Universal Health Coverage Benefit Package of

SINDH

ESSENTIAL PACKAGE OF HEALTH SERVICES

WITH LOCALIZED EVIDENCE

June 2021

MOVING TOGETHER
TO BUILD A HEALTHIER PAKISTAN

UNIVERSAL HEALTH COVERAGE: EVERYONE, EVERYWHERE

HEALTH DEPARTMENT
GOVERNMENT OF SINDH

@ 22nd June 2021
(Sindh EPHS endorsed by the Sindh UHC Steering Committee)

Essential Package of Health Services with localized evidence
UHC Benefit Package of Sindh

Produced by:
Health Department,
Government of Sindh

Analysis done by:
Sindh UHC Technical Committee;
Office of the Director General Health Services, Sindh; and
Health Planning, System Strengthening and Information Analysis Unit (HPSIU)

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United Nations Children Fund,
and Ministry of National Health Services, Regulations & Coordination (NHSR&C)

For more information, please visit:
Web: https://www.sindhhealth.gov.pk/

MESSAGE

'Health is a human right and quality essential health services should be available to everyone, every time, with a special focus on the most vulnerable segment of the society. Universal Health Coverage (UHC) through evidence-based cost effective and equitable essential health interventions lays the foundation of a responsive health care system for ALL'

The health is of paramount importance for development and prosperity of our people. Sindh is making progress in improving health outcomes; however, there is a stronger need to further strengthen the health system by addressing the life-threatening gaps.

Dr Azra Fazal Pechuho
Minister of Health & Population
Government of Sindh

The Government of Sindh through the Health Department, has embarked on an ambitious, yet a considered, reform agenda for the transformation of the health sector in Sindh to achieve Universal Health Coverage (UHC). To achieve this objective, our UHC technical team at the Health Department has initiated tremendous efforts at reviewing, analysing, interpreting and prioritizing evidence based best practices that have the greatest potential in making a significant dent improvement in health outcomes of the province.

This work has resulted in the development of a costed Essential Package of Health Services (EPHS)/ UHC Benefit Package of Sindh. This exercise follows from the national generic EPHS/ UHC Benefit Package of Pakistan, endorsed in the Inter-Ministerial Health & Population Council on 22nd October 2020. In the same meeting Sindh had suggested that as a follow-up to the national level generic UHC-Benefit Package, the province specific EPHS should be developed, based on localized evidence. It is an extremely proud moment for me, that Sindh is the first province to complete this ground breaking work in Pakistan. The Health Department, Sindh has undertaken this exercise by prioritizing a set of interventions that have the greatest potential in making a difference in the lives of the people of Sindh. We have to ensure provision of quality health services, which are accessible to all, for a speedy progress towards achieving UHC.

Having agreed to a prioritized set of interventions, the real challenge begins with expanding the coverage of these interventions to all people. If the UHC Benefit Package of Sindh is to be made successful, multi-prong actions are required. To begin with, the historical trend of low financing in the health sector needs to be addressed. Since the UHC Benefit Package of Sindh is designed to introduce efficiency in terms of low-cost and high-impact interventions, the need for an increase in health financing is not precluded.

Furthermore, extensive planning work will be required in developing and then deploying essential health workforce and enhancing their capacity. For implementation of the UHC Benefit Package of Sindh, it will also require greater inter-sectoral cooperation. The health benefits that are dependent on interventions that are the domains of other departments/ entities/ private sector, will not be possible to obtain, unless there is close coordination and collaboration with implementing departments/ partners.

We, as a government, will transform the health system and do our utmost to make the implementation of UHC-BP for Sindh a success and thereby ensure healthy outcomes.

FOREWORD

Dr Kazim Hussain Jatoi
Secretary Health
Government of Sindh

Health care is a right of everyone, everywhere, rich or poor. Universal Health Coverage (UHC) agenda will deliver better health outcomes and huge impact on quality of life. Investing in health is also imperative for economic growth and poverty reduction with reciprocal improvement in Human development index and human Capital.

The Honourable Chief Minister of Sindh - Mr Syed Murad Ali Shah and the Honourable Minister of Health & Population - Dr Azra Fazal Pechuho are committed to UHC reforms and gave directions to localize scientific evidence, develop and implement the EPHS / UHC Benefit Package of Sindh. This task of development of EPHS is now completed.

The development of the EPHS/ UHC Benefit Package of Sindh is a milestone event and offers the most relevant health sector reforms. The package offers a set of prioritized interventions that have been selected, based on localized scientific evidence, considering feasibility in the context of province and are deemed to be the most cost effective in curtailing the largest magnitude of disease burden.

The Health Department affirms that every possible effort will be made to address the governance, finance, human resource and service delivery challenges that may come across, while implementing the UHC Benefit Package of Sindh.

The fast pace of population growth means that health department cannot stride with supply and demand to provide the basic needs for health service delivery for everyone in the province. The question is whether the government has the requisite resources to provide these interventions directly through its own infrastructure or identify other partners, including private sector that can assist in the delivery of these interventions.

It is essential that for successful implementation requisite financial allocation is ensured. In this regard a key step is to develop a strategy to finance those health facilities that identifies the fiscal space and potential sources, for additional funding, that can be tapped to rollout the UHC Benefit Package interventions.

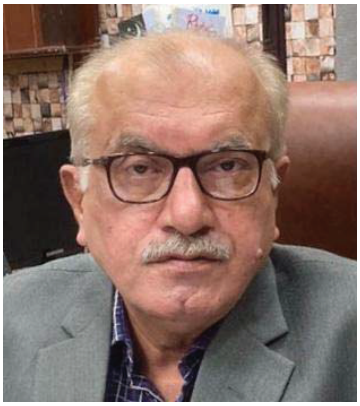
Adequate human resource for health is a longstanding challenge in the province. With a significant segment of the population living in remote and hard to reach areas, it is essential that quality human resource be made available through capacity building. How to overcome the shortcoming of human resource in the province will require careful and long-term planning.

The Health Department undertakes to provide the requisite oversight, administrative guidance and support to make the implementation of UHC Benefit Package of Sindh as streamlined as possible. The health reforms agenda in the shape of UHC Benefit Package of Sindh is an excellent opportunity, to finally address the health needs of the most deserving and underserved people.

Finally, I appreciate the dedication and efforts of Dr. Irshad Memon, Director General Health Services – Sindh, partners and members of the Sindh UHC Technical Committee to complete the given task in a shortest possible time and without compromising on quality. I expect that the UHC Technical committee will continue to work with the same dedication for the implementation of EPHS, while ensuring Sindh makes speedy progress towards achieving UHC.

ACKNOWLEDGEMENTS

In pursuing Universal Health Coverage (UHC), the Health Department, Sindh aims to extend coverage of quality essential health services to all people in the province. Many countries are moving towards publicly financed health care systems that cover the whole population for essential health services, enabling them to reduce preventable illness and death, particularly in women and children. Removing both direct and indirect barriers to health care, contributes to improving access to essential services, reducing one of the main causes of household impoverishment.



Dr Irshad Memon
Director General Health Services
Government of Sindh

Achieving a UHC system is as much a political process as a technical one. The UHC Benefit Package of Sindh has come to fruition under the able guidance of the Honourable Chief Minister of Sindh - Mr Syed Murad Ali Shah and is a key plank for the Government of Sindh in its strategy for health service delivery.

The Honourable Minister for Health & Population - Dr Azra Fazal Pechuho led from the front throughout the development of EPHS to achieve UHC. Dr Pechuho recognized the singular importance of the need to have health sector reforms that are essentially a game changer, which will fill in the wide gaps in health service delivery in an equitable manner.

Secretary Health, Dr Kazim Hussain Jatoi was instrumental in providing the required administrative support that ensured the formation of the UHC technical committee and the availability of all members of the committee in all sessions and workshops.

The Health Department Sindh has been given excellent support by the Federal Ministry of National Health Services, Regulations and Coordination. It is important to acknowledge Director General (Health) - Dr Rana Mohammad Safdar for extending support by granting access to the technical team at the Health Planning, System Strengthening & Information Analysis Unit (HPSIU). The HPSIU team under the able leadership of Dr Malik Muhammad Safi provided extensive support in the development of the EPHS/ UHC Benefit Package of Sindh. The technical lead at HPSIU - Dr Raza Zaidi has displayed exemplary commitment in taking the UHC agenda forward in Sindh. The UHC Benefit Package of Sindh would not have been possible without the explicit support and commitment of the HPSIU team.

The Department acknowledges the far-fetched support from Dr Ala Alwan at the DCP3 Secretariat/ LSHTM. The development partners have continued to support the department in various endeavours. Head of WHO Office in Pakistan Dr Palitha Mahipala and the country & provincial WHO office deserve recognition regarding the support provided on this initiative. UNICEF country representative Ms. Aida Girma and the country & provincial office have provided incredible support to complete the task without any delay.

Last but not the least, the officials at the Health Department, Sindh and other stakeholders / members of the Sindh UHC Technical Committee deserve high praise for showing their strong commitment towards this priority reform agenda. The UHC Core Team led by Dr Iqbal Memon, UHC Coordinator has also played an important role of reviewing and finalizing the EPHS document.

Our responsibility does not end with the finalization of the EPHS. Rather this is only the beginning of a long road ahead. Let us determine to do everything possible to ensure the delivery of quality essential health services to all people of Sindh.

Contributions

The Health Department, Sindh played a lead role in the development of costed EPHS/ UHC Benefit Package for Sindh in collaboration with partners and stakeholders.

Involvement of stakeholders from the public & private health sector, community, implementing partners/ CSOs, academic institutions, UN and donor agencies was ensured for a comprehensive and inclusive dialogue.

Chair of the Sindh UHC Technical Committee:

Sindh UHC Core Team:

- Dr. Irshad Ahmed Memon,
  Director General Health Services Sindh.
- Dr. Shabnam Karim, Chief Technical Officer
- Dr. Mahmood Iqbal Memon, Sindh UHC Coordinator
- Mr. Muhammad Moosa Qazi, Sindh UHC Focal Point
- Dr. Abdul Sattar Chandio, Deputy DGHS
- Dr. Waqar Mahmood, Additional Director MIS
- Dr. Gordhan Das, DHO Tharparkar

Sindh UHC Technical Committee:

- Dr. Sahib Jan Badar, AAP Health
- Dr. Leela Ram, Add. Director CDC
- Dr. Amjad Ali khan, DHO Sanghar
- Dr. Muhammad Juman Bahooto, DHO Hyderabad
- Dr. Daulat Jamali, DHO SBA
- Dr. Muhammad Hussain Abro, DHO Khairpur
- Dr. Maqbool Ahmed Memon, DHO Malir
- Dr. Muhammad Yaqoob, Deputy Director (O&D)
- Dr. Abdul Sattar, Deputy Director General
- Dr. Mumtaz Ali Wagan, Deputy Director NCD
- Dr. Suresh, MS Sindh Govt Hosp
- Dr. Mahmood Iqbal, Deputy Director General
- Dr. Zulfiqar Ali Khoso, Medical Officer
- Mr. Salman Rahman, Health Services Council
- Dr. Saqib Ali Sheikh, Additional Director, CDC-1
- Dr Saira Zaidi, AAD
- Dr. Teerath Dus, Deputy DG, CDC
- Dr. Zulfiqar Dharejo, DDG, RMNCH
- Dr. M Ibrahim Sarki, Additional Director RMNCH
- Ms. Jameela Soomro, DD Dev, HD
- Dr. Zahid H Solangi, DD Dev, HD
- Mr. Ghulam Murtaza Noonari, AAP Health
- Ms Khair-u- Nisa, DD Nursing, DNSK
- Mr. Abdul Nasir, Planning Officer, HD
- Mr. Mohsin Sheikh, Add Director Development
- Mr. Ghassan Haroon, DS, Finance Department
- Dr. Huma Khan, Focal person, Hepatitis
- Dr. Khalil Ahmed Sheikh, PD, PPP Hands
- Dr. Greece, Add. Director, EPI
- Dr. Ayaz Hussain, Health Specialist, UNICEF
- Mr. M Afzal Kolachi, Regional Director, PPHI
- Mr. Saleem ur Rehman, Health Coordinator
- Dr. Badar Munir,WHO, Sindh
- Dr. Muhammad Ali Abro, Div. Asst. Director
- Mr. Zubair Ahmed, DD Planning
- Mr. Syed Nadir Shah, HIS- M&E specialist
- Dr. Nadir Ali Soomro, MO
- Dr. Muhammad Arif, Sr. Cardiologist
- Dr. Lala Jaffar, DHO Hyderabad
- Dr. Mushtaque Khan, Deputy DGHSS (O&D)
- Dr. Umar Khan, Nutrition Specialist
- Dr. Faiza Erum Bhutto, Director Clinical, SHCC
- Dr. Maryam Huda, Aga Khan University
- Dr. Sara Salman, WHO
- Dr. Badar Munir, WHO
- Dr. Naveed Asghar, HPSR officer, WHO
- Dr. Kamal, UNICEF
- Mr. Bahram Gul, UNFPA
- Dr. Wali Muhammad Rahimoo, JSI
- Dr. Nadeem Hassan, JSI
- Dr. Rajwal Khan, UNAIDS
- Dr Shabbir Chandio, USAID
- Dr. Tanveer Hussain, Chemonics, USAID

Team from M/o NHSR&C:

- Dr. Malik Muhammad Safi, National UHC Advisor
- Dr. Syed Raza Mahmood Zaidi, Sr. UHC Benefit Package / Health System Specialist
- Dr. Muhammad Khalid, UHC Benefit Package Specialist
- Mr. Wahaj Zulfiqar, Finance Specialist
- Dr. Sabeen Afzal, Deputy Director (Health System)
- Dr. Hasan Bin Hamza, Policy & Planning Specialist
- Dr. Ahsan Maqbool Ahmed, Information Analyst
- Mr. Usman Bashir, M&E Officer
- Dr. Saira Kanwal, Research Associate
- Ms. Javeria Yousuf, Research Associate
- Ms. Amina Qazi, Research Associate

EXECUTIVE SUMMARY

Universal Health Coverage (UHC) is based on the principle that all individuals and communities have equitable access to their needed health care, in good quality, without suffering financial hardships. A set of policy choices about benefits and their rationing are among the crucial decisions for moving towards UHC. The three dimensions of UHC are: i) which services are covered and which needs to be included; ii) covered population and extension to non-covered; iii) reducing cost sharing and fees.

Designing a comprehensive package of health services considering burden of disease, cost effectiveness of interventions and social context is essential to define which services are to be covered through different platforms: i) community level; ii) primary healthcare centre level; iii) first level hospital; and iv) tertiary hospital; and v) population level. In addition, interventions related to inter-sectoral prevention and fiscal policies play a key role in moving towards UHC.

Disease Control Priorities – Edition 3 (DCP3) finalized in 2017 defines a model concept of essential universal health coverage (EUHC) that provides an initial landmark for country-specific analysis of priorities considering country-specific cost structures, epidemiological needs, and national priorities.

Development of a generic Essential Package of Health Services/ UHC Benefit Package of Pakistan was carried out jointly by the Ministry of National Health Services, Regulations & Coordination (M/o NHSR&C) and Provincial/ Area Departments of Health and other key stakeholders. Following the same exercise, the Health Department decided not only to localize scientific evidence in the context of Sindh province but also to develop a UHC Benefit Package of Sindh.

The Health Department, Sindh led the process of localization with a quick review of availability of essential health services in the province compared to 218 DCP3 recommended interventions and 151 prioritized interventions in the generic national EPHS. The review indicated that:

- Overall, **51% (112/218) of the DCP3 recommended EUHC interventions and 83% (126/151) of the generic EPHS interventions** are being currently implemented partially, whereas only 12% of EUHC and 20% of generic EPHS interventions are expected to be accessible in more than 50% of the health facilities of Sindh province.
- **Out of the DCP3 recommended district level EUHC interventions, 48% (89/185) and out of the generic district level EPHS interventions 84% (99/117) are available partially in Sindh.** Only 9% of district EUHC interventions and 13% of generic district EPHS interventions are available in more than 50% of health facilities.
- **Non-communicable diseases and infectious diseases clusters appears comparatively to be neglected areas.**
- **Interventions at Community and PHC centre level platforms were also comparatively feeble.**

After the review, scientific evidence was localized in the context of Sind:

- For Sindh EPHS development, it was decided to use the national level **'Description of Interventions'** as such, which were developed through consensus among stakeholders, using the latest guidelines and manuals.
- The **burden of disease data for Sindh** for the year 2019 from the Institute of Health Matrix & Evaluation was shared and used, rather than 2017 data used at the national level.
- The Sindh UHC Technical Committee as a group decided baselines, targets and year-wise milestones for each proposed intervention. **Year-wise targeted population for each intervention** was defined using projected Sindh data from the 2017 census, latest

national/provincial/area surveys, burden of disease data for Sindh produced by the Institute of Health Metrics and Evaluation (IHME), administrative data and other published research. The baseline for some interventions was identified through department's programme data. Year-wise milestones were kept realistic as the same has significant impact on the overall unit cost.

- The **unit costs** for around 170 interventions for the national exercise across the five platforms estimated were used with adjustments to staff pay scales for Sindh province.
- For the Sindh EPHS, the **Incremental cost-effectiveness ratio** (ICER) values identified in the generic national EPHS were used (considering availability of limited data at provincial level).

Health Interventions Prioritization Tool (Hiptool) is a web-based digital tool developed by the University College of London and was used to analyse, optimise health interventions and visualization of results (in addition to Excel sheets). Optimization of interventions based on – cost effectiveness, disability adjusted life years (DALYs) averted, targeted population, budgetary impact was done. This consequently led to the Investment Cascade of Interventions in Sindh to further analyse the evidence.

All evidence was reviewed and discussed in group work and then in plenary. Later on, evidence was used for prioritisation of health interventions for Sindh EPHS. A total of 131 interventions were prioritized for five platforms.

Platform	Immediate Priority Interventions	Unit Cost ($)/ person/ year (inclusive of health system cost)	DALYs Avert
1. Community level	21	2.91	565,518
2. PHC centre level	37	4.22	1,836,851
3. First level hospital	36	10.95	510,871
District EPHS	**94**	**18.09**	**2,913, 240**
4. Tertiary hospital	25	7.29	539,236
5. Population level	12	3.36	++
All five platforms	**131**	**28.66**	**3,452,476 ++**

- **District EPHS included 94 interventions as immediate priority** for EPHS, out of which 21 were at Community level, 37 at PHC centre level and 36 at First level hospital.

  (The Sindh UHC Technical Committee prioritized costly intervention for tackling cardio-vascular diseases (CVD) at FLH, as the government is committed and has started establishing CVD centres in all DHQ hospitals. ECD, trauma and some surgical interventions were also prioritized for immediate implementation. Similarly considering the burden of HIV, intervention of testing of HIV for screening was added in District EPHS. Some of the FLH interventions were shifted to Tertiary Hospital level.)

- An addition of **10 interventions through special initiatives** will cost US$6.48/ person/ year and will avert additional 279,460 DALYs through District EPHS.

Year wise unit costs and DALYs averted were also estimated whereas year-wise unit costs were also estimated using with 8% annual inflation rate. All costs also included health system costs.

Detailed health system needs and standards are included in this document considering prioritized interventions. It was also agreed to strengthen institutional capacity in the Health Department Sindh to regularly localize and generate evidence for inclusion and exclusion of interventions in future.

Table of Contents

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARV	Anti-Retro-Viral therapy
BCC	Behaviour Change Communication
BEmONC	Basic Emergency Obstetrical and Neonatal Care
BMGF	Bill & Malinda Gates Foundation
BOD	Burden of Disease
CEmONC	Comprehensive Emergency Obstetrical and Neonatal Care
CVD	Cardio Vascular Diseases
DALYs	Disability Adjusted Life Years
DCP3	Disease Control Priorities – Edition 3
ECD	Early Childhood Development
EPHS	Essential Package of Health Services
EUHC	Essential Universal Health Coverage
FLH	First Level Hospital
GAVI	Global Alliance for Vaccine and Immunization
GFATM	Global Fund to fight against AIDS, TB & Malaria
GPEI	Global Polio Eradication Initiative
HIV	Human Immuno-Deficiency Virus
HPN	Health Population & Nutrition
HPV	Human Papilloma Virus
ICER	Incremental Cost Effectiveness Ratio
ICPD	International Conference on Population & Development
IPP	Inter-sectoral Prevention Policies
IHR	International Health Regulations
IMCI	Integrated Management of Childhood Illnesses
IUCD	Intra Uterine Contraceptive Device
JEE	Joint External Evaluation
JSI	John Snow International
LSHTM	London School for Hygiene and Tropical Medicine
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MDR	Multi Drug Resistance
M/o NHSR&C	Ministry of National Health Services, Regulations & Coordination
NAC	National Advisory Committee
NTD	Neglected Tropical Diseases
PHC	Primary Health Care
PPHI	People's Primary Healthcare Initiative
RDT	Rapid Diagnostic Test
RH	Reproductive Health
SDGs	Sustainable Development Goals
STI	Sexually Transmitted Infections
TB	Tuberculosis
TH	Tertiary Hospital
TOR	Terms of Reference
TRF	Technical Resource Facility
UHC	Universal Health Coverage
UHC BP	Universal Health Coverage Benefit Package
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation & Hygiene
WB	World Bank
WHO	World Health Organization

SINDH ESSENTIAL PACKAGE OF HEALTH SERVICES

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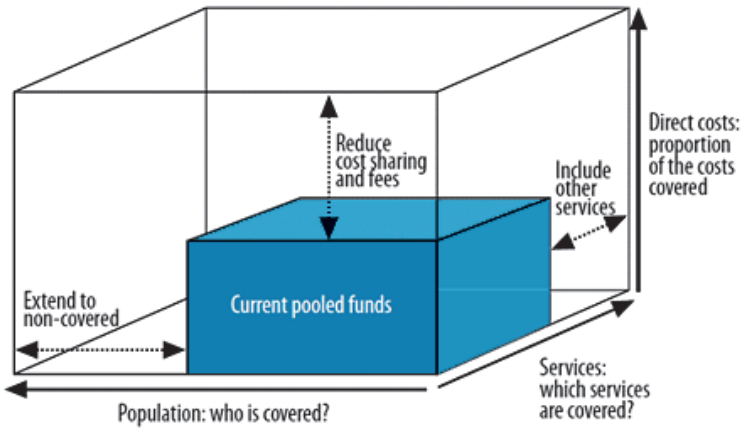
The Agenda for Sustainable Development was endorsed by the United Nations as an integrated global commitment to chart a new era for development and poverty reduction during the period 2015-2030. In this agenda, Universal Health Coverage (UHC) became the key outcome under the health goal of the Sustainable Development Goals (SDG).

The draft 12th Five Year Plan (health chapter), National Health Vision and Sindh Health Strategy (2012-20) are underpinned by the idea to ensure provision of good quality essential health care services to all people through a resilient and equitable health care system.

Sindh Health Strategy vision is:

> *'Maximising efforts to improve health status of the people in Sindh in congruence with international and national commitments and in response to the province's needs'*

Universal Health Coverage (UHC) is based on the principle that all individuals and communities have equitable access to their needed health care, in good quality, without suffering financial hardship. A set of policy choices about benefits and their rationing are among the critical decisions in the reform of health financing system towards universal coverage. Choices need to be made about proceeding along each of the three dimensions in a way that best fits their objectives as well as the financial, organizational and political contexts. The three dimensions are: i) which services are covered and which needs to be included; ii) covered population and extension to non- covered; iii) reducing cost sharing and fees.



Three dimensions to consider when moving towards universal coverage

Disease Control Priorities – Edition 3 (DCP3) defines a model concept of essential universal health coverage (EUHC) that provides a starting point for analysis of priorities. Pakistan is one of the first countries in the world to use the global review of evidence by the DCP3 to inform the definition of its UHC benefit package/ EPHS.

