategies for achieving overall goals in each pillar of health system as well as laid down policy objectives to transport principles and directions into the realm of planning, programming and budgeting that circumscribes the domain in which various programmes, initiatives and activities will be carried out. Details of strategic actions required for each proposed strategy is also provided for facilitating the implementation and subsequent monitoring. Achieving these goals will require a staged approach over time, including substantial new injections of funding and sustained effort.

Service Delivery

Outcome I: Improved access and quality of healthcare

Objectives

- To build an efficient, safe and effective health services delivery system which caters to the specific needs of all population groups with enhanced emphasis on, emergency care, family planning and nutrition services
- To reduce the morbidity and mortality related to communicable and non-communicable diseases (NCDs)
- To raise community awareness for health promotion and disease prevention
- To institutionalize quality of care in the health services delivery system

Strategies	Strategy Actions
1. Institute Essential Health Services (EHS) Package for primary (including facility-based and outreach services), secondary and tertiary level healthcare facilities	Develop Essential Package of Health Services (EPHS) encompassing infrastructure, workforce, information systems, essential medicines, supplies and equipment along with costing.
	Conduct periodic health facility assessment survey of all primary and secondary healthcare facilities
	Reposition primary and secondary level facilities on priority basis to deliver EHS package
	Engage community and civil society in delivery of healthcare service
2. Establishment of district level health complexes[3] in a phased manner	Upgrade existing DHQ hospital to district health complexes having teaching and training facilities for medical students, nurses and allied health professionals through private sector involvement
	Develop two-way linkages for patient referral, staff skill building and clinical supervision through networking of all primary and secondary level facilities with the district health complex
3. Strengthen urban primary health care	Develop urban primary healthcare network involving both public and private sector
	Operationalize and upgrade municipal health facilities in urban areas
	Enhance support to private sector for service delivery in urban areas through Punjab Health Foundation[4]
	Develop communication strategy to raise awareness about urban primary healthcare
4. Ensuring free of cost, level-specific, 24/7, quality emergency services	Strengthen and upgrade emergency care units at public sector facilities through assessed needs of infrastructure, workforce, medicines and consumables, equipment and ambulance services
	Prepare emergency readiness plans
	Provide free of charge emergency care services to all the patients
	Develop mechanism for transportation of rural communities to health facilities through

	community emergency ambulance services
	Build integrated ambulance services for transportation of maternal emergencies
5. Focus and strengthen MNCH, family planning and nutrition services at all levels as part of EPHS	Integrate all MNCH, family planning and nutrition activities at community and primary health facility level as part of EPHS
	Create referral backup for community-level health workers, like CMWs to cater maternal complications
	Strengthen routine immunization services for full immunization of all children and women
	Provide family planning services through uninterrupted supply of family planning commodities to all the primary and secondary level health facilities and outreach workers
	Upgrade a minimum of one third of the BHUs to BHU-plus model for delivery of services on 24/7 basis in 20 low performing districts
	Ensure full package of 24/7 Basic EmONC services[5] at all RHCs and develop RHCs as hub of primary health care system; with services, management and supervision support fanning out to the adjoining BHUs
	Upgrade 2 RHCs to RHC-plus model for provision of 24/7 Comprehensive EmONC services in each of 20 low performing districts of Punjab

	Establish blood banks in secondary level healthcare facilities lacking such arrangements and ensure safe blood transfusion in all existing public and private blood banks
	Strengthen inflection control and waste management practices at all public and private sector health facilities with implementation of standard protocols and regular assessment
7. Strengthen prevention and management of non-communicable diseases (NCDs)as part of EPHS	Commission research on NCDs trends and associated risk factors, disaggregated for gender and geographical prevalence
	Build capacity of facility-based and outreach staff for diagnosis and management of NCDs
	Provide screening services for NCDs at all RHCs, secondary and tertiary hospitals
	Strengthen disease surveillance and epidemiological unit at the provincial and district level
8. Strengthening of nutritional services for mothers and children as part of EPHS	Integrate nutritional services in pregnancy care both at health facilities and through outreach workers and provide management of severe acute malnutrition in targeted health facilities.
	Ensure availability of nutrition supplements and build capacity of healthcare providers, both public and private, on nutritional assessment and management of malnutrition
	Protect all pregnancies through provision of micronutrient supplements including iron, calcium, zinc, vitamins and folic acid
9. Strengthen	Develop a communication strategy to raise awareness among population about communicable diseases, their modes of spread and precautionary measures