The Minister of Health, Sindh not only endorsed the generic National EPHS on 22nd of October 2020 but also decided to localize the scientific evidence in the context of province and accordingly re-prioritize health interventions. Thus, the priority actions for the Health Department, Sindh is to develop a 'UHC Benefit Package' consisting of i) **Essential Package of Health Services (EPHS)** and ii) **Inter-sectoral Interventions/ policies.**

The Health Department, Sindh in partnership with the DCP3 secretariat (with funding of Bill & Malinda Gates Foundation (BMGF)), World Health Organization (WHO), United Nations Children Fund (UNICEF), and the Ministry of National Health Services, Regulations & Coordination (NHSR&C), has ensured comprehensive review of the localized evidence of Sindh to inform the prioritization of health interventions at five platforms for inclusion in the EPHS. Evidence was gathered on burden of disease in Sindh, unit cost and cost-effectiveness of each intervention, budget impact, feasibility, financial risk protection, equity and social context. In addition to economic evaluation, EPHS interventions incorporate evidence on intervention quality and uptake, along with non-health outcomes such as equity and financial protection.

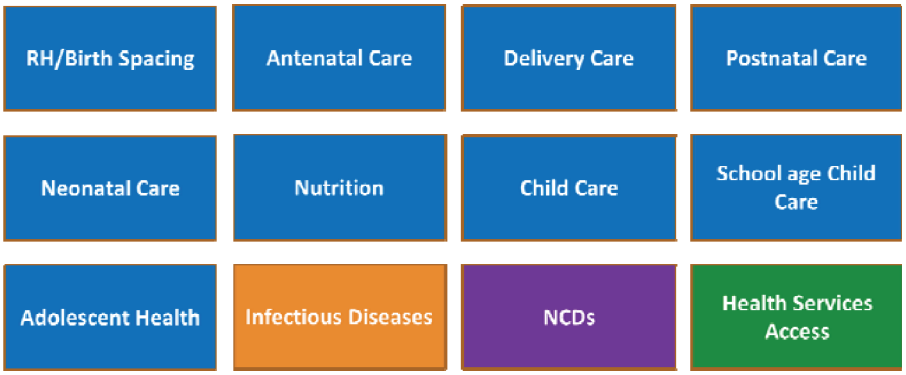
The objective of the Sindh EPHS is to define which services are to be covered through **five different platforms** (both through public and private sector) for ALL people in Sindh:

i) Community level
ii) Primary healthcare centre level
iii) First level hospital
iv) Tertiary hospital
v) Population level

Interventions at community, PHC centre and First level hospital are clubbed as the **District EPHS**, whereas interventions at tertiary hospital, population level and selected programmatic reforms are to be managed at provincial level. In addition, inter-sectoral policies can also play an important role in moving towards UHC and addressing around half of the burden of disease (BOD) in Sindh by mitigating risk factors.

This localized evidence was used to organise priority services into **four clusters** and **twelve categories**:

a. Reproductive, maternal, new-born, child, adolescent health & nutrition/ Life course related cluster
b. Infectious diseases cluster
c. Non-communicable diseases & Injury prevention cluster
d. Health services cluster



The evidence has been intensely reviewed by the technical experts and stakeholders, followed by critical review at the UHC Technical Committee of Sindh to select those health interventions that should be provided in the pathway to UHC, given the best estimates of the funding available to the government, partners and private sector.

HISTORY OF ESSENTIAL HEALTH SERVICES

Near the end of 19th century, the industrial revolution in Europe saw heavy disease and death tolls especially in urban areas. Early epidemiological discoveries about diseases like cholera, malaria, yellow fever etc., raised awareness about organization of medical services, clean water, sanitation, and living conditions. During the first half of the nineteenth century, different approaches were adopted by the European countries to tackle health challenges.

Later on, the Second World War damaged health infrastructures in many countries, paradoxically it also paved the way for the introduction of some reforms. Wartime Britain's national emergency service to deal with casualties was helpful in the construction of what became, in 1948, the National Health Service, perhaps the most widely influential model of a health system.

Japan and the Soviet Union also extended their limited national systems to cover most or all of the population, as did Norway and Sweden, Hungary and other communist states in Europe, and Chile. As former colonies (including Indo-Pak) gained independence, they also tried to adopt modern, comprehensive systems with heavy state participation.

At the time of independence in 1947, Pakistan inherited a wide range of public health problems. The majority of the country's population was illiterate, unaware of healthy lifestyles and practices, malnourished or under-nourished and living in low levels of environmental sanitation with majority having no access to safe drinking water. Situation was further aggravated by the fact that only a handful of doctors and skilled personnel were left behind to manage the situation.

In 1947, a large epidemiological outbreak of cholera in Egypt gave motivation to the development of tropical medicine for dealing with international outbreak containment. A programme of social uplift was also launched, and medical colleges were established in former East and West Pakistan. Later on, scope of health services remained under the influence of international declarations, global health initiatives and other development initiatives but largely focused on the disease specific approach to health. Pakistan's public health remained focused on small pox eradication, malaria eradication/ control and control of some other infectious diseases, as well.

A paradigm shift was witnessed in the health systems after the International Conference on Primary Health Care, Alma-Ata in 1978. Health for all (HFA) became the goal and achieving universal accessibility for populace through primary health care approach became the central theme. A large number of PHC facilities were established. In 1982, an alternate Selective PHC approach (GOBI – Growth monitoring, Oral rehydration salt, Breast feeding and Immunization) was launched, which mainly targeted childhood illnesses. The launch of the Lady Health Workers' Programme in 1994 was a major reform in the country, which also expressed the commitment of the government towards International Conference of Population and Development (ICPD).

During 1980s and 1990s the World Bank and other financial institutions assumed a more preeminent role in the health sector and for specific services private sector was also engaged. During 1990s, Global Health Initiatives (Global Polio Eradication Initiatives-GPEI; Global Fund to fight against AIDS, TB & Malaria – GFATM; Global Alliance for Vaccine and Immunization-GAVI etc.) started evolving and represented a radical shift towards these Initiatives.

In 2000, the Millennium Development Goals (MDGs) reinforced the vertical disease focused nature of development assistance with additional inclusion of hepatitis, blindness etc. along with some elements of health system strengthening indirectly through programmes focusing on maternal and child health

supported by bilateral donors and multilateral banks. A number of management and institutional reforms were also tested to improve efficiency and effectiveness in the health system.

Over the period, focus of provincial governments remained on hospitals, while private sector emerged as a major service provider. However, private sector prioritized provision of private goods in health and provision of public goods remained largely the mandate of public sector.

The public sector always faced fiscal constraints due to which it could not provide essential health services to all. After 2005 Earthquake, an attempt was made to define very broad basic package of health services. At the same time at global level, concept of EPHS developed further mainly in conflict affected countries – notably Afghanistan, Somalia, Liberia, South Sudan and the Democratic Republic of the Congo to name but a few. The key feature was that all the EPHS proposals were drawn up immediately after conflict/ humanitarian crises in order to assist with comprehensive reform and reconstruction of public health infra-structure.

In Pakistan, a more formal attempt for developing an essential package of health services (EPHS) was made initially in the provinces of Punjab and Khyber Pakhtunkhwa during 2012-13, and later on in Sindh, corresponding with the 18th constitutional amendment. With UK's Department for International Development / Technical Resource Facility (TRF) support, costed EPHS were defined but remained limited to reproductive, maternal, new-born, child health and nutrition services at community and primary healthcare facilities. Non-communicable diseases, health emergencies, inter-sectoral interventions were not prioritized, while the implementation focus remained largely through the public sector, along with contracting out of health facilities to NGOs to a variable extent. Main objective was to ensure efficiency and effectiveness of health services in the system rather than provision of comprehensive EPHS to all people. However, this offered a good lesson learning opportunity for provision of a package of services which was positively supported by development of minimum services delivery standards mainly at primary level. In parallel, legislative reforms were also initiated to establish healthcare commissions/ authority, to set service delivery standards and their enforcement both in the public and private sector.

Health Insurance Programme was first approved in June 2014 and launched on December 31st 2015. The Programme aimed at families living below the poverty line and were covered for up to Rs. 50,000 of treatment in public or private hospitals and for up to Rs. 300,000 for treatment of seven particularly expensive diseases: diabetes, cardiovascular diseases, cancer, kidney and liver diseases, HIV and Hepatitis complications, burns and road accidents. In 2019, the package of services was enhanced to nine diseases and per family support was increased to Rs. 720,000 per year.

The 2030 agenda on Sustainable Development in 2015 has provided another opportunity to revisit the health services and health system in Pakistan to ensure achievements of new targets and goals, which are more comprehensive and ambitious than MDGs. The Astana Declaration in 2018 is also expected to provide a fresh look on the PHC agenda.

In August 2018, an international meeting on Disease Control Priorities - Edition 3 (DCP3) was held in Pakistan and attended by Morocco, Lebanon, Iran, Jordan, Pakistan, WHO EMRO, University of Washington and other stakeholders including provincial departments of health. Soon after the workshop, and on the decision of Inter-Ministerial Health & Population Forum meeting held in September 2018, Pakistan proposed the DCP3 secretariat to select Pakistan as the first country in the World to adopt DCP3 recommended interventions. The proposal was agreed by the secretariat.

In July 2019, with support of the DCP3 secretariat and WHO, work related to development of generic UHC Benefit Package of Pakistan started through a consultative process with provincial / area Health Departments and other stakeholders. The generic EPHS was endorsed by the Inter-Ministerial Health & Population Council on 22nd October 2020. It was also decided to develop province specific EPHS. Sindh thus

became the first province in Pakistan to develop the provincial EPHS. The document was endorsed by the Sindh Steering Committee chaired by the health minister on 22nd June 2021.

RATIONALE

The Health Department, Sindh is committed to improve the health of all people, particularly women and children by providing universal access to affordable, quality, essential health services which are delivered in an efficient way through a resilient and responsive health system. On the other hand, there are always financial constraints and the government is unable to provide even basic health services to all people, resulting in poor health outcomes.

The SDG baseline in 2015 for UHC coverage index in Sindh was estimated to be 37.6 (46.9 in 2019), which was much less than the average of sub-Saharan Africa at 42[2]. While considering different factors, one cannot ignore whether right essential health services are offered to all people or not.

It is crucial to review the current status of health services and to suggest cost-effective interventions through different platforms in such a way to avert maximum possible preventable burden of disease in the province.

AIM AND PRINCIPLES

The UHC Essential Package of Health Services is a policy framework for strategic service provision based on scientific evidence on health interventions. The purpose is to ensure that all people have access to essential health services (including prevention, promotion, treatment, rehabilitation and palliation) particularly in the context of limited resources. It aims to address current poor access to health and inequalities in health service provision. It also helps to establish and clarify health priorities and direct resource allocation accordingly.

The guiding principles adopted for the development process of the 'UHC benefit package' included the following:

- Setting of the package is country/province executed and owned with active engagement of policy makers and other stakeholders
- The package should enhance equity and improve access for vulnerable segments of the population
- Strong commitment and joint work of key officials in government and other stakeholders is essential for success
- The process should be open and transparent in all steps with clearly defined criteria, driven by evidence and a systematic approach of collaboration from data to dialogue and decisions
- Partnership with other stakeholders including UN agencies and development partners is a critical component of joint work
- Feasibility and affordability of implementation is key. Unrealistically aspirational package with inadequate financial resources or health system capacity is a recipe for failure
- The package developed should be linked to robust financing mechanisms and effective service delivery system

PROCESS FOR THE DEVELOPMENT OF SINDH EPHS

After the development of the generic UHC Benefit Package for Pakistan/ EPHS, provincial adaptation of the UHC BP is a critical step for rolling out across the provinces. There are variations across the provinces in terms of health systems dynamics, situation with regards to prioritized interventions and the service delivery issues. Consequently, keeping in view the local context, it is important that each province, deliberate and prioritize the interventions.

[2] WHO, 2016; World Health Statistics, Monitoring Health for SDGs

To implement the decision of developing province specific costed EPHS document, three options were considered by the Health Department, Sindh:

a. Adopt the generic UHC BP for Pakistan / EPHS as Sindh EPHS;
b. Consideration of the current Sindh specific evidence and use this for prioritization of interventions for Sindh EPHS;
c. Province specific detailed evidence generation followed by intervention prioritization.

The Health Department, Sindh decided to opt for the option (b) of using Sindh specific evidence to a maximum possible extent and use national evidence where evidence generation is time consuming and difficult. It was also decided to institutionalize the process in the Health Department, Sindh, so that evidence is generated/ collated on a regular basis and that the Health Department, Sindh will make required changes in the EPHS in future if required. Later on, following steps were followed for the development of Sindh EPHS:

Step 1: Governance arrangement

To ensure clear and consistent governance of the UHC BP provincial localisation, it was important to set out the order of procedures for decision making across different tiers, roles and responsibilities, while ensuring clear ways of engaging to support an inclusive process.

The governance arrangement recognizes the leadership of the Health Department, Sindh, while being supported by the M/o NHSR&C, Partners and the UHC BP National Advisory Committee (NAC). The Chief Secretary, Government of Sindh notified the Sindh UHC Technical Committee under the chairmanship of Director General Health Services, Sindh and with representation of different constituencies with following Terms of Reference (TOR):

- The UHC Technical Committee will act as Sindh specific Coordination and Facilitation architecture on UHC related interventions, projects and reform initiatives;
- Liaise with the Ministry of NHSR&C, other departments, partner organizations and stakeholders for effective coordination and harmonization;
- Facilitate generating the localized evidence for province/area specific UHC Benefit Package and related reform initiatives;
- Collection, collation of available data and information on UHC related interventions and situation in the province/area;
- Based on available localized evidence, the group will produce background documents/ discussions papers, which will be used to guide the development of provincial/area UHC Benefit Package (including a: Essential Package of Health Services for all five platforms – community, PHC centre, First level hospital, Tertiary hospital and Population level; and b: Inter-sectoral interventions policies);
- Facilitate consultations at different levels to produce the project documents not limited to the National Health Support Project (NHSP), Global Financing Facility and Joint UHC Technical Assistance Plan of the province/area;
- Monitor the progress of implementation of UHC related interventions and suggest recommendations for the consideration of Health Department;
- The Sindh UHC Technical Committee may form sub-committees as per need.

The Chief Secretary, Government of Sindh also notified Sindh UHC Steering Committee under the chair of Sindh Minister of Health & Population and members from Departments of Finance, Planning & Development and Health, with following TOR:

- Provide strategic direction to oversee and governing all Sindh UHC-Benefit activities;
- Drive the use of UHC-Benefit Package in policy and planning;
- Ensure stakeholders involvement in the Sindh UHC-Benefit Package process;
- Review and approve the recommendations of the Sindh UHC Technical Committee;

- Guide and approve work plans presented by the Sindh UHC Technical Committee;
- Resource mobilisation of funds for UHC Benefit Package activities for long term sustainability;
- Monitor implementation progress in pilot districts and facilitate addressing barriers and challenges;
- Revisit the UHC Benefit Package considering evidence generated locally.

The Health Department, Sindh also selected a UHC Coordinator (with support of the DCP3 secretariat/ LSHTM) to systematically carry out the activities for the development of Sindh UHC Benefit Package.

Step 2: Provincial Sensitization, Re view and Localisation of Evidence

After initial meeting with the Ministry of NHSR&C in March 2021, first formal consultative workshop of the UHC Technical Committee was held on 22-23rd of April 2021, to sensitize the stakeholders from Sindh on the process, appraise them of the UHC situation in the province, review the availability of essential health services and set baselines, targets and milestones for all EPHS proposed interventions for Sindh.

It was agreed that the criteria used for the development of generic national EPHS will also be used in Sindh to guide the EPHS development process. The criteria for the prioritization of interventions included:

1. Burden of Disease;
2. Effectiveness of intervention;
3. Feasibility;
4. Cost-effectiveness;
5. Equity;
6. Budget impact;
7. Financial risk protection; and
8. Social and economic impact.

Step 3: Review of Localized evidence and development of costed Sindh EPHS

The first workshop was followed by analytical work by the core team to generate Sindh specific evidence for the development of Sindh EPHS. The following evidence was collated for the prioritization of interventions:

1. For Sindh EPHS development, it was decided to use the national level 'Description of Interventions' as such, which were developed through consensus among stakeholders, using the latest guidelines and manuals.
2. Burden of Disease in Sindh: With availability of burden of disease data for Sindh, it was decided to apply the 2019 date, instead of 2017 burden of disease data at national level used in the generic EPHS. Significant rise in the total burden of disease was observed in 2019 compared to 2017.
3. Target population for each Intervention: The Sindh UHC Technical Committee as a group decided baselines, targets and year wise milestones for each proposed intervention. Year-wise targeted population for each intervention was defined using projected Sindh data from the 2017 census, latest national/provincial/area surveys, Institute of Health Metrics and Evaluation (IHME) and other published research. The baseline for some interventions was identified through department's programme. Year-wise milestones were kept realistic as the same has significant impact on the overall unit cost.
4. Unit cost: For the generic EPHS at national level, unit costs were calculated for 170 interventions across the 5 platforms. Costs were calculated to be nationally representative, using a provider perspective. Staff requirements were described in terms of staff type and number of minutes of direct contact required. For some interventions, multiple drug regimens were described depending on the target population. For equipment, resources were quantified by the number of minutes used per intervention. The same cost components were used in the Sindh EPHS considering the fact that the technical specifications of the interventions will remain the same. However, staff salaries were adjusted to the pay scales in Sindh and annual milestones defined by the Sindh UHC technical

committee were used to make year-wise cost projections. In addition, an inflation rate 8% was also added in forthcoming years.

5. Incremental cost-effectiveness ratio (ICER): For the Sindh EPHS, the ICERs value identified in the generic national EPHS were used (considering availability of limited data at provincial level), which were identified through the use of the Tufts registry and DCP3 databases on cost-effectiveness. The matching of the ICERs for each intervention went through a step-wise process along with assessment of quality of data.
6. Health Interventions Priori tization Tool (Hiptool): [3] is a web-based digital tool developed by the University College of London and was used to analyse, optimise health interventions and visualization of results. Optimization of interventions based on – cost effectiveness, disability adjusted life years (DALYs) averted, targeted population, budgetary impact was done using the Hiptool. This consequently led to the Investment Cascade of Interventions in Sindh to further analyse the evidence.

The next step after the generation of localized evidence / investment cascade, was a three-days' workshop held on 27-29th of April, 2021, involving Sindh UHC Technical Committee to deliberate and prioritise interventions for Sindh EPHS. The Sindh UHC Technical Committee deliberated to prioritize interventions into immediate, special and high priority categories, considering the fiscal space and availability of resources for the implementation.

Prioritized interventions as Sindh EPHS document were finally reviewed and endorsed by the Sindh UHC Steering Committee on 22nd June 2021.

[3] Health Interventions Prioritization Tool Working Group. http://hiptool.org/

REVIEW OF AVAILABILITY OF ESSENTIAL HEALTH SERVICES IN SINDH

The review was carried out by the Health Department, Sindh and other key stakeholders to compare the current availability of Essential Health Services in the province against the DCP3 recommended 218 interventions for Essential UHC (EUHC) and 151 initially prioritized interventions under the generic EPHS of Pakistan. Results are based on general consensus among 51 participants and gives a glimpse of availability of health services in the province. However, there would be significant variation in service provision not only among districts of Sindh but also worse coverage in hard to reach/ socio-economically poor districts.

Results in Sindh against the DCP3 recommended 218 EUHC interventions by platform and cluster are as following:

Platform	No of EUHC interventions	Not available	Available 1-25%	Available 26-50%	Available 51-75%	Available >75%
Community	**59**	66%	14%	14%	7%	-
PHC Centre	**68**	49%	26%	18%	7%	-
First Level Hospital	**58**	41%	38%	7%	10%	3%
Tertiary Hospital	**20**	20%	25%	10%	35%	10%
Population	**13**	46%	23%	23%	8%	-

Cluster	No of EUHC interventions	Not available	Available 1-25%	Available 26-50%	Available 51-75%	Available >75%
RMNCH/Age related	**60**	28%	42%	20%	10%	-
Infectious diseases	**50**	58%	22%	12%	8%	-
NCD and Injuries	**52**	60%	19%	10%	12%	-
Services access	**56**	52%	18%	11%	13%	7%
TOTAL	**218**	**49%**	**25%**	**13%**	**11%**	**2%**

Results in Sindh against the generic national EPHS initially prioritized 151 interventions by platform and cluster are as following:

Platform	No of EPHS interventions	Not available	Available 1-25%	Available 26-50%	Available 51-75%	Available >75%
Community	**28**	18%	32%	39%	11%	-
PHC Centre	**43**	16%	42%	26%	16%	-
First Level Hospital	**46**	13%	63%	13%	11%	-
Tertiary Hospital	**22**	9%	18%	5%	41%	27%
Population	**12**	42%	33%	17%	8%	-

Cluster	No of EPHS interventions	Not available	Available 1-25%	Available 26-50%	Available 51-75%	Available >75%
RMNCH/Age related	**55**	7%	53%	25%	15%	-
Infectious diseases	28	25%	39%	21%	14%	-
NCD and Injuries	**29**	28%	34%	17%	21%	-
Services access	**39**	15%	36%	15%	18%	15%
TOTAL	**151**	**19%**	**41%**	**20%**	**17%**	**4%**

Summary results of the review indicate that:

- Overall, 51% (112/218) of the DCP3 recommended EUHC interventions and 83% (126/151) of the generic EPHS interventions are being currently implemented partially, whereas only 12% of EUHC and 20% of generic EPHS interventions are expected to be accessible in more than 50% of the health facilities in Sindh province;
- Out of the DCP3 recommended district level EUHC interventions, 48% (89/185) and out of the generic district level EPHS interventions 84% (99/117) are availabl e partially in Sindh. Only 9% of district EUHC interventions and 13% of generic district EPHS interventions are available in more than 50% of health facilities;

- Out of the DCP3 recommended community level EUHC interventions, 34 % (20/59) and out of the generic community level EPHS interventions 82% (23/28) are available partially in Sindh. However, only 7% of community level EUHC interventions and 11% of generic community EPHS interventions are available more than 50%;
- Out of the DCP3 recommended PHC centre level EUHC interventions, 51% (35/68) and out of the generic PHC centre level EPHS interventions 84% (36/43) are available partially in Sindh. However, only 7% of PHC level EUHC interventions and 16% of generic PHC centre EPHS interventions are available in more than 50% of facilities;
- Out of the DCP3 recommended FLH level EUHC interventions, 59% (34/58) and out of the generic FLH level EPHS interventions 87% (40/46) are available partially in Sindh. However, only 14% of FLH level EUHC interventions and 11% of generic FLH EPHS interventions are available in more than 50% of facilities;
- Out of the DCP3 recommended TH level EUHC interventions, 80% (16/20) and out of the generic TH level EPHS interventions 90% (20/22) are available partially in Sindh. However, only 45% of TH level EUHC interventions and 68% of generic TH EPHS interventions are available in more than 50% of facilities;
- Out of the DCP3 recommended Population level EU HC interventions, 54% (7/13) and out of the generic population level EPHS interventions 58% (7/12) are available partially in Sindh. However, only 7% of Population level EUHC interventions and 8% of generic Population level EPHS interventions are available;

- Analysis of cluster-based results indicate that out of 218 DCP3 recommended EUHC services, partially available RMNCH and age-related cluster interventions are 43/60 (72%), for infectious diseases cluster 21/50 (42%), for NCD & injuries cluster 21/52 (40%) and for health services cluster 27/56 (48%). Non-communicable diseases and infectious diseases clusters appears to be neglected areas;
- Analysis of cluster-based results indicate that out of 151 recommended generic EPHS services, partially available RMNCH and age-related cluster interventions are 51/55 (93%), for infectious diseases cluster 21/28 (75%), for NCD & injuries cluster 21/29 (72%) and for health services cluster 33/39 (85%). Again, Non-communicable diseases and infectious diseases clusters need more attention.