health communication	Develop a communication strategy to raise community awareness on risk factors associated with NCDs
	Raise community awareness through mass media campaigns to motivate household level action against malnutrition
10. Integration of preventive healthcare (vertical) programmes	Ensure functional and managerial integration of vertical programmes under EPHS at primary level and for the interim period regroup programmes having common objectives[8]
	Optimize healthcare service delivery arrangements through adopting integrated models, like SRH-HIV and family planning service for reproductive health
11. Institutionalise inter-sectoral collaboration for better health outcomes	Energize existing mechanisms of inter-sectoral and inter-departmental collaboration at Planning and Development Board
	Promote partnership with non-governmental organizations and international agencies for concerted action to improve health
	Institutionalize operational mechanisms for inter-sectoral coordination at district level
	Strengthen school health services in collaboration with Education Department and include a strong focus on risk factors associated with communicable and NCDs like personal hygiene, physical activity, tobacco use and dietary habits
12. Implementation of Minimum Service Delivery Standards	Revisit MSDS at primary and secondary level and develop MSDS for tertiary level hospitals in public sector and incorporate in EPHS
	Apply MSDS for private sector through Punjab Healthcare Commission and support its
(MSDS) and standardization of hospitals and healthcare facilities as part of EPHS.	implementation through Punjab Health Foundation
	Integrate MSDS into EPHS and ensure application throughout the province
	Upgrade health facilities to achieve MSDS for both physical and human resources
	Develop guidelines on quality measures at provincial level and institute clinical audits and clinical assessments through Punjab Healthcare Commission
	Develop and implement standards for brining culture of accreditation in the province through support of National Standards Committee on Healthcare

Governance and Accountability

Outcome II: An efficient system of health sector governance, accountability and regulation

Objectives:

- To rejuvenate management of health organizations and facilities in Punjab
- To create a higher capacity in DoH for its key roles in health policy making, programming, human resource management, monitoring and evaluation
- To reorganize DGHS and equip it with appropriately designed systems, data and capacities for orchestrating implementation of health policy initiatives in the province
- To seek efficiency, effectiveness and responsiveness gains through decentralized health management and service delivery, optimal autonomy to decentralized districts and autonomous health facilities and integration of vertical programmes
- To establish a robust, comprehensive and responsive regulatory regime to provide optimal regulatory environment to healthcare delivery in the province

Strategies	Strategic Actions
1. Restructure Department of Health for a stewardship and monitoring role	Functional review of Health Department to study organizational structures, mandates and capacities with recommendations for reform in view of redefining of DoH's role emphasising its stewardship, policy formulation, resource allocation, regulation and oversight roles
	Reorient departmental systems toward changing role as a steward of health sector, with responsibilities for leadership, financing, regulation, setting targets, programming and monitoring of outcomes
	Build departmental capacity in policy and programming
	Strengthen Punjab Health Sector Reform Program as a Strategy and Policy Unit to perform

	stewardship role of present strategic plan updating and implementation
	Create of a system of evidence based health policy and programming, including methods for use of DHIS, technical studies and evaluations
	Develop essential databases as decision support systems including health workforce, disease monitoring, programme monitoring, health monitoring, asset accounting, procurement and logistics, performance measurement and resource utilisation
	Develop mechanisms to assess expenditure efficiency with legally binding reporting requirements from all implementing agencies
	Reassess key programmes for achieving health goals
	Create systems of internal communication between health sector organisations to ensure better uptake of policies
	Create a Health Strategy Ministerial Board with co-opted members from health professions of both public and private sector for overall monitoring of achievement of health sector goals
2. Restructure DGHS to orchestrate implementation of health policy initiatives	Functional review of DGHS to study organizational structures and mandates, and recommendations for reform and capacity building
	Implementation of leadership, mentoring and enabling roles performed by a reoriented DGHS
	Create system of evidence based health programming monitoring reports, data analysis, technical studies and evaluations
	Link DHIS with monitoring and mentoring by DGHS by creating reporting requirements, special studies and evaluations
	Strengthen information systems for central reviews and monitoring including preparation of monitoring indicators