The review concludes that:

- Current services are not sufficient to make significant progress towards achieving UHC. While developing & implementing Sindh EPHS, priority should be given first to scale up those cost-effective services which are being implemented with limited coverage;
- Two platforms – community based and PHC centre level should have scaled up services to avert maximum burden of disease. A more integrated approach should be adopted as implementation of selected interventions;
- Where services are included in the package they should be provided with the appropriate technology, to a high quality and within specified time-period;
- EPHS should be a live document and should be reviewed regularly by stakeholders and updated as improved evidence on the costs and health impact of these interventions becomes available;
- UHC benefit package should consider inter-sectoral interventions, which are mostly cost-effective and have long lasting impact on the health outcomes.

AN OUTLINE OF THE SINDH EPHS WITH LOCALIZED EVIDENCE

The Essential Package of Health Services (EPHS) has been designed to provide a progressively improving access of essential health care services to the population considering fiscal space and based on the commitment of the government to achieve UHC.

The fiscal space is critically constrained and the health part of the government budget that provides sustainable resources for public purposes is very narrow[4]. Although a gradual increase in health expenditure has been reported in recent years, health expenditure remains low in Sindh and other provinces. In Pakistan, public health expenditure is around 1% of the GDP whereas around 2% of the health expenditure is out-of-pocket. The total health expenditure per capita was US$ 45 in 2015-16, of which public spending on health was around US$ 14,[5] much lower than the estimated cost of the packages and compared to other countries in the region.

Adequate public spending on essential health services is central to UHC, the current financial gap calls for exploring options to implement the recommended package in a way that is consistent with current fiscal realities but also take into account the potential to adopt approaches for progressive increase in resources and coverage of interventions.

While the government needs to focus attention not only to enhance health sector allocations but also to gradually improve the coverage of essential health services especially in socio-economic poor districts. The contents of the EPHS are therefore a dynamic process that should be regularly updated and refined by the Health Department. District level interventions through community, PHC clinic and FLH are interlinked with each other and augment each other for maximum benefit.

Needless to say, prioritizing the government budget for EPHS is a very challenging task that requires full engagement of the highest level of government and relevant sectors commitment, especially the Department of Planning & Development, Department of Finance and the Federal government. Making the case for a higher level of investment in health requires:

- Conducting fiscal space analysis and identifying potential sources of additional funding;
- Linking revenue raising to a health financing strategy and investment plan;
- Advocacy for political support and presenting evidence of efficiency and economic gains.

Details of interventions prioritized for the Sindh EPHS are as following:

Platform	Number of DCP3 recommended Interventions	High Priority Interventions (with split)	Immediate Priority Interventions (with split)	Interventions through Special Initiatives
1. Community level	59	28	21	5
2. PHC centre level	68	43	37	3
3. First level hospital	58	46	36	2
District EPHS	**185**	**117**	**94**	**10**
4. Tertiary hospital	20	22	25	-
5. Population level	13	12	12	-
All Five Platforms	**218**	**151**	**131**	**10**

A summary of interventions (immediate priority) of Sindh EPHS for the year 2021 are as follows:

[4] WHO. https://www.who.int/health_financing/topics/fiscal-space/why-it-matter/en/

[5] Federal Bureau of Statistics; National Health Accounts 2015-16

Platform	Immediate Priority Interventions	Unit Cost ($)/ person/ year (inclusive of health system cost)	DALYs Avert
1. Community level	21	2.91	565,518
2. PHC centre level	37	4.22	1,836,851
3. First level hospital	36	10.95	510,871
District EPHS	**94**	**18.09**	**2,913, 240**
4. Tertiary hospital	25	7.29	539,236
5. Population level	12	3.36	++
All five platforms	**131**	**28.66**	**3,452,476 ++**

An addition of 10 interventions through special initiatives will cost US$6.48/ person/ year and will avert additional 279,460 DALYs through District EPHS. DALYs averted through population level interventions are difficult to measure but are expected to be highly cost-effective.

At the community level, majority of interventions are to be implemented through Lady Health Workers (LHWs), which cost US$1.53 to US$2.3/person/year depending upon the covered population per LHW (1,500 or 1,000 people respectively).

Implementation of EPHS progressively improves the coverage of essential health care services to the population and accordingly has cost implication and DALYs averted. Accordingly, projections from 2021 to 2027 are shown below.

	District EPHS – 117 interventions (initially Prioritized)		**District EPHS – 104 interventions** (Immediate & Special)	
Year	**Unit Cost ($)** (Inclusive of health system cost)	**DALYs Averted**	**Unit Cost ($)** (Inclusive of health system cost)	**DALYs Averted**
2021	33.32	3,524,507	24.49	3,135,225
2022	36.29	3,736,701	27.20	3,335,628
2023	39.58	3,974,565	30.24	3,562,839
2024	43.57	4,268,881	33.95	3,844,928
2025	46.48	4,477,256	36.61	4,041,784
2026	49.39	4,683,543	39.27	4,236,615
2027	52.28	4,888,669	41.90	4,429,723

	DISTRICT EPHS – 94 interventions (Immediate Priority)		
Year	Unit Cost ($) (Inclusive of health system cost)	DALYs Averted	Unit Cost ($) 8% annual inflation rate
2021	18.01	2,855,765	19.45
2022	19.02	2,985,143	20.54
2023	20.11	3,130,578	21.72
2024	21.34	3,305,953	23.05
2025	22.31	3,433,208	24.09
2026	23.28	3,558,644	25.15
2027	24.23	3,682,553	26.17

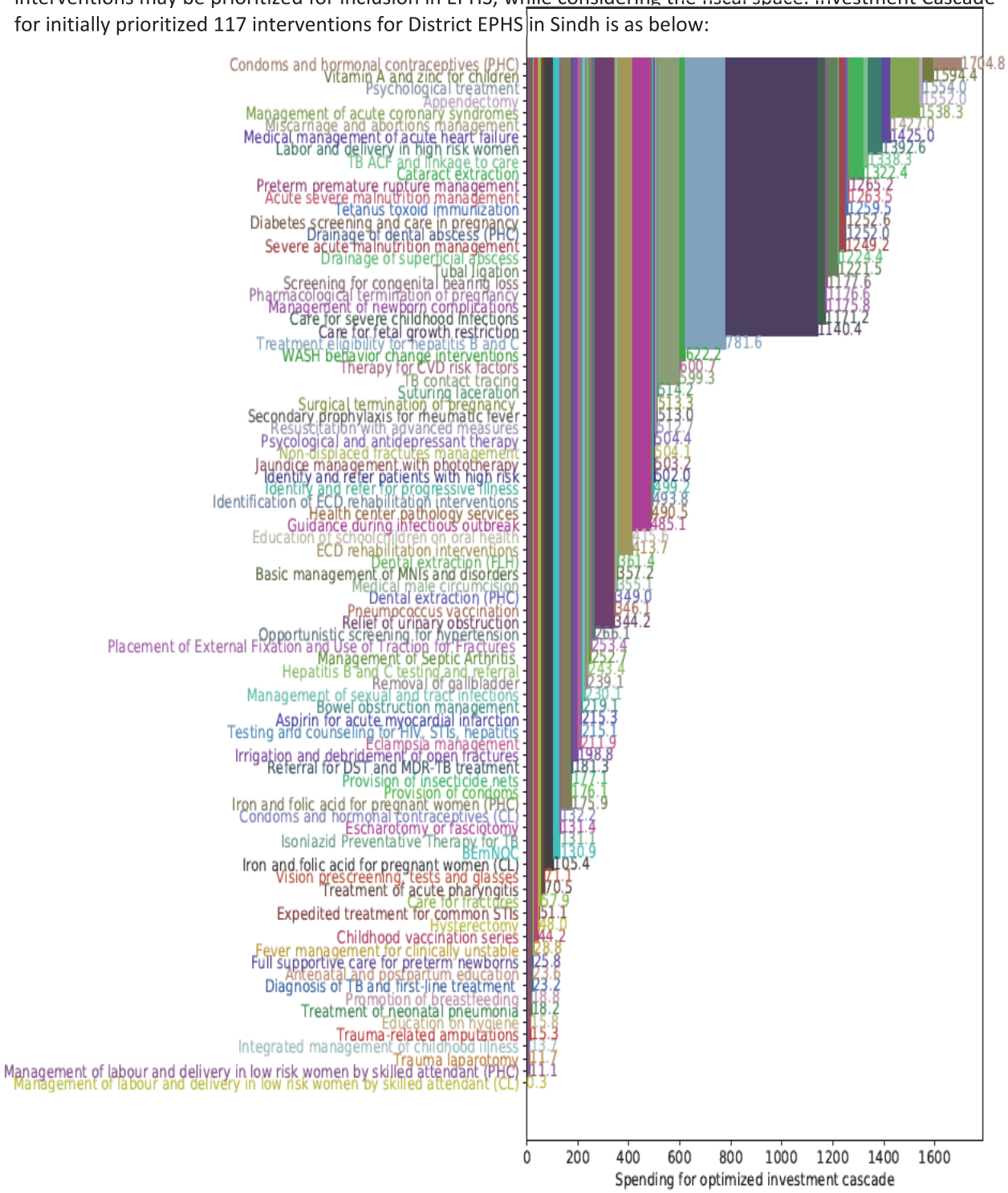
Year	Tertiary Hospital Level – 25 interventions		
	Unit Cost ($) (Inclusive of health system cost)	DALYs Averted	Unit Cost ($) with 8% annual inflation rate
2021	7.29	539,236	7.87
2022	7.81	566,127	8.44
2023	8.35	593,304	9.01
2024	8.89	623,337	9.60
2025	9.44	653,598	10.19
2026	10.03	686,517	10.83
2027	10.68	722,260	11.53

Year	Population Level – 12 interventions	
	Unit Cost ($)	Unit Cost ($) with 8% annual inflation rate
2021	3.36	3.36
2022		3.63
2023		3.92
2024		4.23
2025		4.57
2026		4.94
2027		5.33

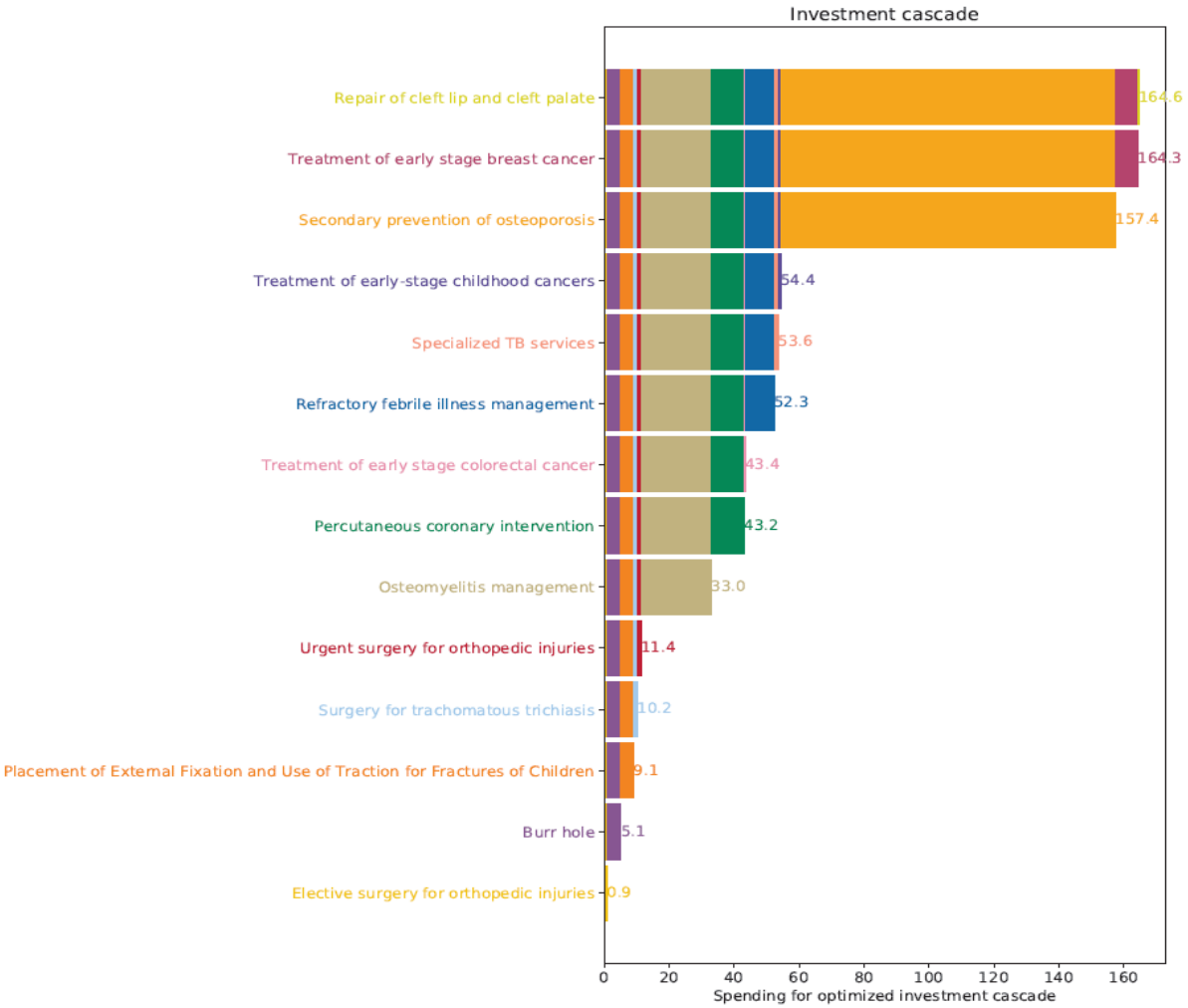
Note: Cost of population level interventions are relatively high than the generic EPHS. It is recommended that interventions may be implemented in partnership with other provinces/ federating areas to bring the cost down without compromising on the efficiency.

INVESTMENT CASCADES

Optimization of interventions based on localized evidence was done using – 'HiP Tool (Health Interventions Prioritization Tool)'. This consequently led to the Investment Cascade of Interventions, which suggest interventions may be prioritized for inclusion in EPHS, while considering the fiscal space. Investment Cascade for initially prioritized 117 interventions for District EPHS in Sindh is as below:



Investment Cascade for 22 Tertiary Hospital EPHS for Sindh is as below (excluding 3 interventions which were shifted from District EPHS to Tertiary Hospital in Sindh):



The following section provide details of interventions and localised evidence in the context of EPHS.

Localised Evidence of 117 Interventions for District EPHS and Prioritisation of Interventions

DCP 3 Code / UHC BP Platform	Full Name of Intervention	Cluster	Cost effective-ness and ranking	ICER	Burden of Disease Annual DALYs per 100,000	Spending per Intervention USD	Spending per Intervention USD % of total spending	Budget Impact	Cost per capita $	Cost per capita PKR	Unit Cost / Intervention $	Immediate/ Special Initiative
C1-COM	Antenatal and postpartum education on family planning	RMNCH	15	57	35,939	332,307	0.02%	Low	0.007	1.01	0.55	Immediate
C10-COM	Education on handwashing and safe disposal of children's stools	RMNCH	10	34	8,049	524,582	0.03%	Low	0.010	1.59	0.86	Immediate
C11-COM	Pneumococcus vaccination	RMNCH	56	749	1,914	14,804,064	0.87%	Medium	0.290	44.94	18.52	Immediate
C12-COM	Rotavirus vaccination	RMNCH	113	38,571	10	7,468,242	0.44%	Low	0.146	22.67	9.18	Immediate
C14-COM	Provision of vitamin A and zinc supplementation to children according to WHO guidelines, and provision of food supplementation to women and children in food insecure households	RMNCH	105	6,143	830	40,375,012	2.37%	High	0.791	122.57	20.80	Zinc immediate; Vit A after NIDs; Food supplementation through special initiative

DCP 3 Code / UHC BP Platform	Full Name of Intervention	Cluster	Cost effective-ness and ranking	ICER	Burden of Disease Annual DALYs per 100,000	Spending per Intervention USD	Spending per Intervention USD % of total spending	Budget Impact	Cost per capita $	Cost per capita PKR	Unit Cost / Intervention $	Immediate/ Special Initiative
C16-COM	Childhood vaccination series (diphtheria, pertussis, tetanus, polio, BCG, measles, hepatitis B, Hib, rubella)	RMNCH	21	121	6,549	12,838,017	0.75%	Medium	0.251	38.97	19.01	Immediate
C18-COM	Education of schoolchildren on oral health	RMNCH	73	1,082	1,991	1,853,391	0.11%	Low	0.036	5.63	0.87	Immediate
C19-COM	Vision pre-screening by teachers; vision tests and provision of ready-made glasses on-site by eye specialists	RMNCH	27	229	1,169	561,401	0.03%	Low	0.011	1.70	1.32	Immediate
C2-COM	Counselling of mothers on providing thermal care for preterm new-borns (delayed bath and skin-to-skin contact)	RMNCH	12	54	8,968	55,536	0.00%	Low	0.001	0.17	0.75	Immediate
C27a-COM	Provision of iron and folic acid supplementation to pregnant women, and provision of food or caloric supplementation to pregnant women in food insecure households (CL)	RMNCH	28	266	2,258	34,363,567	2.01%	High	0.673	104.32	56.61	Immediate

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C27b-PHC	Provision of iron and folic acid supplementation to pregnant women, and provision of food or caloric supplementation to pregnant women in food insecure households (PHC)	RMNCH	34	286	2,258	43,705,928	2.56%	High	0.856	132.68	57.07	Immediate
C28-COM	Community-based HIV testing and counselling (for example, mobile units and venue-based testing), with appropriate referral or linkage to care and immediate initiation of lifelong ART	Infectious Disease Cluster	38	286	596	15,416	0.00%	Low	0.000	0.05	2.24	Special Initiative
C30a-COM	Provision of condoms to key populations, including sex workers, men who have sex with men, people who inject drugs (IDU), transgender populations, and prisoners	Infectious Disease Cluster	36	286	1,550	208,113	0.01%	Low	0.004	0.63	22.65	Special Initiative
C30b-COM	Provision of disposable syringes to people who inject drugs (IDU)	Infectious Disease Cluster	33	286	1,550	73,972	0.00%	Low	0.001	0.22	8.05	Special Initiative

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C32-COM	Routine contact tracing to identify individuals exposed to TB and link them to care	Infectious Disease Cluster	70	1,082	3,780	85,107,911	4.99%	High	1.667	258.37	13.86	Special Initiative
C33-PHC	For malaria due to P. vivax, test for G6PD deficiency; if normal, add chloroquine or chloroquine plus 14-day course of primaquine	Infectious Disease Cluster	79	1,082	708	244,685	0.01%	Low	0.005	0.74	3.50	X
C3a-COM	Management of labour and delivery in low-risk women by skilled attendant	RMNCH	3	2	34,022	291,174	0.02%	Low	0.006	0.88	23.14	Immediate
C3b-COM	Basic neonatal resuscitation following delivery	RMNCH	2	1	34,022	20,344	0.00%	Low	0.000	0.06	1.62	Immediate
C3c-PHC	Management of labour and delivery in low-risk women by skilled attendant	RMNCH	5	17	34,022	10,799,143	0.63%	Medium	0.212	32.78	23.84	Immediate
C3d-PHC	Basic neonatal resuscitation following delivery	RMNCH	1	1	34,022	789,607	0.05%	Low	0.015	2.40	1.74	Immediate
C4-COM	Promotion of breastfeeding or complementary feeding by lay health workers	RMNCH	13	54	6,463	563,609	0.03%	Low	0.011	1.71	0.93	Immediate

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C43-COM	Early detection and treatment of Chagas disease, human African trypanosomiasis, leprosy, and leishmaniases	Infectious Disease Cluster	108	8,857	55	9,873,816	0.58%	Medium	0.193	29.98	13.47	Immediate
C45-COM	Identify and refer patients with high risk including pregnant women, young children, and those with underlying medical conditions	Infectious Disease Cluster	81	1,082	1,386	2,736,531	0.16%	Low	0.054	8.31	0.89	X
C46-COM	In the context of an emerging infectious outbreak, provide advice and guidance on how to recognize early symptoms and signs and when to seek medical attention	Infectious Disease Cluster	25	1,082	6,656	4,560,885	0.27%	Low	0.089	13.85	0.45	Immediate
C5-PHC	Tetanus toxoid immunization among schoolchildren and among women attending antenatal care	RMNCH	93	2,857	364	6,973,784	0.41%	Low	0.137	21.17	1.18	Immediate
C51-COM	WASH behaviour change interventions, such as community-led total	NCD & IPC	80	1,082	9,076	21,401,823	1.25%	High	0.419	64.97	1.06	X

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	sanitation											
C53a-COM	Identification/screening of the early childhood development issues motor, sensory and language stimulation	Health Services	68	1,082	894	3,369,717	0.20%	Low	0.066	10.23	1.18	Immediate
C53b-PHC	Early childhood development rehabilitation interventions, including motor, sensory, and language stimulation	Health Services	71	1,082	894	52,324,406	3.07%	High	1.025	158.85	18.34	Special Initiative
C8-COM	Detection and management of acute severe malnutrition and referral in the presence of complications	RMNCH	94	2,900	673	3,978,466	0.23%	Low	0.078	12.08	19.64	Special Initiative
FLH1-FLH	Detection and management of fetal growth restriction	RMNCH	85	1,286	6,990	358,848,347	21.04%	High	7.028	1,089.41	520.63	X
FLH10-FLH	Surgical termination of pregnancy by manual vacuum aspiration and dilation and curettage	RMNCH	76	1,082	263	310,711	0.02%	Low	0.006	0.94	184.41	Immediate
FLH11-FLH	Full supportive care for severe childhood infections with danger	RMNCH	84	1,286	21,323	31,475,159	1.85%	High	0.616	95.55	268.23	X

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	signs											
FLH12-FLH	Management of severe acute malnutrition associated with serious infection	RMNCH	90	2,286	673	24,757,618	1.45%	High	0.485	75.16	242.19	Special Initiative
FLH13-FLH	Early detection and treatment of early-stage cervical cancer	RMNCH	53	557	206	33,045	0.00%	Low	0.001	0.10	274.48	Immediate
FLH14-FLH	Insertion and removal of long-lasting contraceptives (IUCDs and Implants)	RMNCH	60	1,082	568	172,957	0.01%	Low	0.003	0.53	2.53	Immediate
FLH15-FLH	Tubal ligation	RMNCH	89	2,000	568	43,928,661	2.58%	High	0.860	133.36	193.16	Immediate
FLH16-FLH	Vasectomy	RMNCH	40	314	568	153,152	0.01%	Low	0.003	0.46	187.48	X
FLH17-FLH	Referral of cases of treatment failure for drug susceptibility testing; enrolment of those with MDR-TB for treatment per WHO guidelines (either short or long regimen)	Infectious Disease Cluster	39	314	500	4,192,373	0.25%	Low	0.082	12.73	616.18	Immediate
FLH18-FLH	Evaluation and management of fever in	Infectious Disease	20	116	71,615	3,133,530	0.18%	Low	0.061	9.51	136.39	

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	clinically unstable individuals using WHO IMAI guidelines, including empiric parenteral antimicrobials and antimalarials and resuscitative measures for septic shock	Cluster										
FLH20-FLH	Management of acute coronary syndromes with aspirin, unfractionated heparin, and generic thrombolytics (when indicated)	NCD & IPC	102	4,593	10,549	111,738,342	6.55%	High	2.189	339.22	429.64	Immediate
FLH22-FLH	Management of acute exacerbations of asthma and COPD using systemic steroids, inhaled beta-agonists, and, if indicated, oral antibiotics and oxygen therapy	NCD & IPC	110	15,714	4,492	40,790,952	2.39%	High	0.799	123.84	81.96	Immediate (DHQ)
FLH23-FLH	Medical management of acute heart failure	NCD & IPC	101	3,857	705	32,301,485	1.89%	High	0.633	98.06	621.00	Immediate
FLH24-FLH	Management of bowel obstruction	NCD & IPC	47	457	738	3,793,267	0.22%	Low	0.074	11.52	264.89	Immediate
FLH3-FLH	Jaundice management with phototherapy	RMNCH	75	1,082	1,918	1,117,891	0.07%	Low	0.022	3.39	102.12	Immediate

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FLH30-FLH	Management of intoxication/poisoning syndromes using widely available agents; e.g., activated charcoal, naloxone, bicarbonate, antivenin	NCD & IPC	77	1,082	2,077	61,305	0.00%	Low	0.001	0.19	30.32	Immediate
FLH31-FLH	Appendectomy	Health Services	103	4,814	237	13,693,429	0.80%	Medium	0.268	41.57	278.61	
FLH34-FLH	Colostomy	Health Services	18	86	469	160,030	0.01%	Low	0.003	0.49	298.85	To TH
FLH35-FLH	Escharotomy or fasciotomy	Health Services	32	276	552	327,975	0.02%	Low	0.006	1.00	311.08	To TH
FLH36-FLH	Fracture reduction and placement of external fixator and use of traction for fractures	Health Services	24	157	16,086	6,869,473	0.40%	Low	0.135	20.85	252.38	Immediate
FLH38-FLH	Hysterectomy for uterine rupture or intractable postpartum haemorrhage	Health Services	22	139	260	3,757,111	0.22%	Low	0.074	11.41	332.73	Immediate
FLH39-FLH	Irrigation and debridement of open fractures	Health Services	41	410	16,086	17,685,468	1.04%	High	0.346	53.69	380.56	To TH
FLH4-FLH	Management of eclampsia with magnesium sulfate,	RMNCH	42	429	877	13,065,012	0.77%	Medium	0.256	39.66	176.47	Immediate

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	including initial stabilization											
FLH41a-FLH	Management of septic arthritis	Health Services	51	529	1,614	9,294,401	0.54%	Medium	0.182	28.22	404.54	Immediate
FLH41b-FLH	Placement of External Fixation and Use of Traction for Fractures	Health Services	52	529	13,413	690,442	0.04%	Low	0.014	2.10	345.91	Immediate
FLH42-FLH	Relief of urinary obstruction by catheterization or suprapubic cystostomy	Health Services	55	743	892	78,132,340	4.58%	High	1.530	237.20	223.37	Immediate
FLH43-FLH	Removal of gallbladder including emergency surgery	Health Services	49	486	305	9,011,024	0.53%	Medium	0.176	27.36	309.73	Immediate
FLH44-FLH	Repair of perforations (for example, perforated peptic ulcer, typhoid ileal perforation)	Health Services	16	74	1,123	8,238	0.00%	Low	0.000	0.03	387.94	Immediate
FLH45-FLH	Resuscitation with advanced life support measures, including surgical airway	Health Services	72	1,082	15,016	8,339,896	0.49%	Low	0.163	25.32	81.67	Immediate
FLH48a-FLH	Trauma laparotomy	Health Services	7	20	16,086	573,794	0.03%	Low	0.011	1.74	357.10	Immediate
FLH49-FLH	Trauma-related amputations	Health Services	9	33	16,086	1,598,550	0.09%	Low	0.031	4.85	313.09	Immediate

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FLH5-FLH	Management of maternal sepsis, including early detection at Health Centre	RMNCH	109	13,571	120	24,528,627	1.44%	High	0.480	74.47	226.30	Immediate
FLH50-FLH	Tube thoracostomy	Health Services	63	1,082	16,883	124,832	0.01%	Low	0.002	0.38	86.98	Immediate
FLH52-FLH	Compression therapy for amputations, burns, and vascular or lymphatic disorders	Health Services	57	800	552	11,761	0.00%	Low	0.000	0.04	9.91	Immediate
FLH6-FLH	Management of new-born complications infections, meningitis, septicaemia, pneumonia and other very serious infections requiring continuous supportive care (such as IV fluids and oxygen)	RMNCH	86	1,429	1,914	4,663,314	0.27%	Low	0.091	14.16	128.85	Immediate
FLH7-FLH	Management of preterm labour with corticosteroids, including early detection at FLH	RMNCH	112	35,714	8,968	24,192,013	1.42%	High	0.474	73.44	254.11	Immediate
FLH8-FLH	Management of labour and delivery in high-risk women, including operative delivery (CEmNOC)	RMNCH	99	3,703	35,939	53,383,413	3.13%	High	1.046	162.06	578.34	Immediate

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HC1-PHC	Early detection and treatment of neonatal pneumonia with oral antibiotics	RMNCH	11	41	1,914	2,392,692	0.14%	Low	0.047	7.26	5.88	Immediate
HC10-FLH	Screening and management of diabetes in pregnancy (gestational diabetes or pre-existing type II diabetes)	RMNCH	92	2,571	174	522,886	0.03%	Low	0.010	1.59	6.84	Immediate
HC11-PHC	Management of labour and delivery in low-risk women (BEmNOC), including initial treatment of obstetric complications prior to transfer	RMNCH	29	267	35,939	25,487,430	1.49%	High	0.499	77.38	33.28	Immediate
HC12-PHC	Detection and treatment of childhood infections with danger signs (IMCI)	RMNCH	8	23	21,770	2,032,826	0.12%	Low	0.040	6.17	8.56	Immediate
HC14-PHC	Psychological treatment for mood, anxiety, ADHD, and disruptive behaviour disorders	RMNCH	104	4,821	4,130	1,621,964	0.10%	Low	0.032	4.92	2.79	Immediate
HC16-PHC	Post gender-based violence care, including counselling, provision of emergency contraception, and rape-	RMNCH	117	1,206	4,762	-	0.00%	Low	-	-	17.43	X

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	response referral (medical and judicial)											
HC17-PHC	Syndromic management of common sexual and reproductive tract infections (for example uretheral discharge, genital ulcer, and others) according to WHO guidelines	RMNCH	48	469	954	10,984,782	0.64%	Medium	0.215	33.35	5.89	Immediate
HC19-FLH	For individuals testing positive for hepatitis B and C, assessment of treatment eligibility by trained providers followed by initiation and monitoring of antiviral treatment when indicated	Infectious Disease Cluster	83	1,251	2,646	159,355,716	9.34%	High	3.121	483.78	312.12	Special Initiative
HC2-PHC	Management of miscarriage or incomplete abortion and post abortion care	RMNCH	100	3,857	263	2,040,754	0.12%	Low	0.040	6.20	29.61	Immediate

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HC20-PHC	Hepatitis B and C testing of individuals identified in the national testing policy (based on endemicity and risk level), with appropriate referral of positive individuals to trained providers	Infectious Disease Cluster	50	504	2,646	4,290,227	0.25%	Low	0.084	13.02	4.20	Special Initiative
HC21-PHC	Partner notification and expedited treatment for common STIs, including HIV	Infectious Disease Cluster	23	156	1,550	3,075,629	0.18%	Low	0.060	9.34	4.12	Immediate
HC23-PHC	Provider-initiated testing and counselling for HIV, STIs, and hepatitis, for all in contact with health system in high-prevalence settings, including prenatal care with appropriate referral or linkage to care including immediate ART initiation for those testing positive for HIV	Infectious Disease Cluster	43	429	4,196	3,242,489	0.19%	Low	0.064	9.84	5.14	Immediate

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HC24-FLH	As resources permit, hepatitis B vaccination of high-risk populations, including healthcare workers, PWID, MSM, household contacts, and persons with multiple sex partners	Infectious Disease Cluster	116	386	1,188	-	0.00%	Low	-	-	2.99	X
HC25-PHC	Provision of voluntary medical male circumcision service in settings with high prevalence of HIV	Infectious Disease Cluster	59	1,081	1,550	6,144,590	0.36%	Low	0.120	18.65	41.50	Immediate
HC26-PHC	For PLHIV and children under five who are close contacts or household members of individuals with active TB, perform symptom screening and chest radiograph; if there is no active TB, provide isoniazid preventive therapy according to current WHO guidelines	Infectious Disease Cluster	31	271	3,780	208,794	0.01%	Low	0.004	0.63	21.09	Immediate

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HC27-PHC	Diagnosis of TB, including assessment of rifampicin resistance using rapid molecular diagnostics (UltraXpert), and initiation of first-line treatment per current WHO guidelines for drug-susceptible TB; referral for confirmation, further assessment of drug resistance, and treatment of drug-resistant TB	Infectious Disease Cluster	14	56	3,780	4,456,703	0.26%	Low	0.087	13.53	95.39	Immediate
HC28-COM	Screening for HIV in all individuals with a diagnosis of active TB; if HIV infection is present, (Refer for ARV treatment) and HIV care	Infectious Disease Cluster	4	4	596	490	0.00%	Low	0.000	0.00	2.45	Immediate
HC3-FLH	Management of preterm premature rupture of membranes, including administration of antibiotics	RMNCH	96	3,041	11,157	1,489,944	0.09%	Low	0.029	4.52	43.23	Immediate

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HC30-PHC	Evaluation and management of fever in clinically stable individuals using WHO IMAI guidelines, with referral of unstable individuals to first-level hospital care	Infectious Disease Cluster	78	1,082	71,615	681,054	0.04%	Low	0.013	2.07	5.81	Immediate
HC32-PHC	Provision of insecticide-treated nets to children and pregnant women attending Health Centre	Infectious Disease Cluster	35	286	1,386	952,585	0.06%	Low	0.019	2.89	9.07	Selected high risk districts
HC33-PHC	Identify and refer to higher levels of health care patients with signs of progressive illness	Infectious Disease Cluster	69	1,082	1,386	12,522,795	0.73%	Medium	0.245	38.02	5.45	X
HC36-PHC	Long-term combination therapy for persons with multiple CVD risk factors, including screening for CVD in community settings using non-lab-based tools to assess overall CVD risk	NCD & IPC	65	1,082	23,838	1,029,443	0.06%	Low	0.020	3.13	10.95	Immediate
HC37-PHC	Low-dose inhaled corticosteroids and bronchodilators for asthma and for selected	NCD & IPC	111	25,180	4,492	1,140,494	0.07%	Low	0.022	3.46	3.27	Immediate

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	patients with COPD											
HC38-PHC	Provision of aspirin for all cases of suspected acute myocardial infarction	NCD & IPC	46	443	10,549	347,019	0.02%	Low	0.007	1.05	1.14	Immediate
HC39a-PHC	Screening of albuminuria kidney disease including targeted screening among people with diabetes	NCD & IPC	107	8,737	2,727	2,326,286	0.14%	Low	0.046	7.06	10.23	Immediate
HC41-PHC	Secondary prophylaxis with penicillin for rheumatic fever or established rheumatic heart disease	NCD & IPC	64	1,082	580	252,336	0.01%	Low	0.005	0.77	3.34	Immediate
HC42-PHC	Treatment of acute pharyngitis in children to prevent rheumatic fever	NCD & IPC	26	214	580	12,616,396	0.74%	Medium	0.247	38.30	5.08	Immediate
HC45-PHC	Opportunistic screening for hypertension for all adults and initiation of treatment among individuals with severe hypertension and/or multiple risk factors	NCD & IPC	54	571	21,697	12,498,520	0.73%	Medium	0.245	37.94	22.16	Immediate

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HC4a-COM	Provision of condoms and hormonal contraceptives, including emergency contraceptives	RMNCH	37	286	1,550	786,800	0.05%	Low	0.015	2.39	15.71	Immediate
HC4b-PHC	Provision of condoms and hormonal contraceptives, including emergency contraceptives and IUDs	RMNCH	6	6,501	1,550	305,423	0.02%	Low	0.006	0.93	15.71	Immediate
HC50-PHC	Management of depression and anxiety disorders with psychological and generic antidepressant therapy	NCD & IPC	95	1,082	3,211	5,818,632	0.34%	Low	0.114	17.66	36.57	Immediate
HC56-PHC	Targeted screening for congenital hearing loss in high-risk children using otoacoustic emissions testing	NCD & IPC	88	1,857	1,203	1,075,034	0.06%	Low	0.021	3.26	14.52	Immediate
HC57a-PHC	Dental extraction (PHC)	Health Services	58	1,000	364	2,866,382	0.17%	Low	0.056	8.70	21.93	Immediate
HC57b-FLH	Dental extraction (FLH)	Health Services	67	1,082	364	4,211,346	0.25%	Low	0.082	12.79	25.78	Immediate
HC58a-PHC	Drainage of dental abscess (PHC)	Health Services	91	2,543	72	2,844,631	0.17%	Low	0.056	8.64	21.77	Immediate
HC59-PHC	Drainage of superficial abscess	Health Services	30	2,159	72	2,905,667	0.17%	Low	0.057	8.82	16.05	Immediate

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HC5a-COM	Counselling of mothers on providing kangaroo care for new-borns (CL)	RMNCH	44	430	6,143	2,934	0.00%	Low	0.000	0.01	0.90	Immediate
HC5b-PHC	Counselling of mothers on providing kangaroo care for new-borns (PHC)	RMNCH	45	430	6,143	22,566	0.00%	Low	0.000	0.07	0.90	Immediate
HC6-FLH	Management of neonatal sepsis, pneumonia, and meningitis using injectable and oral antibiotics	RMNCH	19	107	1,914	55,002	0.00%	Low	0.001	0.17	1.72	Immediate
HC60-PHC	Management of non-displaced fractures	Health Services	62	1,082	16,086	565,485	0.03%	Low	0.011	1.72	15.13	Immediate
HC61-PHC	Resuscitation with basic life support measures	Health Services	82	1,082	15,016	41,201	0.00%	Low	0.001	0.13	1.84	Immediate
HC62-PHC	Suturing laceration	Health Services	74	1,082	16,086	882,359	0.05%	Low	0.017	2.68	3.94	Immediate
HC63a-PHC	Treatment of caries	Health Services	106	6,644	72	35,266,575	2.07%	High	0.691	107.06	28.00	Immediate
HC64-PHC	Basic management of musculoskeletal and neurological injuries and disorders, such as prescription of simple exercises and sling or cast provision	Health Services	66	1,082	21,333	2,129,666	0.12%	Low	0.042	6.47	9.43	Immediate

DCP 3 Code / UHC BP Platform	Full Name of Intervention	Cluster	Cost effective-ness and ranking	ICER	Burden of Disease Annual DALYs per 100,000	Spending per Intervention USD	Spending per Intervention USD % of total spending	Budget Impact	Cost per capita $	Cost per capita PKR	Unit Cost / Intervention $	Immediate/ Special Initiative
HC68-PHC	Health centre pathology services	Health Services	61	1,082	1,386	5,334,551	0.31%	Low	0.104	16.19	23.22	Cost included at relevant intervention level
HC7-PHC	Pharmacological termination of pregnancy	RMNCH	87	1,714	263	703,992	0.04%	Low	0.014	2.14	17.51	Immediate
HC9a-COM	Screening of hypertensive disorders in pregnancy	RMNCH	115	132,148	877	291,101	0.02%	Low	0.006	0.88	0.43	Immediate
HC9b-PHC	Screening and management of hypertensive disorders in pregnancy	RMNCH	114	132,148	877	5,460,054	0.32%	Low	0.107	16.58	7.13	Immediate
RH1-FLH	Full supportive care for preterm new-borns	RMNCH	17	83	33,682	2,278,852	0.13%	Low	0.045	6.92	39.26	Immediate
RH14-FLH	Cataract extraction and insertion of intraocular lens	Health Services	97	3,143	438	57,149,301	3.35%	High	1.119	173.50	244.90	Immediate
P5-COM	Systematic identification of individuals with TB symptoms among high-risk groups and linkage to care (“active case finding”)	Infectious Disease Cluster	98	3,571	3780	15,840,258	0.93%	Medium	0.310	48.09	0.78	Immediate

Note: Health System cost is included

LEGENDS			
	Strong and positive evidence		Intervention recommended for Immediate implementation
	Medium positive evidence		Intervention recommended for implementation through Special initiatives
	Weak positive evidence		Not an immediate priority OR shifted from FLH to Tertiary Hospital

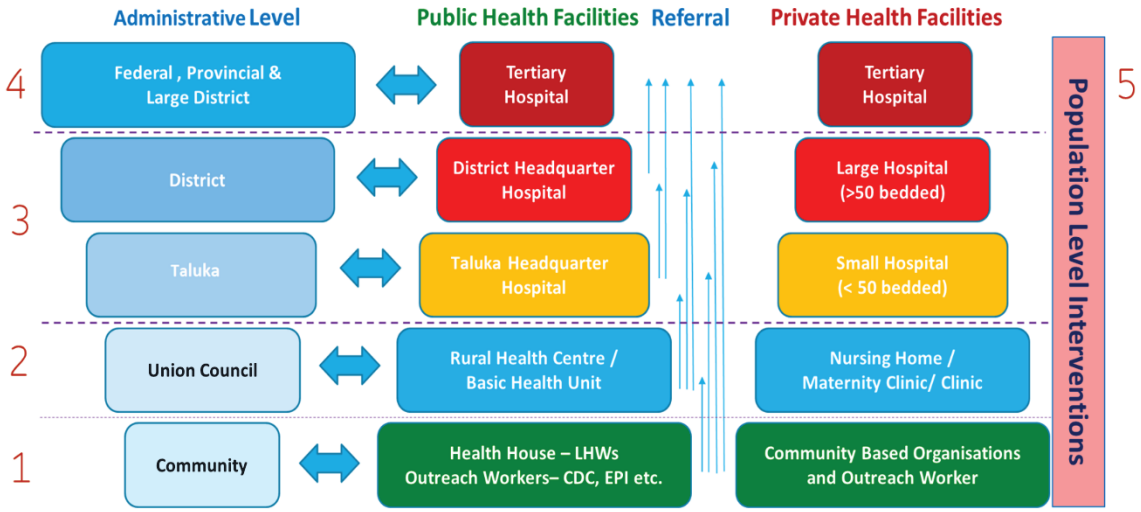
12 Prioritized Interventions at Population Level

Code	Intervention	Cluster	Unit Cost ($)/ Capita/Yr
P1-P1	Mass media messages concerning sexual and reproductive health and mental health for adolescents (Also included in HIV and Mental health packages of services)	RMNCH	0.08
P2-P2	Mass media messages concerning healthy eating or physical activity (Also included in CVD and Musculoskeletal packages of services)	RMNCH	0.08
C25-P3	Education campaign for the prevention of gender-based violence	RMNCH	0.08
P4-P4	Mass media encouraging use of condoms, voluntary medical male circumcision and STI testing	RMNCH	0.08
P6-P5	Sustained integrated vector management for effective control of visceral Leishmaniasis, dengue, chikungunya, CCHF, and other nationally important causes of non-malarial fever vector borne NTDs	Infectious Disease Cluster	0.08
P13-P6	Mass media messages concerning awareness on handwashing and health effects of household air pollution	Infectious Disease Cluster	0.08
P7-P7	Conduct a comprehensive assessment of International Health Regulations (IHR) competencies using the Joint External Evaluation (JEE) tool	Infectious Disease Cluster	0.00
P10-P8	Develop and implement a plan to ensure surge capacity in hospital beds, stockpiles of disinfectants, equipment for supportive care and personal protective equipment	Infectious Disease Cluster	2.13
P11-P9	Develop plans and legal authority for curtaining interactions between infected persons and un-infected population and implement and evaluate infection control measures in health facilities	Infectious Disease Cluster	0.05
P8-P10	Conduct simulation exercises and health worker training for outbreak events including outbreak investigation, contact tracing and emergency response	Infectious Disease Cluster	0.00
P9-P11	Decentralize stocks of antiviral medications to reach at risk groups and disadvantaged populations	Infectious Disease Cluster	0.61
P3-P12	Mass media messages concerning use of tobacco (Also included in CVD package of services)	NCD & IPC	0.08

HEALTHCARE DELIVERY SYSTEM IN SINDH

Sindh's public health delivery system functions as an integrated health complex that is administratively managed at the district level. The government provide healthcare through a three-tiered healthcare delivery system and community-based interventions. The former includes Basic Health Units (BHU), and Rural Health Centres (RHC) forming the core of the primary healthcare centres. Secondary care including first and second referral facilities providing acute, ambulatory and inpatient care is provided through Taluka Headquarter Hospitals (THQs), and District Headquarter Hospitals (DHQs) which are supported by Tertiary Care mostly annexed with teaching hospitals. Services are augmented through a range of public health programmes through healthcare delivery system and through population level interventions.

Figure: Public & Private Healthca re Delivery System in Sindh



The private healthcare system constitutes of for-profit and not-for-profit (NGOs and CBOs) and constitutes a diverse group of doctors, nurses, pharmacists, traditional healers, drug vendors, as well as laboratory technicians, shopkeepers and unqualified practitioners. The private healthcare delivery system includes clinics, maternity clinics, nursing homes, small hospitals (less than 50 bedded) and large hospitals (more than 50 bedded) and tertiary care from private teaching hospitals. Diagnostic facilities and the sale of drugs from pharmacies are also a part of this system. In some cases, the distinction between public and private sectors is not very clear as many public sector practitioners also practice privately.

Whereas, primary, promotive and preventive health services are largely offered by the public sector, the focus of private sector is generally on the curative care services, with bias towards urban areas.

A brief introduction of different types of District level healthcare delivery system is provided below:

Community based healthcare delivery system

At the household level, services are provided through community-based health providers including Lady Health Workers (LHWs), Community Midwives (CMWs) and workers for community-based organizations (e.g. for provision of HIV & AIDS preventive services). In addition, there are also outreach workers including Lady Health Supervisors, Vaccinators, Population Welfare Councillor, CDC/Environmental Technologist etc, and have been accounted for as PHC centre staff.

Lady Health Workers (LHWs)

Lady Health Worker (LHW) is a community-based worker and the LHWs Programme was launched nationwide in 1994. LHW is responsible to register households in her community of around 150-200 households (an average of 1,000-1,500 people) and offer primary, preventive, promotive and some

curative care services. LHW is required to visit at least 7-10 households each day to ensure that all registered households are visited at least once every month. During household visit she provides services including health education, counselling, motivation and community organization. She promotes and offer family planning services, maternal and adolescent healthcare, child healthcare including immunization and nutrition services, treatment of common ailments etc.

The LHW's house is designated as a **Health House,** where she is expected to establish a 'kit corner' to provide counselling and treatment services to those visiting her for advice. The LHW's house may also serves as a vaccination post to vaccinate women and children in coordination with the area vaccinator. LHW is responsible to organize her community by forming health committee and women's groups. LHW submits her monthly report in the monthly 'continuing education' meeting at the health facility. She is replenished with medicines and supplies consumed during last month.

Community Midwives (CMWs)

Community Midwives (CMWs) were introduced through the National Maternal, New-born and Child Health (MNCH) Programme in 2006. CMW is responsible to provide individualized care to the pregnant women throughout the maternity cycle and the new-born and ensure skilled birth attendance for home deliveries or at work/ birthing station established by her. The catchment population for a CMW is around 5000. In some areas, Lady Health Visitors (LHV), mostly based at PHC centre, also offer home-based delivery services. Considering rapidly increasing institutional deliveries across the country, the need for community midwives is less comparatively in large urbanized districts. Whereas in remote and socio-economically poor districts, this is among the few options to ensure skilled birth attendance.

Community based services to prevent HIV & AIDS

Community based services are also offered through workers of community-based organizations in HIV & AIDS high-risk populations to ensure provision of preventive services. These services are usually offered to injecting drug users, sex workers, bridging population etc.

In addition, community level services are also offered by the out-reach workers including Vaccinators, Health, Population Welfare Councillors, Environmental technicians, Lady health supervisors and other health facility staff. For some interventions, other volunteers also contribute to delivery of services e.g., polio campaign, deworming campaign, Vit A supplementation, etc. Nomenclature varies in different provinces. Activities related to out-reach workers have been accounted for mostly at the PHC centre level.

Primary healthcare centre level health system

There are different types of primary healthcare centre level facilities in rural areas commonly known as Basic Health Unit (BHU), BHU Plus and Rural Health Centre (RHC), while in urban areas, comparable types of PHC facilities are Dispensary, Medical/ MCH centre while in private sector different types of comparable PHC facilities are General Physician (GP) Clinic, Medical centre and Nursing/ maternity homes etc.