	Provision of data analysis capacities through appropriate expertise and building data analysis capacity
	Develop response protocols to deal with disease outbreaks, emergencies, systemic failures and natural disasters
	Develop programme review guidelines to carry out periodic assessments of key health programmes
	Periodic and annual systemic reviews to assess response readiness and priming for service delivery for health organizations, autonomous health facilities and decentralized district departments with DGHS maintaining and following a roster of such reviews; the updated information to be placed on the departmental website.
3. Optimise decentralisation to districts and autonomy to health facilities	Strengthen health facilities and decentralize district health departments for service delivery by equipping them with appropriate mandates, authorities, resources, systems, capacities and incentives laden accountabilities
	Create systems for setting health goals for decentralized entities, mentoring and accountability
	Enhance local capacities for programming and monitoring and strengthen incentives for local initiatives
	Review of autonomy granted to tertiary hospitals regarding adequacy of management authorities, resources and clearly spelt out responsibilities
	All districts and institutions to develop and report on annual work plans
	Periodic and annual reporting requirements in review meetings with legal force behind them to usher in transparency in the decentralized management and operations
4. Fully operationalize	Develop a system of rule based, comprehensive and responsive regulatory regime
	Develop healthcare commission field formations and mechanisms
Punjab Healthcare Commission	Application of accountability to cases of service delivery failures and medical negligence
	Create system for registration and licensing of health facilities
	Create system for registration and licensing of medical laboratories
	Establishment of Laboratory Certification System
	Progressive application of Minimum Service Delivery Standards for both physical and human resources
	Development of patient rights statements with mandatory display and communication to patients
	Strengthen regulation and registration of all cadres of health workforce, including doctors, nurses, allied health professionals, homeopaths and Tibbs, and other health-related service providers like nutritionists, physiotherapists, optometrists, etc.

Outcome III: A management system that provides incentives for performance and ensures accountability

Objectives

- To achieve a higher response for health goals from the public officials and health authorities through institutionalization of performance management
- To realign incentives for healthcare provision through systems of reward and sanctions for performance and accountability
- To strengthen systems for public procurement and institute accountability for results
- To strengthen internal controls for both financial and managerial functions

Strategies	Strategic Actions
1. Develop a comprehensive system for performance assessment and incentives	Institutionalise performance evaluation through mandated performance concepts, indicators, assessment methods and application schedules
	Implement contracting-in models to enhance performance of primary and secondary level facilities
	Build capacity to develop, procure and manage contracts within the department
	Institutionalise and regular update of job descriptions for all cadres
	Customize performance management tools and processes to the health workforce requirement
	Develop performance evaluation systems for healthcare institutions and personnel
	Reorient promotion policy for all health service cadres by linking it to the performance
	Grant sufficient autonomy to local management to modify performance incentives according to government guidelines
	Create a system of 'pay for performance' and 'forfeit for failure' or P4P & F4F to reward innovation, initiative, efficient utilization of available resources and research[9]
	Review occupation-specific dispensation to ensure appropriate performance based incentives are structured into the remuneration package to attract and retain health professionals[10]
	Institute a favourable contractual policy for health professionals, which is non-permanent and non-pensionable
2. Develop a robust system of accountability for performance	Strengthen internal controls[11] for both financial and managerial functions
	Develop and apply of codes of behaviour for health workers which should include gender sensitive standards for work place behaviour with legal instruments for institutional accountability
	Regularly review performance management of district managers based on indicators culled from policy and programmatic goals
	Conduct continuous performance audit at provincial and district level to review

Health Workforce

Outcome IV: Adequate and skilled workforce available to fulfil population health needs

Objectives

- To establish a governance and leadership structure for HR policy, planning, production and management of health workforce to meet the health needs of the population
- To ensure availability of healthcare providers especially that of female healthcare providers in rural health facilities and specialists at secondary level hospitals
- To establish ways of improving quality and productivity of the health workforce
- To develop a favorable and attractive contractual policy for health professionals
- To improve retention of health workers and revitalize the concepts of continuous professional education and training
- To update medical education curriculum with a focus on community-oriented medical education

Strategies	Strategic Actions
1. Establish a Human Resource Planning and Development Unit	Develop a Human Resource Strategy and establish Human Resource Planning and Development (HRPD) Unit[13] at the provincial level, placed within the DOH and subsidiary HR units at the district levels; to provide a mechanisms to analyse and use the HRH information for policy dialogue, decision making and planning with stakeholders' participation

	Conduct a detailed workforce study to examine the current status and future workforce needs of the critical categories in the province by taking in account MSDS needs for production and absorption as well migration levels as per WHO Code of Practice for International Migration
	Develop automated database in the form of Human Resource Management Information Systems (HRMIS) for both public and private sector
	Study internal and external migration trends and implement WHO Global Code of Practice on international Recruitment
	Develop a comprehensive HRH communication strategy to develop a coordination mechanism for close linkage among constituencies and organizations including the public sector (MoH. MoE, MoL and MoFA); training institutions, professional associations, civil society, non-governmental and faith based organizations; international agencies and development partners
2. Fill all vacant posts of healthcare providers at primary healthcare facilities, specially in rural and hard-to-reach areas	Enhance age bar for entry to be enhanced by 10 years for female health workers in recruitment by Punjab Public Service Commission
	Institute a special incentives package for RHCs where there are no WMOs, nurses or other female health staff, including both financial and non-financial incentives
	Provide market driven incentives to WMOs at THQ and DHQ hospitals to conduct the medico legal cases
	Incentivise training and deployment of CMWs to ensure safe delivery practices
3. Fill all vacant posts of specialists at secondary healthcare hospitals	Implement special incentives package/ flexible contract arrangements for specialists working in SHC facilities according to the local needs focusing on anaesthetists, paediatricians, radiologists, pathologists and gynaecologists as a short term measure to be incorporated into DHCs model
	Recognise THQ and DHQ hospitals for placements of PG trainees

	Rotational placements of the required specialties at the THQ and DHQ hospitals for at least three months from tertiary and teaching hospitals
	Develop short certificate courses in deficient specialties through CPSP or UHS
4. Develop a Health Services Academy on the lines of Civil Services Academy for trainings of different categories of health workers	Upgrade and fully resource Provincial Health Development Centre (PHDC) to the level of Punjab Health Services Academy (PHSA)
	Strengthen District Health Development Centre (DHDC) network to conduct district level induction trainings and strengthen linkages with PHDC
	Update induction training manual "Training 2000" for implementation of training courses
	Conduct training needs assessment for various cadres and institutionalise all on job training with PHSA and DHDC network
	Develop category-focused and level-specific training courses with management training separate from clinical cadres, and link trainings with career advancements
	Developed linkages with renowned private sector institutions for leadership, management and other specialized trainings to improve quality of HR
5. Fill faculty positions in all health personnel educational institutions for doctors, nurses and allied health professionals with trained and qualified teachers	Meet standard of faculty needs for medical colleges, nursing schools and allied health professional teaching institutes
	Attract medical graduates/post graduates to areas where there is deficiency e.g. in basic sciences. Institute similar incentives for nurses and allied professionals faculty
	Identify and implement incentives to attract trained faculty in nursing and allied health professional education institutions
	Fill all staffing positions in all medical colleges in Punjab according to PMDC regulations
	Provide training in teaching methodologies and ultimately make it mandatory for teaching in any medical institution in Punjab
	Institute training programmes for nursing and allied health professional teachers; update and expand existing programmes
6. Revise the medical education curriculum with more emphasis on preventive and promotive care and incorporate COME at all levels	Adopt the community-oriented medical education (COME) curriculum that was developed for the pilots
	Update nursing curriculum with an emphasis on community-oriented perspective
	Raise awareness about the benefits of using COME approach to increase acceptance among faculty and students
	Train faculty in the use of COME and appropriate assessment techniques
	Implement COME curriculum for both medical and nursing education
	Review and modify the medical college examination system according to the needs of COME
7. Create CME opportunities for health professionals and over time make CME mandatory for continuation of practice	Make regular CME opportunities available for all health professionals through CPSP, UHS and private institutions
	Make CME opportunities available for private healthcare providers and GPs
	Create Tele-education and distance learning courses to give CME opportunities to people working in rural and hard-to-reach locations
	After a certain period of regular provision of CME opportunities, a defined number of CME credits should be made mandatory and linked with continuation of practice/license