A brief explanation of three types of PHC centre facilities in public and private sector are as following:

Basic Health Unit/ Dispensary/ General Practitioner Clinic

Dispensary is the oldest type of a primary healthcare facility mainly in urban areas. After Alma Ata, Basic Health Units (BHUs) were established country wide, mainly in rural areas, to work as the first formal point of contact to access primary healthcare services. Ideally, each Union Council or Ward (lowest administrative unit) should have one PHC centre usually serving a population of around 5,000 to 25,000. Usually, these health facilities offer basic primary healthcare services, which include provision of static and outreach services for maternal & childcare, immunization, family planning, management of diarrhoea, pneumonia, control of communicable diseases and management of common ailment along with health education activities. These facilities are also responsible for provision of management and

logistic support to LHWs and other community-based service providers. These facilities offer services usually 8 hours/ 6 days a week.

24/7 BHU Plus / MCH Centre / Medical Centre

With increasing population and to ensure 24/7 delivery services, the concept of BHU Plus emerged. In comparison to BHU, BHU Plus is envisaged to provide wider range of services including round the clock delivery services. BHU Plus is envisaged to serve a catchment population of 25,000 – 40,000. It is important to offer wide range of services, infrastructure, human resources, equipment and supplies should also be ensured at BHU Plus.

Rural Health Centre / Health Centre/ Nursing Homes

Rural Health Centre (RHC) functions around the clock and serve a catchment area population of 40,000–60,000 or even more, providing a comprehensive range of primary health care services and basic indoor facilities. The services envisaged to be provided at RHC include health education services, general treatment services, Basic Emergency Obstetric & New-born Care (BEmONC) services, emergency services such as management of injuries, accident, dog bite/snake bite; selected surgical services such as stitching, abscess drainage, circumcision etc. and first aid services to stabilize the patient in emergency conditions and refer them to higher level of care in case of complications. RHCs also provide clinical, logistical and managerial support to the BHUs, LHWs, MCH Centres, and Dispensaries that fall within its geographical limits. RHC also provides medico-legal, basic surgical, dental and ambulance services. RHCs are equipped with laboratory and X-ray facilities and a 20 bedded inpatient facility. Around 5-8 BHUs are linked with the RHC for referral and other administrative purposes.

Equivalent to RHC, there are private sector Health Centre, Nursing or Maternity homes mostly in urban areas and sometimes offer wider range of services including specialized services.

First level hospital health system

First level hospital refers to the intermediate level of medical care that is provided by a specialist or facility upon referral from primary care and is designed to provide technical, therapeutic and diagnostic services. It requires more specialized knowledge, skills, and equipment than the primary care professional. Services are offered 24/7. Basic specialist consultation and hospital admissions fall into this category. First level hospitals include Taluka Head Quarters (THQs), and District Head Quarter (DHQs) in public sector. The services provided at the health facilities are primarily curative in nature. Administratively, these hospitals are run by senior doctors or medical superintendents who oversee medical staff that comprises doctors, nurses, paramedics and other technicians.

Private hospital less than 50 beds are considered to be equivalent to THQ hospital while private hospitals having bed capacity more than 50 are equivalent to DHQ hospital.

Taluka Head Quarter (THQ) hospital / 50 bedded Private hospitals

The catchment population of THQ hospital is the population of that Taluka and may vary from 60,000 to 1 million people or even more. Hospital beds in THQ hospital ranges from 40-150 depending upon the size of Taluka. THQ hospital is supposed to provide basic (and sometimes Comprehensive Emergency Obstetrics and New-born Care (CEmONC), along with basic medical and surgical services. THQ hospital also provides services to those patients who are referred by RHCs, BHU, LHWs and CMWs.

District Head Quarters (DHQ) hospital / >50 bedded Private hospitals

DHQ hospital serves the whole population of a district and population may vary from 1-3 million or more. Number of hospital beds range from 200-400 or more. DHQ hospitals are supposed to provide specialized curative care, diagnostics, inpatient and referral services. DHQ hospital provides services to patients referred by LHWs, CMWs BHUs, RHCs and THQ hospital.

Tertiary hospital (Public/ Private)

A tertiary referral hospital provides tertiary care, which is a level of health care obtained from specialists in a large hospital after referral from the providers of primary care and secondary care. Tertiary hospital that usually has a full complement of services including paediatrics, obstetrics, general medicine, gynaecology, various branches of surgery and psychiatry. Specialty hospital are 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.

Tertiary hospital may also be attached with a Medical Teaching Institute. Tertiary hospitals are not present in all districts but in districts with large population and also serve the neighbouring districts.

Population level

Federal and Provincial governments also carry out some interventions which benefit the whole population. Population-level health interventions are policies or programmes shift the distribution of health risk by addressing the underlying social, economic and environmental conditions. These interventions might be programs or policies designed and developed in the health sector, but may be in sectors elsewhere, such as media or education.

DISTRICT LEVEL ESSENTIAL PACKAGE OF HEALTH SERVICES

(Community, PHC Centre and First Level Hospital)

UHC Benefit Package/ Essential Package of Health Services (EPHS) offers a futuristic vision in the health sector to set strategic direction and accordingly implement prioritized interventions to make progress on achieving Universal Health Coverage/ health-related Sustainable Development Goals.

Based on the evidence informed process outlined above, minimum of 94 interventions out of 218 recommended interventions by the DCP3 were prioritized for immediate implementation by stakeholders to be included in the Sindh District level EPHS at the community, PHC centre and First Level Hospital. Remaining interventions were identified as high priority to be implemented provided resources are available whereas 10 were identified to be implemented through special initiatives with additional support of national and/or provincial governments. Other interventions can also be offered once EPHS interventions are fully offered.

The immediate, high priority and special initiative interventions are categorized to four clusters (i: RMNCAH&N cluster; ii: Infectious diseases cluster; iii: Non-communicable disease cluster; and iv: health services access cluster). However, for ease of understanding, some interventions have been merged or broken down further. After that these interventions were re-classified according to lifecycle approach into following 12 categories:

1. Reproductive health/ birth spacing
2. Antenatal care
3. Delivery care
4. Post-natal care
5. New-born care
6. Nutrition
7. Child care
8. School age child care
9. Adolescent health
10. Infectious diseases
11. Non-communicable diseases
12. Health services access

First nine categories are part of RMNCH cluster. The description in the following section reflects the prioritized set of District level EPHS interventions:

EPHS at Community level

The package of services that are being proposed at the community level reflect the community needs, burden of disease, cost-effectiveness of interventions and the contextual factors to ensure delivery of efficient, effective and quality services at the doorstep. The health care workers, service providers and community-based organizations will provide the proposed services in the communities. Service providers include Lady Health Workers, Lady Health Visitor, Population Welfare Councillor and workers of Community-Based Organizations. These frontline workers also get backup support from the out-reach workers including CDC/Environmental Technicians, Vaccinators, Lady Health Supervisors and other health facility staff. The interventions among twelve categories are provided in the following box.

COMMUNITY LEVEL INTERVENTIONS

Reproductive Health/ Birth spacing
– Education and counselling on birth spacing during antenatal and post-natal care (LHW, CMW, LHV)
– Provision of condoms, hormonal pills and injectable contraceptives (LHW, CMW, LHV)
– Referral and linkages for IUCD insertion (LHW)
– Referral and linkages for surgical contraceptive methods (LHW)

Antenatal Care
– Counselling on providing thermal & kangaroo care to new-born (LHW, CMW, LHV)
– Counselling on breastfeeding and growth monitoring (LHW, CMW, LHV)
– Monthly monitoring of pregnant women using MCH card and referral to Skilled birth attendant (LHW)
– Nutrition counselling and provision of Iron and folic acid to pregnant women (LHW)
– Referral/ immunization for TT immunization (CBAs and Pregnant women) (LHW, CMW)
– Screening for hypertension during pregnancy and immediate referral (LHW, CMW. LHV)

Delivery Care
– Referral to skilled birth attendant for low risk labour and delivery (LHW)
– Identification of danger signs and referral to BEmONC or CEmONC facility considering complications (LHW, CMW, LHV)
– Low risk normal delivery (Only where CMW or LHV is available)

Post-Natal Care
– Use of PNC checklist for mother within 24 hours after delivery (LHW) +3 follow up visits for 40 days after delivery (LHW, CMW)
– Education and counselling on birth spacing during post-natal care and service provision/ referral (LHW, CMW)

New-born Care
– Use of PNC checklist for new-born within 24 hours after delivery (LHW) + care of new-born including care of cord (3 follow up visits) (LHW, CMW, LHV)
– Early initiation of breastfeeding (within ½ hour of birth) and initiation of growth monitoring (LHW, CMW, LHV)
– Ensuring thermal & kangaroo care to new-born (LHW)
– Ensure initiation of immunization for BCG and zero dose polio (LHW with support of area Vaccinator)

Nutrition
– Screening for malnutrition in children; growth monitoring, ensure provision of food supplements for moderately acute malnourished cases and refer severely acute malnourished cases to stabilization centre (LHW, PW councillor)
– Ensure provision of vitamin A (after National immunization days are stopped) and zinc supplementation (LHW, PW councillor, etc)
– Provision of micro-nutrients (iron and folic acid), ensure food supplementation to women/adolescent girls (LHW)

Child care
– Community based integrated management of childhood illnesses (LHW); immediate referral for complications and danger signs and follow up visits (LHW, PW councillor)
– Childhood Vaccination (BCG, Polio 0,1,2,3, Penta 1,2,3, Pneumococcal 1,2,3, Rota 1,2, Measles 1,2) – Typhoid vaccine from 2022 (LHW, PW councillor with support of Vaccinator)
– Education on handwashing and safe disposal of children's stool (LHW, PW councillor)

School age Child Care
– Education of schoolchildren on oral health (LHW, PW councillor)
– Vision pre-screening and referral if required (LHW, PW councillor)
– School based HPV vaccination of girls (vaccinator, LHV) – after 2022-23 and through special initiative
– Drug administration against soil-transmitted helminthiasis (LHW, PW councillor, volunteer)

Adolescent Health
– Education and counselling for prevention of sexually transmitted infection, screening and referral (LHW)

Infectious Diseases
– Community based HIV testing, counselling and referral (In high risk groups by CBO worker)
– Provision of condoms and disposable syringes (In high risk groups by CBO worker)
– Health education on Hepatis B and C and referral of suspected cases (LHW, PW councillor)
– Health education on STI and HIV (LHW, CBO worker)
– Systematic screening and routine contact tracing exposed to Tuberculosis (LHW, CBO worker)
– Referral of malaria suspect (LHW, PW councillor)
– Conduct larvicidal and water management (LHW & PW councillor with backup support from CDC/ Environmental technician)
– Identification and referral of suspected cases of Dengue, Influenza, Trachoma etc. (LHW, PW councillor)
– Identification, reporting and referral of notifiable diseases (LHW, PW councillor and CDC/ Environmental technician) - Conduct simulation exercises/ training

Non-Communicable Diseases
– Exercise based pulmonary rehabilitation of COPD (LHW)
– Screening for hypertension (LHW)
– Health education on CVD prevention (LHW, PW councillor)
– Health education on Diabetes (LHW, PW councillor)
– Self-managed treatment of migraine (LHW)
– Clap test for screening of congenital hearing loss among new-born and referral (LHW, CMW)
– WASH behaviour changes interventions (LHW, PW councillor with backup support from CDC/ Environmental technician)

Health Services Access
– Health education on dental care (LHW, PW councillor)
– Health education scabies, lice and skin infections (LHW, PW councillor)
– First aid, dressing and care of wounds and referral (LHW)
– Identification and screening of early childhood development issues and referral (LHW)
– Basic management of musculoskeletal injuries and disorders and referral (LHW)

EPHS at PHC centre level

The prioritized interventions are again based on the life-cycle approach which should be offered at the PHC centre. However, scope of interventions will vary considering different types of PHC centre. The following box reflect the essential services across different types of PHC centres.

PHC CENTRE LEVEL INTERVENTIONS				
Sr. No.	Intervention	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
	Reproductive Health/ Birth Spacing			
1.	Education and counseling on birth spacing during antenatal and post-natal / post-abortion care	Yes	Yes	Yes
2.	Provision of condoms, hormonal pills, emergency contraceptive pills, and injectable contraceptives	Yes	Yes	Yes
3.	Insertion and removal of the intrauterine device (IUD)	Yes	Yes (12/7)	Yes (24/7)
4.	Surgical contraceptive methods	Yes (Referral and Linkages)	Yes (Referral and Linkages)	Yes (Organize mini-lap camps and referral)
	Antenatal care			
5.	Counseling on providing thermal & kangaroo care to new-born	Yes	Yes	Yes
6.	Counseling on breastfeeding and growth monitoring	Yes	Yes	Yes
7.	Monitoring of pregnant women using MCH card (at least 4 ANC visits)	Yes	Yes (12/7)	Yes (24/7)
8.	Nutrition counseling and provision of Iron and folic acid to pregnant women	Yes	Yes	Yes
9.	Immunization against tetanus (CBAs and Pregnant women)	Yes	Yes	Yes
10.	Screening and care/ referral for hypertensive disorders in pregnancy	Yes	Yes (24/7 Care & referral)	Yes (24/7 Care & referral)
11.	Diabetes care in pregnancy	Yes (Only screening and Referral)	Yes (Screening and Referral for diabetes care in pregnancy)	Yes (Screening and Referral for diabetes care in pregnancy)
	Delivery Care			
12.	Low-risk Labour and Delivery	No (Only Referral)	Yes (24/7 services for low-risk labour & delivery and basic neonatal resuscitation (Availability of seven signal functions for BEmONC)	Yes (Services for low-risk labour/delivery and managing complications; Basic neonatal resuscitation (Availability of seven signal functions for BEmONC)
13.	Identification and referral for complications and danger signs	Yes (Referral to 24/7 BEmONC or CEmONC facility)	Yes (24/7 Referral to CEmONC facility)	Yes (24/7 Referral to CEmONC facility)
14.	Management of premature rupture of membranes, including administration of antibiotic	No	No	Yes
15.	Management of miscarriage or post-abortion care	No	No	Yes

PHC CENTRE LEVEL INTERVENTIONS				
Sr. No.	Intervention	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
	Post-Natal Care			
16.	Post-natal care services +3 follow up visits	Yes	Yes (12/7)	Yes (24/7)
17.	Education and counseling on birth spacing during post-natal/ post-abortion care	Yes	Yes	Yes
	New-born Care			
18.	New-born care including care of cord (follow up visits)	Yes	Yes	Yes
19.	Early initiation of breastfeeding (within ½ hour of birth) and initiation of growth monitoring	Yes	Yes	Yes
20.	Ensuring thermal & kangaroo care to new-born	Yes	Yes	Yes
21.	Initiation of immunization for BCG and zero dose polio	Yes	Yes	Yes
	Nutrition			
22.	Screening for malnutrition in children; growth monitoring, provision of food supplements for moderately acute malnourished cases and refer severely acute malnourished cases to the stabilization centre	Yes	Yes (12/7)	Yes (24/7)
23.	Provision of vitamin A (after National immunization days are stopped) and zinc supplementation	Yes	Yes	Yes
24.	Provision of micro-nutrients (iron and folic acid) and food supplementation to women and adolescent girls	Yes	Yes	Yes
	Child Care			
25.	Integrated management of childhood illnesses; immediate referral for danger signs and follow up visits	Yes	Yes (12/7)	Yes (24/7)
26.	Childhood Vaccination (BCG, Polio 0,1,2,3, Penta 1,2,3, Pneumococcal 1,2,3, Rota 1,2, Measles 1,2)	Yes	Yes	Yes
27.	Education on handwashing and safe disposal of children's stool	Yes	Yes	Yes
	School-age Child Care			
28.	Education and counseling on oral health	Yes	Yes	Yes
29.	Vision pre-screening and referral if required	Yes	Yes	Yes
30.	Drug administration against soil-transmitted helminthiasis	Yes	Yes	Yes
	Adolescent Health			
31.	Syndromic management of common sexual and reproductive tract infections	Yes	Yes	Yes
32.	Psychological treatment of depression, anxiety, and disruptive behaviour disorders among adolescent; referral if required	Yes	Yes	Yes
33.	Post-gender-based violence care including counseling and referral	No	No	Yes (from 2022)
	Infectious Diseases			
34.	HIV testing, counseling, and referral for ART	No	No	Yes
35.	Hepatitis B and C testing and referral	No (Only Health education on Hepatitis B and C)	Yes	Yes
36.	Partner notification and expedited treatment for STI and referral for HIV	No (Only Health education on STI and HIV)	Yes	Yes
37.	Diagnosis and treatment of Tuberculosis (TB)	No (Only Referral of suspected cases)	Yes	Yes (Referral of MDR cases)
38.	Screening of HIV in all individuals with a diagnosis of active TB	No	No	Yes
39.	Screen for TB in all newly diagnosed PLHIV and close contacts	No	No	Yes

PHC CENTRE LEVEL INTERVENTIONS				
Sr. No.	Intervention	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
40.	Malaria-suspect to be diagnosed with RDT and treatment for positive cases	Yes	Yes	Yes (Pre-referral treatment in severe and complicated cases)
41.	Early detection and referral of Dengue and Trachoma cases	Yes	Yes	Yes
42.	Identification, reporting, and referral of notifiable diseases (Conduct simulation exercises/ training)	Yes	Yes	Yes
	Non-Communicable Diseases			
43.	Low dose corticosteroid and bronchodilator for Asthma and selected COPD	Yes	Yes (12/7 with Nebulizer)	Yes (24/7 with Nebulizer)
44.	Cardiovascular risk factor screening using Non-lab-based tools and regular follow up	Yes	Yes (12/7)	Yes (24/7)
45.	Provision of aspirin for suspected acute myocardial cases	Yes	Yes	Yes
46.	Screening of albumin urea kidney disease in diabetics	Yes	Yes	Yes
47.	Secondary prophylaxes with penicillin for Rheumatic fever	Yes	Yes	Yes
48.	Treatment of acute pharyngitis	Yes	Yes	Yes
49.	Self-managed treatment of migraine	Yes	Yes	Yes
50.	Support caregivers of patients with dementia	Yes	Yes	Yes
51.	Management of anxiety and depression disorders	Yes	Yes	Yes
52.	Calcium and Vit D supplementation for prevention of osteoporosis in high-risk individuals	Yes	Yes	Yes
53.	Screening of hearing loss using an otoscope and basic management/ referral	Yes	Yes	Yes
54.	WASH behavior changes interventions	Yes	Yes	Yes
	Health Services Access			
55.	Dental Care	Yes (Dental pain and infection management)	Yes (Basic Dental care)	Yes (Treatment of caries, drainage of dental abscess, dental extraction)
56.	Drainage of a superficial abscess (Treatment of scabies, lice, and skin infections)	Yes	Yes (12/7)	Yes (24/7)
57.	Management of non-displaced fracture and referral	No	Yes (24/7)	Yes (24/7)
58.	Circumcision	No	Yes	Yes
59.	Suturing of a small laceration	Yes	Yes (24/7)	Yes (24/7)
60.	Identification and screening of early childhood development issues	Yes	Yes	Yes
61.	Basic management of musculoskeletal injuries and disorders	Yes	Yes	Yes
62.	Laboratory Services	Yes (Basic and rapid diagnostic lab services)	Yes (Essential PHC lab services including radiology)	Yes (RHC level lab services including radiology)

The availability of laboratory and imaging services that comply with the envisioned EPHS intervention package, is a key for effective provision of the EPHS interventions and reaching

diagnosis before initiating treatment. The following table presents the laboratory tests and imaging services across the PHC health facilities.

PHC CENTRE LEVEL INTERVENTIONS				
Sr. No.	Intervention	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
1.	Haemoglobin & Blood Complete Examination	Yes/No	Yes	Yes
2.	Blood Glucose Testing	Yes	Yes	Yes
3.	Lipid Profile	No	No	Yes
4.	Liver Function Tests	No	Yes	Yes
5.	Serum Uric Acid	No	Yes/No	Yes
6.	Renal function Test (Such as Serum Urea & Creatinine)	No	Yes	Yes
7.	Urine Chemistry (Qualitative and Quantitative Testing)	Yes (Only Qualitative)	Yes	Yes
8.	Onsite Malaria Testing	No	Yes	Yes
9.	Malaria Rapid Diagnostic Test (RDT)	Yes	Yes	Yes
10.	Gram Staining at the facility	Yes/ No	Yes	Yes
11.	Stool Microscopy at Facility	Yes / No	Yes	Yes
12.	Onsite Tuberculosis Testing	No	Yes	Yes
13.	X-Ray Services	No	Yes	Yes
14.	ECG Services	No	Yes	Yes
15.	Ultrasound	No	Yes	Yes

EPHS at First Level Hospital

The prioritized interventions are/ should be offered at the FLH. However, the scope of interventions will vary considering different types of FLH (Taluka or District) in the public and private sector. The following box reflects the essential services across different types of FLH.

FIRST LEVEL HOSPITAL INTERVENTIONS			
Sr. No.	Intervention	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
	Reproductive Health/ Birth Spacing		
1.	Early detection and treatment of early-stage cervical cancer	Yes	Yes
2.	Insertion and removal of long-lasting contraceptives	Yes	Yes
3.	Tubal ligations	Yes	Yes
4.	Vasectomy	No	Yes
	Antenatal care		
5.	Management of eclampsia with magnesium sulphate, including initial stabilization at health centres	Yes	Yes
6.	Screening and management of diabetes in pregnancy (gestational diabetes or pre-existing type II diabetes)	Yes	Yes
	Delivery care		
7.	Surgical termination of pregnancy by maternal vacuum aspiration and dilatation & curettage	Yes	Yes
8.	Management of labour and delivery in high-risk women, including operative delivery (CEmONC)	Yes	Yes
9.	Management of maternal sepsis, including early detection at Health centre	No	Yes
	Postnatal care		
	(Follow up visit of complicated delivery cases)	Yes	Yes
	New-born care		
10.	Management of Neonatal sepsis, pneumonia, and meningitis using injectable and oral antibiotics	No	Yes
11.	Management of preterm premature rupture of membranes, including	Yes	Yes

FIRST LEVEL HOSPITAL INTERVENTIONS			
Sr. No.	Intervention	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
	administration of antibiotics		
12.	Management of new-born complications infections, meningitis, septicemia, pneumonia, and other very serious infections requiring continuous supportive care (such as IV fluids and oxygen)	No	Yes
13.	Full supportive care for preterm new-born	Yes	Yes
14.	Jaundice Management with Phototherapy	Yes	Yes
	Nutrition		
	(Stabilization centres only in food-insecure districts)	-	Yes
	Child care		
15.	Full supportive care for severe childhood infections with danger signs	Yes	Yes
	Infectious diseases		
16.	For individuals testing positive for hepatitis B and C, assessment of treatment eligibility by trained providers followed by initiation and monitoring of ART when indicated	No	Yes
17.	Referral of cases of treatment failure for drug susceptibility testing; enrolment of those with MDR-TB for treatment per WHO guidelines	Yes	Yes
18.	Evaluation and management of fever in clinically unstable individuals using WHO IMAI guidelines, including empiric parenteral antimicrobials and antimalarial and resuscitative measures for septic shock	No	Yes
	Non-communicable diseases		
19.	Management of acute coronary exacerbations of asthma and COPD using systemic steroids, inhaled beta-agonists, and if indicated oral antibiotics and oxygen therapy	Yes	Yes
20.	Management of acute coronary syndromes	No	Yes
21.	Medical management of acute heart failure	No	Yes
22.	Early childhood development rehabilitation interventions, including motor, sensory, and language stimulation	No	Yes
23.	Management of bowel obstruction	No	Yes
24.	Management of intoxication/ poisoning syndromes using widely available agents e.g., charcoal, naloxone, bicarbonate, antivenom	No	Yes
	Health services access		
25.	Appendectomy	Yes	Yes
26.	Colostomy (Adult and Paediatrics) (Refer to tertiary hospital)	No	No
27.	Escharotomy or fasciotomy (Refer to tertiary hospital)	No	No
28.	Fracture reduction & placement of external fixator and use of traction for fractures	Yes	Yes
29.	Hysterectomy for uterine rupture or intractable postpartum haemorrhage	No	Yes
30.	Irrigation and debridement of open fractures (Refer to tertiary hospital)	No	No
31.	Management of septic arthritis	No	No
32.	Placement of external fixation and use of traction for fractures	No	Yes
33.	Relief of urinary obstruction by catheterization for fractures	Yes	Yes
34.	Removal of gallbladder, including emergency surgery	No	Yes
35.	Repair of perforations (for example perforated peptic ulcer, typhoid ileal perforation)	No	Yes
36.	Tube thoracostomy	Yes	Yes
37.	Trauma laparotomy	No	Yes
38.	Trauma-related amputations	Yes	Yes
39.	Compression therapy for amputations, burns, and vascular or lymphatic disorders	Yes	Yes
40.	Cataract extraction and insertion of intraocular lens	No	Yes

The availability of laboratory and imaging services that comply with the envisioned EPHS intervention package, is a key for effective provision of the EPHS interventions and reaching

diagnosis before initiating treatment. The following table presents the laboratory tests and imaging services across the FLH care facilities.