Health Information Systems

Outcome V: A comprehensive, timely, accurate and functional information foundation for health policy and planning decisions

Objectives

- To enhance scope and contents of health data systems for policy and planning
- To improve access to readily useable data for informed decision making and evidence based policy making to plug data gaps by instituting additional approaches for autonomous tertiary hospitals and private sector to integrate facility-based and community-based MIS to enhance planning process at the provincial level to develop a mechanism for dissemination of the performance of health sector

Strategies	Strategic Actions
1. Strengthen community based information system and its integration with facility-based information system	Institute a mechanism for community-based workers to register all health-related events, specifically neonatal, infant, childhood and maternal deaths
	Conduct feasibility study for integration of DHIS and community-based MIS* taking into account the functional integration and development of IT linkages at district/provincial levels
2. Creation of standardized information system for tertiary level hospitals in public sector	Develop and implement a uniform and standardized Tertiary-level Health Information System (THIS) as a part of overall HIS of Punjab
	Develop guidelines for all autonomous tertiary hospitals for timely reporting on THIS to provincial level
3. Linkage of private sector health facilities with	Link private facilities with provincial level information systems for priority infectious disease notification

provincial level information system	Validate quality of information collected through quality assurance activities of Punjab Healthcare Commission
4. Capacity building of district health managers on use of information through support of Provincial and District Health Development Centres	Institute a regular training programme based on training need assessment on use of information by district health managers
	Build the capacity of PHDC/ PHSA and DHDC through technical assistance to conduct training programmes
	Develop annual health plans based on use of information
5. Establishment of a comprehensive integrated Disease Surveillance System at provincial and district level.	Establish an Integrated Disease Surveillance System (IDSS) at provincial and district level by incorporating DEWS and other existing systems in the IDSS
	Strengthen IDSS and DEWS implementation[14] in all facilities of Punjab
	Build capacity of relevant staff on recording and reporting of diseases enlisted in IDSS/ DEWS
6. Institute a mechanism to organize an information database containing	Develop a "Knowledge Store" (KS)[15] with physical and virtual presence
	Manage KS through public private partnership
research studies, reports, literature and relevant documentation pertaining to health sector of Punjab	Develop linkage with existing HIS, governmental departments, NADRA database, national and international agencies, academia, research organizations in both public and private sector of the province
	Assure governmental support to KS for acting as a clearing house on research and technical assistance studies in the province
7. Organize, analyse and publish pertinent health information on health sector performance for a wider dissemination	Prepare and publish Annual Health Report (AHR)[16] based on analysis of district and provincial level data on key performance indicators
	Dissemination of AHR to districts and general public through knowledge store, electronic and print media
8. Institutionalize a mechanism for a comprehensive health survey at household level	Institutionalize Punjab Health Survey with a periodicity of five years for specific data requirements of health policy and planning
	Conduct periodic independent third party health facility assessment
	Establish linkages and collaboration with Bureau of Statistics and relevant organizations
8. Strengthen health research in both public and private sector	Operationlize and strengthen Punjab Medical Research Fund through active collaboration with national and international partners and research funds to support and guide research activities in the province
	Reform Institute of Public Health in Punjab to take up leading role in health research