FIRST LEVEL HOSPITAL LABORATORY & DIAGNOSTIC INTERVENTIONS			
Sr. No.	Laboratory / Diagnostic Tests	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
1.	Blood CP	Yes	Yes
2.	ESR	Yes	Yes
3.	Blood Culture & Sensitivity	No	Yes
4.	C-Reactive Protein	No	Yes
5.	Blood Grouping & Cross Matching	Yes	Yes
6.	Blood Smear	No	Yes
7.	Random and Fasting blood glucose	Yes	Yes
8.	Serum Electrolytes (Serum Potassium, sodium, Serum Magnesium)	Yes	Yes
9.	Serum Amylase, Lipase	No	Yes
10.	Creatinine Phosphokinase, Serum Lactate	No	Yes
11.	Serum Bilirubin	Yes	Yes
12.	Prothrombin time test, APTT, INR	Yes	Yes
13.	Blood Urea and Nitrogen	Yes	Yes
14.	Hepatitis B & C test	Yes	Yes
15.	Microscopy for malarial parasite	Yes	Yes
16.	Pregnancy Test	Yes	Yes
17.	Beta HCG	No	Yes
18.	Arterial Blood Gases	No	Yes
19.	LFTs	Yes	Yes
20.	RFTs	Yes	Yes
21.	Glucose-6-phosphate dehydrogenase (G6PD)	No	Yes
22.	Coomb's test	Yes	Yes
23.	Cardiac Troponin - T test	No	Yes
24.	Microscopy of Cerebral Spinal Fluid	Yes	Yes
25.	HIV Testing	Yes	Yes
26.	Urine Analysis	No	Yes
27.	Urine Culture & Microscopy test	Yes	Yes
28.	Urine Myoglobin	No	Yes
29.	Spot Urinary protein test	Yes	Yes
30.	High vaginal swab	No	Yes
31.	Semen analysis (sperm count)	Yes	Yes
32.	Lumbar Puncture	No	Yes
33.	Cytology (Pap smear or LBC) and Visual Inspection with Acetic acid (VIA)	No	Yes
34.	Molecular HPV testing	Yes	Yes
35.	Speculum, Vaginal & Rectal examination	No	Yes
36.	Intravenous pyelogram (IVP)	No	Yes
37.	Staining of smears for Ziehl-Neelsen or LED fluorescence microscopy	No	Yes
38.	APRI (AST-to-platelet ratio index)	No	Yes
39.	Liver Biopsy	No	Yes
40.	HBV & HCV Serological testing	Yes	Yes
41.	Nucleic Acid Testing for HBV & HCV RNA	No	Yes
42.	line-probe assays (LPA) for direct detection of resistance mutations in acid-fast bacilli (AFB) smear-positive processed sputum samples	No	Yes
43.	Xpert MTB/RIF for use as the initial diagnostic test in individuals suspected of having MDR-TB	No	Yes
44.	• Phenotypic DST (conventional DST) • Genotypic DST	No	Yes
45.	Gastric Lavage	Yes	Yes
46.	Pulse oximetry	Yes	Yes
47.	Ultra sound	Yes	Yes
48.	Chest X ray	Yes	Yes
49.	ECG	Yes	Yes
50.	Echo	No	Yes
51.	CT Scan	No	Yes

FIRST LEVEL HOSPITAL LABORATORY & DIAGNOSTIC INTERVENTIONS			
Sr. No.	Laboratory / Diagnostic Tests	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
52.	CT scan with contrast	No	Yes
53.	X-ray Abdomen erect	Yes	Yes
54.	Radiograph of Limbs	Yes	Yes
55.	Joint Fluid Aspirate	No	Yes
56.	Fluid aspirate gram stain and culture	No	Yes
57.	Abdominal radiograph – erect and supine	Yes	Yes
58.	Ambulatory Xray (Portable)	Yes	Yes
59.	Ultrasound (to assess gestation age/IUGR) if needed	Yes	Yes
60.	Measurement of the compartment pressure (if Tonometer or Doppler Ultrasound available)	No	Yes
61.	Pelvic ultrasound (in case of the ruptured uterus)	Yes	Yes
62.	Peri-apical radiograph	Yes	Yes
63.	Orthopantomogram	No	Yes
64.	Anti-cyclic citrullinated peptide (anti-CCP)	No	Yes
65.	Antinuclear antibody (ANA)	No	Yes
66.	Rheumatoid factor (RF)	No	Yes
67.	Uric acid	Yes	Yes
68.	Electrophoresis	No	Yes
69.	Blood test for sickle cell disease	No	Yes
70.	DNA testing (thalassemia specific)	No	Yes
71.	Thalassemia Test	No	Yes
72.	(Serum iron or Serum ferritin) (thalassemia specific)	No	Yes
73.	X-ray with a contrast material (barium X-ray)	No	Yes
74.	Dynamic swallowing study	No	Yes
75.	Fibreoptic endoscopic swallowing evaluation	No	Yes
76.	Manometry	No	Yes
77.	CD4 Testing	No	Yes
78.	Clinical chemistry panels (Automated analyser)	No	Yes
79.	RPR test for Syphilis	No	Yes
80.	FNAC	No	Yes
81.	Tissue Biopsy	No	Yes
82.	H & E staining	No	Yes

Note: Blue ones are essential for intervention.

IMPLEMENTATION ARRANGEMENT

Essential Infrastructure for Community, PHC Centre, and FLH Interventions

Following the finalisation of the package, protocols in the government were reviewed. The investment required in each type of facility was estimated to ensure the package is delivered at sufficient quality. Investment in infrastructure is primarily relevant for the PHC centre and FLH level interventions.

At the community level, LHW is also envisaged to establish a kit corner in her house-declared as a health house. Space is used to store medicines and supplies and give counseling or treat minor illnesses to those patients/ clients visiting health houses. This place should also display relevant protocols and posters. LHW should be provided with the necessary equipment and MIS tools. The health house may also serve as a vaccination post.

For CMW, it is proposed that a room in her community will serve as her workstation, which is a place where pregnant mothers will contact for consultation, examination, and delivery. CMW conducts safe delivery either at the CMW work station or at the woman's home and gives women to choose the place of delivery. Privacy and hygiene practices should be ensured with the availability of essential equipment, kit, and furniture, etc.

With regards to the PHC center, the following guidelines should preferably be followed especially in the public sector.

- The suggested land area for a BHU / BHU Plus is 10 Kanal, while for a RHC 24 kanal land is required to ensure the provision of all essential in-patient and outpatient services. The estimated construction cost of the building currently ranges from Rs.3,200 to 3,500 per square foot.
- In a RHC, 20 bedded indoor facility is recommended i.e. 10 bedded ward for male patients and 10 bedded ward for female patients. At the BHU Plus, there should be at least two-bedded facility for institutional delivery.
- While choosing the location for a health facility, it should be ensured that the site has metal road access, electricity supply, adequate water supply, gas supply, and communication lines for telephone/ mobile phone. The building should be built in a manner to ensure adequate sunlight and cross ventilation and as per government rules.
- The facility compound should have a boundary wall with a gate and a facility sign board. A board with listed services, opening times, and emergency contacts during closing times should be displayed, adjacent to the main gate so that it is easily visible to people. The text should be in an understandable format and in the local and national language.
- The health facility area should have a rubbish pit for the disposal of refuse and medical waste. The surroundings of the health facilities should be kept clean with no reservoirs of stagnant/unclean water, which could serve as vector breeding sites.
- The entrance of the building should have a ramp to facilitate physically challenged patients on wheelchairs or stretchers. Wheel chairs & stretchers should be available near the main gate to transfer the patient in minimum time to emergency or OT.
- The entrance of the health facility building should have adequate light and ventilation with space for registration and record room, drug dispensing room, and waiting area for patients. The waiting area should have adequate seating arrangements, functional fans/AC, and protection from extremes of weather. Health education material should be displaced in waiting areas.

- The waiting area should have a list of all fees in local and national languages and a complaint/suggestion box that patients can use to provide feedback on the services.
- Clean drinking water should be available in the facility. Preferably piped water with a water storage facility should be available within the facility.
- Separate functional toilets for male and female staff and clients/patients/attendants should be available while ensuring cleanliness.
- Privacy of patients should be ensured with the availability of adequate numbers of functional curtains/screens in the examination room.
- A kitchen should be available for inpatients at RHCs. Cooking should be strictly limited to the kitchen. However, the option of contracting out the food services may also be considered.
- The labour room at the BHU Plus and RHCs should have an attached toilet, a drinking water facility, and a designated space for newborn care. The privacy should be ensured for patients.
- At the RHC, the Operation theatre area should have a changing room, sterilization area operating area, and washing area. A separate storage facility for sterile and unsterile equipment/ instruments should be available within the operation theatre.
- The dressing room/ procedure room/ injection room should be well equipped with all the emergency drugs and instruments in all PHC facilities.
- The laboratory should have sufficient space with workstations and a separate area for collection and screening of samples should be available. The lab should have a marble/stone tabletop for the platform and washbasins.
- 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
    - Dispensing cum store area
    - Vaccine storage and immunization area
    - BCC and family planning counsel area
    - Office room
    - Utility room for dirty linen and used items
- Laundry: RHC should have its arrangement for safe washing of bed linen, blankets, sheets, etc. used in different areas. The BHUs and BHUs Plus are proposed to send their laundry to the RHCs as per need or there should be a contractual arrangement for linin washing.
- Decent Residential Accommodation with all the amenities, like 24-hrs water supply, electricity, etc. should be available for medical officers, paramedical staff, support staff, and peon/chowkidar.

The infrastructure and basic amenities, recommended at PHC centre facilities are as following:

PHC CENTRE LEVEL INFRASTRUCTURE NEEDS				
Sr. No.	Infrastructure	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
1.	Land required	10 Kanal (BHU)	10 Kanal (BHU Plus)	24 Kanal (RHC)
2.	Central registration point/ reception (with computerized/ paper records)	Yes	Yes	Yes
3.	Medical officer In-charge room with washroom	No	No	Yes
4.	Medical officer room with washroom	Yes	Yes	Yes
5.	WMO room with washroom	No	Yes	Yes
6.	Examination & procedure room	No	Yes	Yes (MO and minor procedure room)
7.	LHV room with washroom	Yes	Yes	Yes
8.	Labour room	No	Yes	Yes
9.	Operation Theatre (OT) with scrub/washing area, changing room, sterilization room, and generator room	Yes	Yes	Yes
10.	Indoor Wards with a nursing station and washrooms	No	No (Two beds maternity room)	Yes (20 beds, 10 each for males and females)
11.	Dental room with washroom	No	Yes	Yes
12.	Waiting areas with washrooms	No	Yes	Yes
13.	Dispensary	Yes	Yes	Yes (Dispensary and dressing area)
14.	EPI room with regular & alternate electricity system	Yes	Yes	Yes
15.	Health education / Training room/ ORT corner	Yes	Yes	Yes
16.	Laboratory	Yes (Mini-Lab)	Yes	Yes
17.	X-ray room with darkroom facility	No	Yes	Yes (Radiology room with a darkroom)
18.	Storeroom	Yes	Yes	Yes
19.	Ramps for disabled	Yes	Yes	Yes
20.	Kitchen	No	No	Yes
21.	Mortuary and postpartum room	No	No	Yes
22.	Garage	No	Yes	Yes
23.	Boundary wall	Yes	Yes	Yes
24.	Residences for staff	Yes	Yes	Yes
25.	Waste disposal area with proper infection control measures/protocols	Yes	Yes	Yes
26.	Water supply & storage facility	Yes	Yes	Yes
27.	Green area with plantation	Yes	Yes	Yes
28.	Carpeted road access	Yes	Yes	Yes
29.	Electricity, Water and Gas Facility	Yes	Yes	Yes
30.	Telephone and Internet	Yes	Yes	Yes
31.	Facility Signboard	Yes	Yes	Yes
32.	Board with listed services, opening times, and emergency contacts	Yes	Yes	Yes
33.	Fuel operated generator	No	Yes	Yes

With regards to FLH, the following guidelines should preferably be followed especially in the public sector.

The suggested land area for THQ and DHQ level hospitals is as following to ensure the provision of all essential in-patient and outpatient services:

a) THQ hospital – 50-200 bedded capacity - 7 ha/138 Kanals (350 m^2/0.69 Kanals per bed)

b) DHQ- 200-500 bedded capacity - 10 ha/198 Kanals (333 m^2/0.65 per bed)

These areas are for the hospital buildings only, excluding the area needed for staff housing.

- The site must be large enough for all the planned functional requirements to be met and for any expansion envisioned within the coming ten years.
- While choosing the location for a health facility, it should be ensured that the site has metal road access, electricity supply, adequate water supply, storm-water disposal gas supply, and communication lines for telephone/ mobile phone.
- The building should be built in a manner to ensure adequate sunlight and cross ventilation and as per government rules.
- In areas where such utilities are not available, substitutes must be found, such as a deep well for water, generators for electricity, and radio communication for the telephone.
- It should be in an area free of pollution of any kind, including air, noise, water, and land pollution.
- The hospital compound should have a boundary wall with a gate and a facility signboard. A board with listed services, opening times, and emergency contacts during closing times should be displayed, adjacent to the main gate so that it is easily visible to people. The text should be in an understandable format and the local and national language. Large DHQ hospitals should have an incinerator.
- The hospital area should have a rubbish pit for the disposal of refuse and medical waste. The surroundings of the health facilities should be kept clean with no reservoirs of stagnant/unclean water, which could serve as vector breeding sites.
- The entrance of the building should have a ramp to facilitate physically challenged patients on wheelchairs or stretchers.
- The entrance of the hospital building should have adequate light and ventilation with space for registration and record room, drug dispensing room, and waiting area for patients.
- The waiting area should have adequate seating arrangements, functional fans/AC, and protection from extremes of weather. Health education material should be displayed in waiting areas.
- The waiting area should have a list of all fees in local and national languages and a complaint/suggestion box that patients can use to provide feedback on the services.
- Clean drinking water should be available in the facility. Preferably piped water with a water storage facility should be available within the facility.
- Separate functional toilets for male and female staff and clients/patients/attendants should be available while ensuring cleanliness.
- Privacy of patients should be ensured with the availability of adequate numbers of functional curtains/screens in the examination room, along with attendants of the same gender.

- A kitchen should be available for Inpatients at THQs/DHQs. Cooking should be strictly limited to the kitchen. However, the option of contracting out the food services may also be considered.
- The labour room at the THQs and DHQs should have an attached toilet, a drinking water facility, and a designated space for newborn care with required equipment like a suction machine. The privacy should be ensured for patients.
- At the FLH facilities, the operation theatre area should have a changing room, sterilization area, operating area, and washing area. Separate storage facility for sterile and unsterile equipment. Autoclave machines/instruments should be available within the operation theatre.
- The dressing room/ procedure room/ injection room should be well equipped with all the emergency drugs and instruments in all FLH facilities.

Besides the above, the health facility should have

- Dispensing cum store area
- Vaccine storage and immunization area
- BCC and family planning counsel area
- Utility room for dirty linen and used items

- The laboratory should have sufficient space with workstations and a separate area for collection and screening should be available. The lab should have marble/stone table top for platform and washbasins.
- 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.
- All FLH facilities should have their arrangement for safe washing of bed linen, blankets, sheets, etc. used in different areas. There should be a contractual arrangement for linen washing.
- Decent residential accommodation with all the amenities, like 24 hours water supply, electricity, etc. should be available for medical officers, paramedical staff, support staff, and for peon/chowkidar.

The infrastructure and basic amenities recommended at FLH center facilities are as follows:

FIRST LEVEL HOSPITAL INFRASTRUCTURE AND BASIC AMENITIES			
Sr. No.	Infrastructure and Basic Amenities	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
1.	Central registration point/reception with computerized and paper records	Yes	Yes
2.	Central registration point Emergency room	Yes	Yes
3.	Medical Officer In-charge room with washroom	Yes	Yes
4.	Medical Officers rooms with washroom	Yes	Yes
5.	WMO rooms with washroom	Yes	Yes
6.	Offices for senior staff, senior medical staff, and admin/accounts	Yes	Yes
7.	Examination & Procedure room	Yes	Yes
8.	LHV / Population welfare rooms with washroom	Yes	Yes
9.	Medical and non-medical stores in the ward	Yes	Yes
10.	Labour room	Yes	Yes
11.	Operation Theatre (OT) with scrub/washing area, changing room, sterilization room, and generator room	Yes	Yes

12.	ICU/CCU	No	Yes
13.	Preoperative room	Yes	Yes
14.	Recovery Room	Yes	Yes
15.	Indoor wards with the nursing station and washrooms	Yes	Yes
16.	Dental room with washroom	Yes	Yes
17.	Waiting areas with washrooms	Yes	Yes
18.	A big room for any meeting/ Academic activity	Yes	Yes
19.	Dispensary	Yes	Yes
20.	EPI room with regular & alternate electricity system	Yes	Yes
21.	Health education / Training room / ORT corner	Yes	Yes
22.	Laboratory	Yes	Yes
23.	X-ray room with darkroom facility	Yes	Yes
24.	Storeroom	Yes	Yes
25.	Ramps for disabled	Yes	Yes
26.	Kitchen	Yes	Yes
27.	Mortuary and postpartum room	Yes	Yes
28.	Garage	Yes	Yes
29.	Boundary Wall	Yes	Yes
30.	Residences for staff	Yes	Yes
31.	Waste disposal area with proper infection control measures/protocol	Yes	Yes
32.	Water supply & Storage facility	Yes	Yes
33.	Green area with plantation	Yes	Yes
34.	External & Internal road access	Yes	Yes
35.	Electricity, Water, and Gas facility	Yes	Yes
36.	Telephone and Internet	Yes	Yes
37.	Facility signboard	Yes	Yes
38.	Board with listed services, opening times, and emergency contacts	Yes	Yes
39.	Fuel operated generator	Yes	Yes
40.	Pharmacy	Yes	Yes
41.	Main stores for medicines	Yes	Yes
42.	Main stores for non-medical items	Yes	Yes
43.	Public washroom	Yes	Yes
44.	Drinking-Water dispensers	Yes	Yes
45.	Parking area (with shades) for staff and visitors	Yes	Yes

Essential Human Resources for Health

Human Resources for Health (HRH) plays a central role in the delivery of essential health services and in achieving UHC. HRH is a critical factor in long term planning, implementation, and sustaining of health care services. The human resource for the PHC centre is inevitable because of the range of essential health services/ interventions which are prioritized.

At the community level, LHW, fulfilling the criteria, is required to cover the 1,000-1,500 population. To ascertain the total number of required LHWs, a standard of 100 percent coverage of the rural areas and 30 percent coverage for urban areas, focussing on the urban slums/densely populated communities is recommended. A CMW should be deployed to cover a population of a minimum of 5,000 people and this cadre is not recommended for urban and socio-economically better-off areas as institutions are usually available. Each union council should have at least two vaccinators to provide vaccination services in the PHC centre and community. Also, the CDC/Environmental technician and Population Welfare (PW) councilors are recommended as outreach workers. For some of the interventions such as HIV, the Community Based Organisations (CBOs) staff working in the community where the high-risk population is concentrated. Linkages with the First Level/ Tertiary hospital staff may be ensured through digital health technology.

The essential human resource across the PHC centre level is reflected in the following table.

PHC CENTRE LEVEL HUMAN RESOURCES FOR HEALTH				
Sr. No.	HRH	Yes / No		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical centre (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
1.	Medical Officer In-charge	1	1	1 (Senior)
2.	Gynaecologist/ Obstetrician (optional)	0	PG students on rotation	1
3.	Medical Specialist (optional)	0	0	1
4.	District/ General Surgeon (optional)	0	0	1
5.	Paediatrician, Eye and ENT specialist (optional)	0	0	(on rotation)
6.	Male Medical Officer	1	2	3
7.	Women Medical Officer	0	2	3
8.	Medico-legal Officer	0	0	1
9.	Dental Surgeon	0	0	1
10.	Head Nurse	0	0	1
11.	Staff Nurse	0	2	6
12.	Lady Health Visitor/ Midwife/ FWW	1	3	3
13.	Vaccinator	2	2	2
14.	CDC/ Environmental technician	1	1	1
15.	Health Technician/ Medical Assistant	1	2	3
16.	Dental Technician	0	1	1
17.	Dispenser/ Dresser	1	2	2
18.	Mortuary attendant	0	0	1
19.	OT Technician	0	0	3
20.	Lab Technician	0	2	2
21.	Radiography Technician	0	2	2
22.	Microscopist	0	0	1
23.	Data Entry Operator	1	2	3
24.	Lower Division Clerk	0	0	1
25.	Population Welfare (HPN) Councillor	2	3	3
26.	Lady Health Supervisor & Driver		As per LHWP standards	
27.	Storekeeper	0	0	1
28.	Ward boy	0	0	3
29.	Generator/ Fog machine operator	0	0	1
30.	Driver	1 (if ambulance)	3	3
31.	Dai/Aya	0	3	3
32.	Cook & Tandorchi*	0	0	4
33.	Washer for Laundry*	0	0	2
34.	Naib Qasid / Sanitary Patrol	1	2	4
35.	Mali	1	1	2
36.	Chowkidar	2	2	3
37.	Sanitary worker*	1	2	3

* Cooking, Washing, and Sanitary services may be contracted out.

- Staff mentioned in Blue font is critical to ensure essential interventions

The essential human resource for health across the FLH is reflected in the following table.

FIRST LEVEL HOSPITAL HUMAN RESOURCES FOR HEALTH			
Sr. No.	HRH	Yes / No	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
	Management Staff		
1.	Superintendent	Yes	Yes
2.	Additional Superintendent	No	Yes
3.	Deputy Superintendent	Yes	Yes
	Specialists		
4.	Medical Specialist/ District Physician	Yes	Yes
5.	Paediatrician + Lactation Consultant	No	Yes
6.	Cardiologist	No	Yes
7.	Dermatologist	No	Yes
8.	Neurologist	No	Yes
9.	Nephrologist	No	Yes
10.	T.B. & Chest Specialist (Pulmonologist)	No	Yes
11.	Psychiatrist	Yes	Yes
12.	Clinical Psychologist	No	Yes
13.	Forensic Expert	No	Yes
14.	Emergency Specialist	No	Yes
15.	Trauma Surgeon	No	Yes
16.	General Surgeon / District Surgeon	Yes	Yes
17.	Gynaecologist/ Obstetrician	Yes	Yes
18.	Paediatrics Surgeon	No	Yes
19.	Urologist	No	Yes
20.	Orthopaedic surgeon	No	Yes
21.	Anaesthetist	Yes	Yes
22.	ENT Specialist	No	Yes
23.	Ophthalmologist	No	Yes
24.	Pathologist	No	Yes
25.	Radiologist	No	Yes
26.	Blood Transfusion Officer	No	Yes
	Medical and Dental Staff		
27.	Senior Medical Officers	Yes	Yes
28.	Medical Officers (MO)	Yes	Yes
29.	Causality Medical Officers & Reliever	Yes	Yes
30.	WMO's for Labour room &Relievers	Yes	Yes
31.	MOs (Intensive Care)	Yes	Yes
32.	Medicolegal Officer	Yes	Yes
33.	Dental Surgeon	Yes	Yes
	Nursing Staff		
34.	Nursing Superintendent	Yes	Yes
35.	Nursing Deputy Superintendent	Yes	Yes
36.	Head Nurses	Yes	Yes
37.	Charge Nurses	Yes	Yes
	Non-Medical Staff		
38.	Budget & Accounts Officer	Yes	Yes
39.	Accountant	Yes	Yes
40.	Social Welfare Officer	Yes	Yes
41.	Pharmacist	Yes	Yes
42.	Physiotherapist	Yes	Yes
43.	Population Welfare Officer	Yes	Yes
44.	Statistical specialist	Yes	Yes
45.	Epidemiologist	Yes	Yes
46.	Computer/ Data Entry Operators	Yes	Yes
47.	Biomedical Engineer	Yes	Yes

	Para-Medical Staff		
48.	Radiographer	Yes	Yes
49.	Dental Technician/Assistant	Yes	Yes
50.	Lab technicians	Yes	Yes
51.	Lab Technician for blood transfusion	No	Yes
52.	CDC/Environmental technicians (INCINERATOR MAN)	Yes	Yes
53.	Eye Technician/Optician	Yes	Yes
54.	Lab Assistants	Yes	Yes
55.	Ophthalmic Technician	Yes	Yes
56.	Biomedical Technicians	Yes	Yes
57.	Microscopists	Yes	Yes
58.	Speech Therapist	No	Yes
59.	ECG Technician	Yes	Yes
60.	Operation Theatre technicians	Yes	Yes
61.	Lady Health Visitors/Midwives	Yes	Yes
62.	Dispensers / dressers	Yes	Yes
63.	Vaccinators	Yes	Yes
	Support Staff		
64.	Head Clerk	No	Yes
65.	Senior Clerk	Yes	Yes
66.	Lower Division Clerk	Yes	Yes
67.	Storekeeper	Yes	Yes
68.	Ward boy	Yes	Yes
69.	Generator / Fog machine Operator	Yes	Yes
70.	Water Carrier	Yes	Yes
71.	Cashier	Yes	Yes
72.	Baildar	Yes	Yes
73.	Carpenter	Yes	Yes
74.	Plumber	Yes	Yes
75.	Almoner	Yes	Yes
76.	Chowkidar	Yes	Yes
77.	Telephone Operator	Yes	Yes
78.	Physiotherapy Aide/technician	Yes	Yes
79.	Stretcher Bearer	Yes	Yes
80.	Ambulance Driver	Yes	Yes
81.	Statistical Assistant	Yes	Yes
82.	Operation Theatre Attendants	Yes	Yes
83.	Sanitary Inspector/ Patrol	Yes	Yes
84.	Lab Attendants	Yes	Yes
85.	Ward Servants	Yes	Yes
86.	Ward Cleaners	Yes	Yes
87.	Electrician	Yes	Yes
88.	Air Conditioner Technicians	Yes	Yes
89.	Tailor	Yes	Yes
90.	Dhobi/Washerman	Yes	Yes

*Cooking, washing, and sanitary services may be contracted out

- Staff mentioned in Blue font is critical to ensure essential interventions
- Number of staff positions will vary as per sanctioned list

Essential Medicines and Supplies

Considering the implementation of prioritized interventions for the EPHS at the community and PHC centre level, the essential medicines and supplies have been mentioned in this section (in blue font). However, some additional medicines and supplies have also been included which health care providers use as alternate medicines or for management of other common illnesses (in black font).

At the community level, the essential medicines and supplies defined by the Lady health Workers' program are as following:

Essential Medicines and Supplies at Community Level

For Lady Health Worker

- Tab Paracetamol
- Syrup Paracetamol
- Syrup Amoxicillin
- Tab Mebendazole
- ORS (Sachet)
- Eye ointment
- Tab. Ferrous salt + Folic Acid
- Syrup Zinc
- Syrup B complex
- Benzyl Benzoate Lotion
- Condoms
- Oral Contraceptive Pills/ emergency pill
- Injectable contraceptive (Depo Provera) with syringes
- Antiseptic Lotion
- Cotton Bandages
- Cotton roll

For other community-level interventions

- Vaccine along with auto-destructible syringes and cold chain
  - BCG Vaccine
  - Oral Polio Vaccine
  - Injectable Polio Vaccine
  - Hepatitis B Vaccine
  - Measles Vaccine
  - Tetanus Toxoid
  - Pentavalent Vaccine
  - Pneumococcal Vaccine
  - Rota vaccine
- Clean Delivery Kits (for LHV)
- Vitamin A
- Deworming medicines
- Medicines and Supplies for high-risk populations
- (RUSF provision at the community level to be explored especially in food-insecure areas)

Following groups of essential medicines have been proposed at the 8/6 BHUs, 24/7 BHUs Plus, and RHCs considering the conditions/illnesses that are proposed to be managed in the EPHS package of services.

Groups of Essential Medicines and Supplies at PHC centre and FLH

- Anesthetics (Local)
- Analgesics (NSAIDs)
- Anti-Allergic (Anaphylaxis)
- Antidotes and other substances used in the poisoning
- Anti-Epileptics Anticonvulsants
- Antibiotics/Antimicrobial
- Anti-Helminthic
- Anti-Fungal
- Anti-Tuberculosis Drugs
- Anti-Diabetics
- Anti-Malarial
- GIT Medicines
- Cardiovascular Medicines
- Medicines Affecting Coagulation
- Oxytocic Medicines
- Ophthalmic Medicines
- ENT Medicines
- I/V Infusions (Plasma Substitutes)
- Vitamins, Minerals and Food supplements
- Medicines for Mental and Behavioural Disorders & Tranquilizers
- Anxiolytics
- Contraceptives
- Vaccines and Sera

The detailed list of medicines and supplies (essential and alternate + additional medicines) recommended at the PHC centre & FLH are provided in Annexure A and B.

Essential Equipment and Furniture

A standard list of equipment for community level and PHC facilities have been developed to complement the EPHS package of the interventions to achieve the goals of the UHC.

At the community level, the following equipment is required.

Essential Equipment at Community Level	
– LHW Kit Bag	– Weighing machine (salter)
– Stethoscope	– Weighing machine (Adult)
– BP Apparatus (Dial)	– Mid upper arm circumference (MUAC) tape
– Thermometer Clinical/ Infra-red thermometer	– Plain Scissors
– Torch with batteries	– Respiratory counter

To effectively implement the prioritized EPHS interventions at different types of PHC centre level facilities, a group of essential equipment and furniture is recommended, which is as follows

Group of Essential Equipment and Furniture at PHC centre and FLH	
– Equipment for Emergency and General services	– Operation theatre
– Equipment for Growth monitoring and Delivery room	– Dental unit
	– Lab equipment and reagents
– Dilatation & Curettage (D&C) set	– Linen
– Caesarean section set	– Transport
– Indoor equipment including hospital beds	– Miscellaneous including furniture
– Procedure room	

A detailed list of essential equipment and miscellaneous items including furniture by different types of PHC centre and FLH is provided in Annexures C and D.

HEALTH SYSTEM AND MANAGEMENT

A key element in ensuring successful implementation of the EPHS is to strengthen the supporting functions of the health system. There are different health system and health management components that are critical to ensure effective delivery of essential health services. These systems are usually managed at the district level or above to ensure efficiency and uniformity. Options for different health system components and their costing/ effectiveness will be discussed separately.

In this section, some of the key health management arrangement at the community and PHC centre level are as following:

Supervision

Supervision is the act or function of overseeing something (health facility/ services) or service providers. Generally, supervision contains elements of providing knowledge, helping to organize tasks, enhance motivation, and monitoring activity and results; the amount of each element is varying in different contexts.

- At the community level, there is a dedicated supervisor (Lady Health Supervisor) to supervise the activities of LHWs in the catchment area. She is supposed to visit each LHW at least once a month and do structured supervision using a checklist. In addition, the concerned health facility in-charge or LHV trainer should carry out supervision activities. The services which are offered by community-based organizations, have their supervisory mechanism considering the design of the intervention.
- At the PHC centre (BHU), at least one visit should be ensured on monthly basis by the district level supervisor and more frequently by the tehsil/ taluka level supervisor.
- At the PHC centre (BHU Plus), at least two visits should be ensured on monthly basis by the district level supervisor and more frequently by the tehsil/ taluka level supervisor.
- At PHC centre (RHC), at least three visits should be ensured on monthly basis by the district level supervisor and more frequently by the tehsil/ taluka level supervisor.

The following should be ensured during supervision activities at all levels:

a. Use of checklist for quality supervision. Option for smartphone application-based checklist may also be considered for immediate reporting to district health management team and action by the concerned

b. Written comments with signature should be ensured on registers for follow up actions

c. Verbal/ written feedback should be provided to supervise with a few actionable points and discussion of supervisee performance

d. Supervisee should be supported in decision making using the available data

Management Meetings

Community-based workers should attend monthly meetings at the health facility to submit reports, collect medicines and supplies, hold discussions with trainers on service delivery-related issues and continuing education.

At PHC center and FLH level, short and structured weekly management meetings should be held to discuss issues and agree on few actionable points. Agenda items of these meetings should be but not be limited to: Health information data quality and timeliness reporting, maintenance of record, utilization of services and their quality, disease data and preventive measures, community engagement, work conditions, finance & budget, decision-making and follow up actions.

Community Engagement and Feedback System

At the community level, each LHW is expected to organize a Health committee and Women's group and call meetings on monthly basis to discuss health-related issues. PW councilors can also ensure community-level health awareness and education sessions in collaboration with LHWs while supporting the health facility staff in organizing health education sessions of patients/ clients visiting health facilities. CBO workers are also involved in health education and awareness-raising activities among high-risk groups.

For getting Patient/ Client opinion and feedback on the LHW service provision, LHS can use her checklist or an informal discussion to ensure feedback from some community members. At the PHC center level, different options for opinion/ feedback from patients/ clients could be by fixing a complaint box in the facility, regular official meetings with community members, informal discussion with community members, using the website of the ministry/ departments of health, toll-free number, etc.

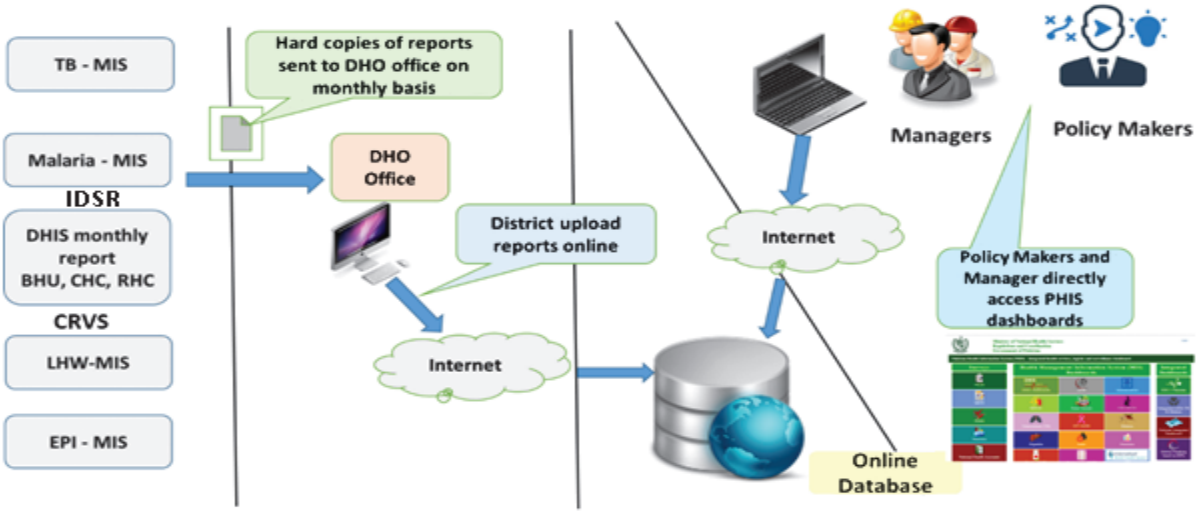
Health Management Information System

Monitoring reflects the periodic collection and review of information on services implementation, coverage, and uses for comparison with implementation plans. Monitoring identifies shortcomings well in time and thus of critical importance for providing quality care. Timely and reliable data is needed which is helpful for decision-making and strengthening of health systems. Monitoring data could be used to better adapt strategies to local conditions, to increase effectiveness.

The supervision activities must have a focus on the data recording and reporting and triangulate/ cross-check the monitoring data relayed through the information system and the actual service provision. If the monitoring data relayed through the information system is of reasonable quality, then it should be used for planning the supervisory visits, focusing on the weaker service delivery points. Monitoring and routine supervision complement each other and are central to bringing transparency and accountability within the health system.

At the present, the information flow from the service providers in the PHC center is not digitised. There are multiple health information systems including LHW-MIS, EPI-MIS, Malaria-MIS, TB-MIS, and PHC centre level District Health Information System (DHIS). The reports for all these health information systems are sent in hard copy to the district office on a monthly basis where they are entered into the system and the data becomes available at the central repository for the respective information system. All these individual systems have been linked

to a common platform "Pakistan Health Information System" where the managers and the policymakers can have ready access to these systems. A schematic description of current information flows has been depicted in the picture below.



The government is considering the option of a (paperless) digital health information system at all levels. In the meantime, the following MIS tools are required at the community and PHC center levels.

Essential MIS Tools at Community and PHC Centre Level

For Lady Health Worker
- Map of catchment area
- Family/ Khandan register
- Dairy
- Treatment register
- Mother/ New-born checklist
- Referral slip
- MCH card
- Health Education material
- Flip chart
- Monthly report
- Catchment population chart

For PHC Centre
- Map of catchment area and Demographic details
- Central registration point register
- OPD ticket
- Medicine requisition slip
- Outpatient department register
- OPD abstract form
- Laboratory register
- Referral slip
- Radiology/Ultrasonography/CT Scan/ECG register

For PHC Centre
- Indoor Patient Register
- Indoor Abstract Form
- Daily Bed Statement register
- Operation Theatre (OT) register
- Family Planning register
- Family Planning card
- Maternal Health register
- TB register
- TB treatment card
- Antenatal card
- Obstetric register
- Health education material
- Monthly report
- Daily medicine expense register
- Stock register (Medicine/Supplies)
- Stock register (Equipment/Furniture/Linen)
- Community meeting register
- Facility staff meeting register
- Secondary facility report form
- Catchment area population chart
- Procedures manual for DHIS
- LQAS form

District Monitoring & Evaluation System

The main outcome level indicator at the district level is the 'Universal Health Coverage Index' which is a cumulative indicator of 4 priority areas and 16 priority indicators. This information should preferably be gathered using national and provincial health & social sector surveys. In case, information is not available then a district-level survey may be considered to collect information.

For services access and readiness assessment (SARA) of health facility/ district for delivery of EPHS, SARA tool has been adopted for Pakistan with support of WHO and University of Manitoba. The same has been aligned with the EPHS prioritized interventions. It is recommended to repeat the survey at the district level with 3-5 years intervals. In addition, it is important to conduct qualitative research to assess community needs, health-seeking behaviors, and perceptions about the quality of health services. Formative research to understand and monitor behaviors and prioritize communication messages is also important, along with other research agendas.

Infection Prevention

The infection prevention at community and PHC center is proposed for

Separate Washrooms for patients/ clients

- Functional washrooms adjacent to waiting areas must be ensured with the availability of water, soap/sanitizers, tissue papers, etc.
- Cleanliness must be ensured at all times with waste disposable bins

Individual/ Staff

- Ensure cleanliness
- Maintain hand hygiene, for preventing cross-contamination (person to person or contaminated object to person) – availability of sanitizers
- Have personal protective equipment available (caps, masks, aprons, eyewear, gloves, closed-toe shoes) and use it appropriately
- Prevent needle/sharp injuries

Facility

- An adequate supply of clean drinking water
- Use containers for sharps disposal and dispose of these safely
- Ensure that clean supplies are available at all sites (gauze, cotton wool, instruments, plastic containers, etc)
- Ensure that antiseptics and disinfectants are available and are used appropriately
- Develop and maintain the shelf-life system to store High-Level Disinfectants (HLD) and sterile items
- Ensure proper collection and cleaning of soiled linen
- Follow waste handling, collection, and disposal guidelines properly

Processing/ Sterilization of equipment

- Perform point-of-use decontamination of instruments and other items.
- Have a separate area for instrument cleaning, where instruments and items are properly cleaned.
- Ensure proper instrument processing, with facilities for HLD and sterilization.
- The proposed equipment for decontamination of instruments at the 24/7 BHU Plus and RHC include electric autoclave, non-electric autoclave, electric dry heat sterilizer, electric boiler/steamer, non-electric boiler/steamer, and chemical HLD. At the 8/6 BHU, electric autoclave and chemical HLD are proposed.

Waste Management

PHC center level facilities should have the waste management guidelines available to reduce the amount of waste, and avoid mixing of general waste (paper, empty juice box, toffee wrappers, packaging) with infectious waste (e.g., dressings, needles) in different assigned colors bin and have a regular capacity building of the staff and sweepers to improve practices related to waste management.

Waste management inside the facility should focus on

Waste collection

- Use appropriate Personal Protective Equipment (utility gloves, eye protection, and toe covered, long plastic shoes)
- Remove gloves immediately after disposing of waste, and perform hand hygiene by washing hands with plain soap and water
- Collect waste in leak-proof containers
- Leak-proof containers once when three-quarters full should be emptied. Do not wait for them to get full
- Human waste, such as the placenta, must be placed in double bags in the leak-proof container
- Keep waste collection area clean and free of spills

Waste disposal

- General waste should be discarded in the nearby waste disposal area
- Contaminated Liquid waste (blood, urine, faeces, and other body fluids) should be emptied into a toilet/sink to get drained into a sewer system
- Solid waste (used dressings and other materials contaminated with blood and organic matter) should be buried in the rubbish pit or incinerated
- Sharps containers should be buried in a rubbish pit or incinerated or open burning with protection
- Sharps may also be stored in a protected manner for offsite removal / burning in district incinerator
- Incinerator in DHQ hospital is recommended

Referral Services

A Referral system is an essential element of an efficient health care delivery system where the patient load is distributed according to services need. For effective referral within the primary health care following propositions are made to make the referral system more effective.

There are different options for establishing a functional referral system including provision of an ambulance to each health facility, pooling of ambulances at specific hubs, and linking with on line services, using the services of philanthropist ambulance services, or 1122 initiatives. Details of these interventions will be further explored in the district health system report. At this stage, the following should be considered:

- The community-level health workers and all PHC centre level facilities should be linked to each other and referral hospitals digitally with a bed registry and ambulance service system.
- Functional ambulances should be available in all PHC centre level facilities and the position of drivers and paramedics should be filled.
- The referral forms should be available and the record of the referred patients adequately maintained.
- Referral protocols should be displayed in the health facilities
- The list of the referral facilities with contact numbers should be displayed/provided to community health workers so that in instances of emergency, a timely referral could be made and the referred facility is informed well in time to be able to provide requisite services.

Capacity Development

All community and PHC centre level, staff must receive training/s for at least 15 days every year. An assessment is being done to identify training needs aligned with the UHC Benefit Package of

Pakistan. However, following key training (others to be developed) are recommended for the technical staff at the community and PHC centre level at this stage.

Training for Community-Level Workers
Training of Trainers (LHWs)
LHW Training and Inservice Training
Lady Health Supervisor Training
15 Days Refresher Training (Annual)
Specialized/ Refresher Training including Maan ki Sehat and Bachay ki Sehat
Training for Vaccinators
Training of PW/ HPN Councillor
Training on Infection Control and Disease Surveillance (for surveillance staff)
Training of CBO staff on HIV prevention

Training for PHC Centre Level Technical Staff
Family Planning (FP)
Integrated Management of Pregnancy and Childbirth (IMPAC)
Emergency Obstetric and New-born Care (EmONC)
Emergency Newborn Care and Helping Baby Breathe
Integrated Management of Neonatal and Childhood Illnesses (IMNCI)
Syndromic Management of Sexually Transmitted Infections including HIIV
Malaria, Dengue and Vector Control
TB-DOTS
Non-Communicable Diseases (e.g. Diabetes, Cardio-Vascular Diseases, Respiratory Diseases)
Infection Control and Waste Management
Mid-level management of EPI
Management of malnutrition + Infant & Young Child Feeding
Anesthesia and Surgical procedures at PHC level
District Health Information System (DHIS) and Use of Information
Logistic and Supply management

Annexures

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A: Essential Medicines and Supplies - at PHC center level facilities