Essential Medicines and Health Technologies

Outcome VI: Uninterrupted supply of quality essential drugs for healthcare facilities and *outreach workers*

Objectives

- To improve logistic and supply chain management system for regular, uninterrupted and adequate availability of essential drugs at all levels of health care
- To implement PPRA rules and regulation for public sector procurement
- To regularly review the Essential Drugs List (EDL) for making it response to burden of disease faced by the population of Punjab
- To create strategic assets at district level for assuring proper and sufficient storage of essential medicines
- To improve quality of drugs by enforcement of drug regulation in Punjab at all levels of manufacturing, testing and sale

Strategies	Strategic Actions
1. Enhance existing logistics and supply chain management system	Review, assess and recommend appropriate changes through adopting standard operating procedures and guidelines for procurement and distribution system
	Establishment of a well-equipped, well-staffed procurement and logistics cell at provincial level
	Restructure medical store depots (MSDs) on modern lines and create a network of MSDs in all districts as part of the supply chain management
	Adapt and implement an integrated Vaccine Logistic Management Information System (VLMIS), and integrated warehousing and LMIS

	Strengthen implementation of PPRA rules and regulations for procurement
	Automate system for quantification, procurement and distribution
2. Regular review of Essential Drugs List (EDL)	Institute periodic review of the EDL on yearly basis
	Update the EDL while keeping in mind needs of the population and burden of disease
3. Strengthen drugs regulation	Review Provincial Quality Control Board (PQCB) for adequacy of resources and skills
	Upgrade DTL through modern drug testing equipment and ensure its regular maintenance
	Monitor pharmacies to be operated by qualified pharmacists

Healthcare Financing

Outcome VII: Efficient, effective, equitable and prioritized healthcare spending

Objectives

- To enhance public sector financing of health service delivery
- To protect the disadvantaged and vulnerable from catastrophic health expenditures
- To enhance linkages of planning, budgeting and monitoring systems and to increase budgetary utilization
- To increase use of private sector participation in provision of publically provided health services by contracting through transparent competitive process

Strategies	Strategic Actions
1. Reassess spending priorities with more focus on primary	Increase investment in primary health care initiatives by gradually reducing future investments in building new tertiary health care facilities. Facilitate public private partnership in developing and maintaining medical education and attached healthcare facilities providing highly specialized care

healthcare 2. Increase overall government expenditure on health care	Consolidate spending to increase focus on primary health through integration of service delivery arrangements having common outcomes, specifically Population Welfare Department and vertical health programmes
	Enhance investment and improve primary health care facilities in districts with lowest performance in health outcomes
	Gradually increase investments in health care – to enhance coverage of primary health care facilities. Assess financial needs of districts and discuss revision in Provincial Finance Commission Award or introduce special health grants.
3. Introduce mechanisms of social safety nets like health voucher schemes	Consolidate Zakat, Bait al Maal and Waseela-e-Sehet initiatives and form a health social security system, devise mechanism for screening low income group and provide free medical services
	Establish a mechanism for health voucher scheme in collaboration with public health care facilities – targeting vulnerable and disadvantaged
4. Enhance linkages of planning, budgeting and monitoring systems	Pilot Output Based Budgeting – OBB (as per Medium-Term Budgetary Framework) at the provincial level and introduce OBB in districts – present provincial OBB to Provincial Assembly as part of the annual budget
	Operationalize a 'Budgetary Performance Evaluation Unit' as a part of Budget Wing of DoH to regularly monitor, evaluate and report performance. Regular reporting to Secretary, Chief Secretary, Office of the Chief Minister, and Cabinet. Introduce regular budget vs. actual monitoring, output monitoring and upload original budget, budget released and budget utilized on regular basis on the Department of Health's website
5. Increase budget utilisation rate at the provincial and district governments	Review existing model of PRSP to update and revise existing contracts and develop guidelines for their expansion
	Improve funds release and utilization mechanism together with the Finance Department, Planning & Development Department and Commissioners / District Coordination Officers

Implementation of the strategy:

There is no denying the enormity of the tasks that lie ahead in implementing the Strategy. Strategic plan enlists a number of strategies and strategic actions that will contribute towards achievement of desired health outcomes. While the key responsibility lies with the Department of Health (DoH) and the Directorate General Health Services (DGHS), role of the Punjab Health Sector Reform Programmed (PHSRP) shall be instrumental rather pivotal in designing the change. Technical inputs shall be required for development of operational plans to implement proposed strategy and PHSRP can take up the role of coordinating technical assistances required for the Strategy. Strengthened role of various organizations like Punjab Healthcare Commission, Punjab Health Foundation, and Provincial and District Health Development Centers is also envisaged for implementation of the Strategy. Further, health is not only the responsibility of Doha as many of the determinants of health are not directly health related such as educational attainment, economic wealth and employment. There are other key players who are directly or indirectly involved in determining health status of the people of Punjab. For improving health status and overall wellbeing of the people, strong partnership among the various sectors will play a vital role in bringing together key stakeholders and organizations to develop and deliver the required initiatives.

As a means to encouraging and supporting action across the province, the strategy development team proposes the establishment of “Health Sector Ministerial Board” (HSMB), which will be headed by the provincial Health Minister and shall comprise of Secretary of Health, Parliamentary Secretary on Health, Chairman P&D, Secretary Finance, Secretary Schools Education, Secretary Population Welfare Department along with nominated technical experts and representatives from private sector, local governments, businesses and industry, civil society, community groups, families and individuals. The Board may be an expanded version of the present steering committee constituted for the Health Sector Strategy development.

The technical members will be experts with considerable practical experience and must not be directly involved in the implementation of the strategy. Working Groups shall be constituted under the HSMB in each of the six strategy pillars. The Board may also include representatives from other sectors that have considerable impact on health such as education, water and sanitation. Support from the development partners in health sector shall be aligned with the strategy. These partners shall be encouraged to provide on-budget support. In case it is not feasible than a joint TA plan shall be prepared and approved by the HSMB.

At the provincial level, key roles and responsibilities include policy and strategic planning, management of large size contracts, capacity building, M&E and supportive supervision. DGHS shall be involved in the planning, budgeting, performance review, supervision, coordination, recording and reporting of progress to provide basis of budgetary allocations.

Adopting a phased approach

Phasing and sequencing of the strategic actions over time is necessary as it will not be possible or appropriate to initiate all actions at once. Initial phase shall set in place the urgent priority actions, while subsequent phases shall build on these actions, learning from evidences from implementation carried out in the initial phase. Various proposed interventions require studies and technical assistance during the initial phase. These studies are essential for going forward and priority shall be accorded to such strategy actions so that the implementation of subsequent actions could be timely accomplished.

Monitoring and Evaluation of the Strategy

During recent years, promotion of a results based culture is evident in health sector of Punjab. Government is making efforts towards making a shift from a planning environment concentrated on the reporting of processes and outputs to outcomes and targets indicators. Therefore, monitoring framework of the strategy shall be based on the strategic outcomes described in strategic framework of this document.

The importance of continuous monitoring for successful implementation of any strategic plan cannot be overstressed. It is especially important given our past experience where plans go off-track and cannot be implemented well because there is inadequate attention to continuous monitoring, re-evaluation, and institution of required modifications. Strong, effective and consistent monitoring, evaluation and accountability must be done to successfully achieve the targets of Punjab Health Sector Strategy. It is necessary to strengthen Punjab's capacity to effectively monitor, evaluate and build evidence around health. A number of ambitious targets have been set and the Strategy has been designed to focus on a cyclical approach of implementation, measurement and accountability. The development of a robust performance framework to underpin the Strategy and inform its implementation is therefore a priority.

The whole process should be guided by the concept of supportive monitoring. While most of the monitoring and supervisory roles discussed here already exist, the needs for capacity building, provision of proper equipment and training as well as capacity building in analysis and use of the

information gathered will have to be assessed and addressed for the mechanisms to be effective. The following description gives an outline of monitoring and evaluation roles throughout the sector. The process of supportive monitoring will flow down to the grass-roots levels. There must be capacity building for staff to perform their roles wherever needed, monitoring and evaluation done and accountability ensured throughout the system from top to bottom. This will be implemented through the performance assessment system being proposed throughout the sector.

Provincial level

At provincial level, HSMB will head the monitoring and evaluation process. The Board will have quarterly meetings to evaluate progress on the strategic targets. Working Groups constituted for each pillar of the strategy will report their performance against specified indicators, identify obstacles and outline remedial actions on quarterly basis. Annual progress report shall be submitted to the provincial Assembly's Standing Committee on Health to review progress and give recommendations for future budget allocations for strategic priorities.

DoH will play the role of an overall provincial supervision and monitoring role. Specific tools shall be developed for assessing the performance in each pillar of the strategy. Assess the achievement of goals against defined criteria, consolidate the information and report to the HSMB. DGHS will have a much more prominent monitoring role in this strategy. It will play a technical backstopping and supportive role in the monitoring and evaluation process. It will coordinate with Provincial and District Health Development Centers to provide technical support and capacity building.

The flow chart (Figure 3) represents the structural mechanism for monitoring and evaluation of Punjab Health Sector Strategy. Where targets are consistently not reached despite addressing obstacles or the reports are untenable; third party evaluations will be conducted. The Board will

have auditing arms, which shall facilitate the process of third party evaluations.

District and Community level

At district level, supportive monitoring and supervision will be strengthened by providing appropriate equipment, expertise and capacity building as well as by better use of data and its analysis. While providing needed support, achievement of targets should be linked to performance assessment at all levels. District Health Management Team (DHMT) shall be operationalized in all the districts to improve service delivery through better planning and management. DHMT may serve as a forum for all health related activities in the districts. This shall enhance inter- sectorial coordination and prevent duplication of effort thus preventing wastage of resources. Primarily role and responsibilities may be focused on planning, monitoring and evaluation; team building and decision making through proactive team design and process, decentralization of various functions to lower levels, advocacy with district assembly and stakeholders for health program support and regulation of non- government providers to assure quality are all critical to the success of DHMTs.

In order to strengthen the role of DHMTs, legislative specification of DHMT authority, responsibilities and accountability is essential for continuity and sustainability. Regular performance assessment of DHMTs on agreed indicators and continued technical support to district management structure should be ensured. Districts shall be preparing annual work plans while taking into consideration the strategic framework and progress shall be reviewed against these plans for individual districts.

Healthcare monitoring is a specialized tasks and community reporting, with time and effort costs, is unlikely to yield sufficient information. However, in order to institute bottom-up monitoring approach in the community, Hospital and Healthcare Committee shall be constituted at the Tehsil and Markaz level, which shall later be brought down to the Union Council level. These committees shall assist the district level management in need assessment, review of progress and planning, and addressing issues and problems through collective efforts. Further, these committees shall also be involved in management of the health facilities as well as advocacy for resources allocation.

Measuring the progress

Progress of the strategy shall be monitored at both levels of health status and outcomes for the population as well as the systemic performance of the health sector. Changes in health outcomes and determinants of health are the long-term measures of the success of this strategy. However, these indicators are most reliably measured over several years at the population level, and changes cannot easily be attributed to specific programme elements. Information from household level surveys like Punjab Health Survey, Multiple Indicator Cluster Survey (MICS), Pakistan Social and Living Standard Measurement Survey (PSLM), Pakistan Demographic and Health Survey (PDHS) and National Nutritional Survey (NNS) shall be used to monitor the overall impact of strategic actions on reduction in morbidity and mortality.

Complementing these longer-term measures are the shorter-term programme and system-level performance indicators more closely related to the specific priority actions, programmes and health system strengthening. Current Health Information Systems are needed to be strengthened for periodic review of the strategy.