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
Anesthetics (Local)				
1.	Lidocaine (Vial)	Yes	Yes	Yes
2.	Lidocaine (Topical)	Yes	Yes	Yes
3.	Inj. Lignocaine + Epinephrine	No	Yes	Yes
Analgesics (NSAIDs)				
4.	Tab. Acetylsalicylic Acid	Yes	Yes	Yes
5.	Tab. Mefenamic Acid	Yes	Yes	Yes
6.	Tab. Diclofenac 50 mg	Yes	Yes	Yes
7.	Diclofenac (Ampule)	No	No	Yes
8.	Tab. Ibuprofen 200 mg	Yes	Yes	Yes
9.	Tab. Ibuprofen 400 mg	Yes	Yes	Yes
10.	Syp. Ibuprofen	Yes	Yes	Yes
11.	Tab. Paracetamol 500 mg	Yes	Yes	Yes
12.	Syp. Paracetamol	Yes	Yes	Yes
13.	Inj. Paracetamol	No	Yes	Yes
14.	Paracetamol (Suppository)	No	No	Yes
Anti-Allergic (Anaphylaxis)				
15.	Tab. Chlorpheniramine	Yes	Yes	Yes
16.	Inj. Chlorpheniramine	Yes	Yes	Yes
17.	Syp. Chlorpheniramine	Yes	Yes	Yes
18.	Tab. Loratadine	No	Yes	Yes
19.	Syp. Loratadine	No	Yes	Yes
20.	Inj. Dexamethasone	Yes	Yes	Yes
21.	Tab. Dexamethasone	Yes	Yes	Yes
22.	Epinephrine (Ampoule)	No	Yes	Yes
23.	Inj. Hydrocortisone 100mg	Yes	Yes	Yes
24.	Tab. Prednisolone 5mg	Yes	Yes	Yes
Antidotes and other substances used in the poisoning				
25.	Atropine (Ampoule)	Yes	Yes	Yes
26.	Charcoal Activated (Powder)	Yes	Yes	Yes
27.	Inj. Diazepam	Yes	Yes	Yes
28.	Naloxone (Ampoule)	No	Yes	Yes
Anti-Epileptics Anticonvulsants				
29.	Tab. Carbamazepine 200 mg	No	Yes	Yes
30.	Syp. Carbamazepine	No	Yes	Yes
31.	Inj. Magnesium Sulphate	Yes	Yes	Yes
32.	Tab. Phenobarbital	No	No	Yes
33.	Inj. Phenobarbital	No	No	Yes
34.	Tab. Phenytoin	No	No	Yes
Antibiotics/Antimicrobial				
35.	Tab./Cap. Amoxicillin 250 mg	Yes	Yes	Yes
36.	Tab./Cap. Amoxicillin 500 mg	Yes	Yes	Yes
37.	Syp. Amoxicillin (Powder for Suspension) 250 mg	Yes	Yes	Yes
38.	Syp. Amoxicillin (Powder for Suspension) 500 mg	Yes	Yes	Yes
39.	Inj. Amoxicillin 500 mg	No	No	Yes
40.	Cap. Ampicillin 250 mg	Yes	Yes	Yes
41.	Cap. Ampicillin 500 mg	Yes	Yes	Yes
42.	Tab. Calvanic Acid + Amoxicillin	Yes	Yes	Yes
43.	Ampicillin (Powder for Suspension) 250 mg	Yes	Yes	Yes
44.	Ampicillin (Powder for	Yes	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
	Suspension) 500 mg			
45.	Inj. Ampicillin 500 mg	No	Yes	Yes
46.	Inj. Benzathine Penicillin 6lakh unit	Yes	Yes	Yes
47.	Inj. Benzathine Penicillin 12lakh unit	Yes	Yes	Yes
48.	Cap. Cefixime 100mg/400mg	No	No	Yes
49.	Tab. Ciprofloxacin 250 mg	Yes	Yes	Yes
50.	Tab. Ciprofloxacin 500 mg	Yes	Yes	Yes
51.	Syp. Ciprofloxacin 250 mg	Yes	Yes	Yes
52.	Cap. Azithromycin	No	No	Yes
53.	Azithromycin (Suspension)	No	No	Yes
54.	Tab. Cotrimoxazole DS	Yes	Yes	Yes
55.	Syp. Cotrimoxazole	Yes	Yes	Yes
56.	Cap. Doxycycline	Yes	Yes	Yes
57.	Inj. Gentamicin 80 mg	Yes	Yes	Yes
58.	Tab. Metronidazole 400 mg	Yes	Yes	Yes
59.	Inj. Metronidazole	No	No	Yes
60.	Syp. Metronidazole 200mg/60 ml	Yes	Yes	Yes
61.	Tab. Nitrofurantoin	No	No	Yes
62.	Inj. Procaine penicillin	Yes	Yes	Yes
63.	Tab. Phenoxymethylpenicillin	No	Yes	Yes
64.	Syp. Phenoxymethylpenicillin	No	No	Yes
	Anti-Helminthic			
65.	Tab Mebendazole	Yes	Yes	Yes
66.	Tab. Pyrantel	Yes	Yes	Yes
67.	Syp. Pyrantel	Yes	Yes	Yes
	Anti-Fungal			
68.	Clotrimazole (Vaginal Cream)	No	Yes	Yes
69.	Clotrimazole (Vaginal Tablet)	Yes	Yes	Yes
70.	Clotrimazole (Topical Cream)	Yes	Yes	Yes
71.	Tab. Nystatin	Yes	Yes	Yes
72.	Nystatin (Drops)	Yes	Yes	Yes
73.	Nystatin (Pessary)	No	No	Yes
	Anti-Tuberculosis Drugs			
74.	Tab. Ethambutol	No	Yes	Yes
75.	Ethambutol (Oral Liquid)	No	Yes	Yes
76.	Tab. Isoniazid	No	Yes	Yes
77.	Syp. Isoniazid	No	Yes	Yes
78.	Tab. Pyrazinamide	No	Yes	Yes
79.	Cap. Rifampicin	No	Yes	Yes
80.	Syp. Rifampicin	No	Yes	Yes
81.	Inj. Streptomycin	No	Yes	Yes
82.	Tab. Ethambutol + Isoniazid	No	Yes	Yes
83.	Tab. Isoniazid + Rifampicin	No	Yes	Yes
84.	Tab. Isoniazid + Pyrazinamide + Rifampicin	No	Yes	Yes
85.	Tab. Rifampicin + Isoniazid + Pyrazinamide + Ethambutol	No	Yes	Yes
86.	Tab. Ethambutol + Isoniazid + Rifampicin	No	Yes	Yes
	Anti-Diabetics			
87.	Tab. Glibenclamide 4 mg	No	Yes	Yes
88.	Tab. Metformin 500 mg	Yes	Yes	Yes
89.	Inj. Insulin Regular	Yes	Yes	Yes
90.	Inj. Insulin long-acting	Yes	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
	Anti-Malarial			
91.	Tab. Chloroquine	No	Yes	Yes
92.	Syp. Chloroquine	No	Yes	Yes
93.	Tab. Sulfadoxine + Pyrimethamine	No	No	Yes
94.	Tab. Artesunate + Sulfadoxine + Pyrimethamine	Yes	Yes	Yes
95.	Artemether (Ampule)	No	Yes	Yes
	GIT Medicines			
96.	Inj. Hyoscine	Yes	Yes	Yes
97.	Tab. Hyoscine	Yes	Yes	Yes
98.	Tab. Metoclopramide	Yes	Yes	Yes
99.	Syp. Metoclopramide	Yes	Yes	Yes
100.	Inj. Metoclopramide	Yes	Yes	Yes
101.	Cap. Omeprazole 40 mg	Yes	Yes	Yes
102.	Inj. Omeprazole	Yes	Yes	Yes
103.	Tab. Esomeprazole	Yes	Yes	Yes
104.	Cap. Esomeprazole	Yes	Yes	Yes
105.	Tab. Aluminium Hydroxide + Magnesium Trisilicate	Yes	Yes	Yes
106.	Syp. Aluminum Hydroxide + Magnesium Trisilicate	Yes	Yes	Yes
107.	ORS (Sachet)	Yes	Yes	Yes
108.	Tab. Bisacodyl	Yes	Yes	Yes
109.	Glycerine (Suppository)	Yes	Yes	Yes
	Cardiovascular Medicines			
110.	Glyceryl Trinitrate (Sublingual)	Yes	Yes	Yes
111.	Isosorbide Dinitrate (Sublingual)	Yes	Yes	Yes
112.	Tab. Enalapril	No	No	Yes
113.	Tab. Atenolol 50 mg	Yes	Yes	Yes
114.	Tab. Methyldopa	Yes	Yes	Yes
115.	Inj. Methyldopa	No	No	Yes
116.	Tab. Hydrochlorothiazide	Yes	Yes	Yes
117.	Inj. Hydrochlorothiazide	Yes	Yes	Yes
118.	Tab. Furosemide 40 mg	Yes	Yes	Yes
119.	Inj. Furosemide 40 mg	Yes	Yes	Yes
120.	Tab. Captopril 25 mg	No	Yes	Yes
121.	Tab. Amlodipine 5 mg	No	Yes	Yes
	Medicines Affecting Coagulation			
122.	Inj. Tranexamic Acid 500 mg	Yes	Yes	Yes
123.	Cap. Tranexamic Acid 500 mg	Yes	Yes	Yes
	Oxytocic Medicines			
124.	Tab. Misoprostol	Yes	Yes	Yes
125.	Inj. Oxytocin	Yes	Yes	Yes
	Respiratory Medicines			
126.	Tab. Salbutamol 4 mg	Yes	Yes	Yes
127.	Salbutamol (Inhaler)	Yes	Yes	Yes
128.	Ammonium Chloride+ Chloroform + Menthol + Diphenhydramine + Sodium Citrate (Antitussive Expectorant)	Yes	Yes	Yes
129.	Inj. Aminophylline	Yes	Yes	Yes
130.	Oxygen Cylinder	Yes	Yes	Yes
	Ophthalmic Medicines			
131.	0.5% Chloramphenicol (Eye Drops)	Yes	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
132.	Ciprofloxacin (Eye Drops)	No	Yes	Yes
133.	Betamethasone 0.5% w/v Neomycin eye drops	Yes	Yes	Yes
134.	Tetracycline (Eye Ointment)	Yes	Yes	Yes
	ENT Medicines			
135.	Boroglycerine (Ear Drops)	Yes	Yes	Yes
136.	Polymyxin B + Lignocaine (Ear Drops)	Yes	Yes	Yes
137.	Ciprofloxacin (Ear Drops)	Yes	Yes	Yes
138.	Xylometazoline (Nasal Drops)	No	Yes	Yes
	I/V Infusions (Plasma Substitutes)			
139.	Plasma Expander (Infusion) 1000ml	No	Yes	Yes
140.	Glucose/Dextrose (Infusion) 1000ml	Yes	Yes	Yes
141.	Glucose/Dextrose (Ampoule)	Yes	Yes	Yes
142.	Normal Saline (Infusion) 1000ml	Yes	Yes	Yes
143.	Dextrose + Saline (Infusion) 1000ml	Yes	Yes	Yes
144.	Ringer's Lactate (Infusion) 500ml	Yes	Yes	Yes
145.	Potassium Chloride (Solution)	Yes	Yes	Yes
146.	Inj. Sodium Bicarbonate	No	Yes	Yes
147.	Water for Injection (Ampule)	Yes	Yes	Yes
	Vitamins, Minerals and Food supplements			
148.	Tab. Ascorbic Acid 500 mg	Yes	Yes	Yes
149.	Inj. Calcium Gluconate	No	Yes	Yes
150.	Tab. Calcium 100 mg	Yes	Yes	Yes
151.	Tab. Ergocalciferol (Vit. D)	Yes	Yes	Yes
152.	Tab. Ferrous fumarate	No	Yes	Yes
153.	Syp. Ferrous fumarate	Yes	Yes	Yes
154.	Tab. Folic Acid	No	Yes	Yes
155.	Tab. Ferrous salt + Folic Acid	Yes	Yes	Yes
156.	Inj. Vitamin K	No	Yes	Yes
157.	Tab. /Cap. Retinol (Vitamin A) after NIDs	Yes	Yes	Yes
158.	Tab. Zinc Sulphate	Yes	Yes	Yes
159.	Syrup Zinc	Yes	Yes	Yes
160.	Tab. B Complex	Yes	Yes	Yes
161.	Tab. Multivitamins	Yes	Yes	Yes
162.	Multiple Micronutrients (Sachet)	Yes	Yes	Yes
163.	Ready to Use Treatment Food	Yes	Yes	Yes
164.	Ready to Use Supplement Food	Yes	Yes	Yes
	Dermatological			
165.	Benzyl Benzoate Lotion	Yes	Yes	Yes
166.	Betamethasone Cream/ Lotion	Yes	Yes	Yes
167.	Calamine Lotion	Yes	Yes	Yes
168.	Hydrocortisone Cream	Yes	Yes	Yes
169.	Polymyxin B + Bacitracin Zinc (Ointment)	Yes	Yes	Yes
170.	Silver Sulfadiazine Cream	Yes	Yes	Yes
171.	Sodium Thiosulfate (Solution)	No	No	Yes
	Medicines for Mental and Behavi oural Disorders & Tranquilizers			
172.	Inj. Chlorpromazine	No	Yes	Yes
173.	Tab. Clomipramine	No	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
174.	Tab. Haloperidol	No	Yes	Yes
175.	Tab. Diazepam 2 mg	Yes	Yes	Yes
176.	Inj. Diazepam 10 mg	Yes	Yes	Yes
177.	Tab. Alprazolam 0.5 mg	No	Yes	Yes
	Anxiolytics			
178.	Tab. Alprazolam 0.5 mg	Yes	Yes	Yes
179.	Tab. Diazepam 2 mg	Yes	Yes	Yes
	Contraceptives			
180.	Condoms	Yes	Yes	Yes
181.	Ethynylestradiol + Norethisterone (Combined Oral Pills)	Yes	Yes	Yes
182.	Progesterone Only Pills (Levonorgestrel)	Yes	Yes	Yes
183.	Emergency Contraceptive Pills (Levonorgestrel)	Yes	Yes	Yes
184.	IUCD (Copper T/Multiload)	Yes	Yes	Yes
185.	Inj. Medroxyprogesterone Acetate (Dmpa)	Yes	Yes	Yes
186.	Inj. Norethisterone Enanthate (Net-En)	Yes	Yes	Yes
187.	Inj. Estradiol Cypionate + Medroxyprogesterone Acetate	Yes	Yes	Yes
188.	Levonorgestrel-Releasing Implant (Subdermal)	No	Yes	Yes
189.	Etonogestrel-Releasing Implant (Subdermal)	No	Yes	Yes
	Vaccines and Sera			
190.	BCG Vaccine	Yes	Yes	Yes
191.	Oral Polio Vaccine	Yes	Yes	Yes
192.	Injectable Polio Vaccine	Yes	Yes	Yes
193.	Hepatitis B Vaccine	Yes	Yes	Yes
194.	Measles Vaccine	Yes	Yes	Yes
195.	Tetanus Toxoid	Yes	Yes	Yes
196.	Pentavalent Vaccine	Yes	Yes	Yes
197.	Pneumococcal Vaccine	Yes	Yes	Yes
198.	Rota vaccine	Yes	Yes	Yes
199.	Anti-Rabies Vaccines (PVRV)	No	No	Yes
200.	Anti-Snake Venom Serum	No	No	Yes
	Disposables/Antiseptics/ Disinfectants			
201.	Syringe 1 ml (Disposable)	Yes	Yes	Yes
202.	Syringe 3 ml (Disposable)	Yes	Yes	Yes
203.	Syringe 5 ml (Disposable)	Yes	Yes	Yes
204.	Syringe 10 ml (Disposable)	Yes	Yes	Yes
205.	Syringe 20 ml (Disposable)	Yes	Yes	Yes
206.	Syringe 50 ml (Disposable)	Yes	Yes	Yes
207.	IV Set	Yes	Yes	Yes
208.	Scalp Vein Set	Yes	Yes	Yes
209.	Volumetric Chamber (IV Burette)	Yes	Yes	Yes
210.	IV Cannula (18, 20,22 & 24G)	Yes	Yes	Yes
211.	Adhesive Tape	Yes	Yes	Yes
212.	Sterile Gauze Dressing	Yes	Yes	Yes
213.	Paper tape	No	Yes	Yes
214.	Antiseptic Lotion	Yes	Yes	Yes
215.	Cotton Bandage (3", 4" & 6")	Yes	Yes	Yes
216.	Absorbent Cotton Wool	Yes	Yes	Yes
217.	Crepe Bandage	Yes	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus (Rural) Medical Centre (Urban) Medical center (Pvt)	24/7 RHC (Rural) Health Centre (Urban) Nursing Home (Pvt)
218.	Examination Gloves (All Sizes)	Yes	Yes	Yes
219.	Sterile Surgical Gloves (All Sizes)	Yes	Yes	Yes
220.	Silk Sutures Sterile (2/0, 3/0, 4/0) with needle	Yes	Yes	Yes
221.	Chromic Catgut Sterile Sutures (different sizes) with needle	Yes	Yes	Yes
222.	Face Mask Disposable	Yes	Yes	Yes
223.	Blood Lancets	Yes	Yes	Yes
224.	Slides	Yes	Yes	Yes
225.	Endotracheal Tube (different sizes)	Yes	Yes	Yes
226.	Nasogastric Tube (different sizes)	Yes	Yes	Yes
227.	Resuscitator Bag with Mask	Yes	Yes	Yes
228.	Disposable Airways (different sizes)	Yes	Yes	Yes
229.	Clean Delivery Kits	Yes	Yes	Yes

The item mentioned in Blue font is critical to ensure essential interventions

B. Essential Medicines and Supplies - at First Level Hospital

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
	Anaesthetics (Local)		
1.	Lidocaine 2 % (Vial)	Yes	Yes
2.	Lidocaine 5 % (Topical)	Yes	Yes
3.	Lidocaine 2% with 1:100,000 epinephrine	Yes	Yes
4.	Lidocaine 2% and bupivacaine	No	Yes
5.	Xylocaine 1%	Yes	Yes
6.	Inj. Ketamine	Yes	Yes
7.	Isoflurane Gas	No	Yes
8.	Suxamethonium 1-2mg ;4	No	Yes
9.	Oxygen supply	Yes	Yes
	Analgesics (NSAIDs)		
10.	Tab. Acetylsalicylic Acid	Yes	Yes
11.	Tab. Mefenamic Acid	Yes	Yes
12.	Tab. Diclofenac 50 mg	Yes	Yes
13.	Diclofenac (Ampule)	No	Yes
14.	Tab. Ibuprofen 200 mg	Yes	Yes
15.	Tab. Ibuprofen 400 mg	Yes	Yes
16.	Syp. Ibuprofen	Yes	Yes
17.	Tab: Paracetamol 325mg	Yes	Yes
18.	Tab. Paracetamol 500 mg	Yes	Yes
19.	Tab: Paracetamol 1000mg	Yes	Yes
20.	Syp. Paracetamol	Yes	Yes
21.	Inj. Paracetamol	No	Yes
22.	Inj. Nalbuphine	Yes	Yes
23.	Inj. Toradol	Yes	Yes
24.	Inj. Kinz 0.1 mg	No	Yes
	Anti-Allergic (Anaphylaxis)		
25.	Tab. Chlorpheniramine	Yes	Yes
26.	Inj. Chlorpheniramine	Yes	Yes
27.	Inj. Promethazine 25mg	No	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
28.	Syp. Chlorpheniramine	Yes	Yes
29.	Tab. Loratadine	No	Yes
30.	Syp. Loratadine	No	Yes
31.	Inj. Dexamethasone	Yes	Yes
32.	Tab. Dexamethasone	Yes	Yes
33.	Epinephrine (Ampule)	Yes	Yes
34.	Inj. Hydrocortisone	Yes	Yes
35.	Tab. Prednisolone	Yes	Yes
	Antidotes and other substances used in the poisoning		
36.	Atropine (Ampule)	Yes	Yes
37.	Charcoal Activated (Powder)	Yes	Yes
38.	Inj. Diazepam	Yes	Yes
39.	Naloxone (Ampule)	No	Yes
	Anti-Epileptics /Anticonvulsants		
40.	Tab. Carbamazepine	No	Yes
41.	Syp. Carbamazepine	No	Yes
42.	Inj. Magnesium Sulphate (50%)	Yes	Yes
43.	Tab. Phenobarbital	No	Yes
44.	Inj. Phenobarbital	No	Yes
45.	Tab. Phenytoin	No	Yes
46.	Tab: Leviteracetam 500mg	No	Yes
	Antibiotics/Antimicrobial		
47.	Tab./Cap. Amoxicillin 250 mg	Yes	Yes
48.	Tab./Cap. Amoxicillin 500 mg	Yes	Yes
49.	Syp. Amoxicillin (Powder for Suspension) 250 mg	Yes	Yes
50.	Syp. Amoxicillin (Powder for Suspension) 500 mg	Yes	Yes
51.	Inj. Amoxicillin 500 mg	Yes	No
52.	Cap. Ampicillin 250 mg	Yes	Yes
53.	Cap. Ampicillin 500 mg	Yes	Yes
54.	Tab. Calvanic Acid + Amoxicillin	Yes	Yes
55.	Ampicillin (Powder for Suspension) 250 mg	Yes	Yes
56.	Ampicillin (Powder for Suspension) 500 mg	Yes	Yes
57.	Inj. Amikacin 15mg	No	Yes
58.	Inj Clindamycin	No	Yes
59.	Inj. Ampicillin 500 mg	No	Yes
60.	Inj. Benzathine Penicillin 6lakh unit	Yes	Yes
61.	Inj. Benzathine Penicillin 12lakh unit	Yes	Yes
62.	Tab: Penicillin V potassium 125 mg	No	Yes
63.	Inj. Cefazoline 2 g	No	Yes
64.	Inj. Ceftriaxone 80mg	No	Yes
65.	Inj. Cefoxitin 2g	No	Yes
66.	Inj.Cefotaxime 50mg	No	Yes
67.	Cap. Cefixime	No	Yes
68.	Tab. Ciprofloxacin 250 mg	Yes	Yes
69.	Tab. Ciprofloxacin 500 mg	Yes	Yes
70.	Syp. Ciprofloxacin 250 mg	Yes	Yes
71.	Inj. Ethionamide 250mg	No	Yes
72.	Inj. Prothionamide 250 mg	No	Yes
73.	Cap. Azithromycin	No	Yes
74.	Azithromycin (Suspension)	No	Yes
75.	Tab. Cotrimoxazole DS	Yes	Yes
76.	Syp. Cotrimoxazole	Yes	Yes
77.	Cap. Doxycycline	Yes	Yes
78.	Inj. Gentamicin 5 mg	Yes	Yes
79.	Inj. Gentamicin 2 mg	Yes	Yes
80.	Inj. Clindamycin 600mg	No	Yes
81.	Inj. Clindamycin 900mg	No	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
82.	Inj. Vancomycin 15mg	No	Yes
83.	Inj. Benzylpenicillin 50,000 units	No	Yes
84.	Inj. Cloxacillin 50mg	No	Yes
85.	Inj. Moxifloxacin 400mg	No	Yes
86.	Inj. Piperacillin	No	Yes
87.	Inj. Tazobactum	No	Yes
88.	Inj. Gatifloxacin 400mg	No	Yes
89.	Inj. Chloramphenicol 25mg/kg	No	Yes
90.	Inj. Flucloxacillin 50mg	No	Yes
91.	Tab. Metronidazole 400 mg	Yes	Yes
92.	Inj. Metronidazole	No	Yes
93.	Syp. Metronidazole 200mg/60 ml	Yes	Yes
94.	Inj. Procaine penicillin	Yes	Yes
95.	Tab. Phenoxymethylpenicillin	No	Yes
	Anti-Helminthic		
96.	Tab. Mebendazole	Yes	Yes
97.	Tab. Flagyl	Yes	Yes
98.	Inj. Flagyl	Yes	Yes
99.	Tab. Pyrantel	Yes	Yes
100.	Syp. Pyrantel	Yes	Yes
	Anti-Fungal		
101.	Clotrimazole (Vaginal Cream)	No	Yes
102.	Clotrimazole (Vaginal Tablet)	Yes	Yes
103.	Clotrimazole (Topical Cream)	Yes	Yes
104.	Tab. Nystatin	Yes	Yes
105.	Nystatin (Drops)	Yes	Yes
	Antivirals		
106.	Tenofovir 300mg	No	Yes
107.	Entecavir 0.5 mg	No	Yes
108.	Sofosbuvir 400 mg	No	Yes
109.	Daclatasvir 60mg	No	Yes
	Anti-Tuberculosis Drugs		
110.	Tab. Ethambutol	No	Yes
111.	Ethambutol (Oral Liquid)	No	Yes
112.	Tab. Isoniazid	No	Yes
113.	Syp. Isoniazid	No	Yes
114.	Tab. Pyrazinamide	No	Yes
115.	Cap. Rifampicin	No	Yes
116.	Syp. Rifampicin	No	Yes
117.	Inj. Streptomycin	No	Yes
118.	Tab. Ethambutol + Isoniazid	No	Yes
119.	Tab. Isoniazid + Rifampicin	No	Yes
120.	Tab. Isoniazid + Pyrazinamide + Rifampicin	No	Yes
121.	Tab. Rifampicin + Isoniazid + Pyrazinamide + Ethambutol	No	Yes
122.	Tab. Ethambutol + Isoniazid + Rifampicin	No	Yes
123.	Inj. Isoniazid 1000mg	No	Yes
124.	Inj. Ethionamide 15mg	No	Yes
125.	Inj. Prothionamide	No	Yes
126.	Inj. Clofazmine	No	Yes
127.	Inj. Pyrazinamide 2000mg	No	Yes
128.	Inj. Kanamycin 1000mg	No	Yes
129.	Inj. Amikacin 1000 mg	No	Yes
130.	Inj. Capreomycin 1000mg	No	Yes
	Anti-Diabetics		
131.	Tab. Glibenclamide 4 mg	No	Yes
132.	Tab. Metformin 500 mg	Yes	Yes
133.	Inj. Insulin Regular	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
134.	Inj. Insulin long-acting	Yes	Yes
	Anti-Malarial		
135.	Tab. Chloroquine	No	Yes
136.	Syp. Chloroquine	No	Yes
137.	Tab. Artemether + lumefantrine	No	Yes
138.	Tab. Artesunate + Sulfadoxine + Pyrimethamine	Yes	Yes
139.	Artemether (Ampule)	No	Yes
	GIT Medicines		
140.	Inj. Hyoscine	Yes	Yes
141.	Tab. Hyoscine	Yes	Yes
142.	Inj. Zantac	Yes	Yes
143.	Tab. Zantac 150mg	Yes	Yes
144.	Tab. Metoclopramide	Yes	Yes
145.	Syp. Metoclopramide	Yes	Yes
146.	Inj. Metoclopramide	Yes	Yes
147.	Cap. Omeprazole 40 mg	Yes	Yes
148.	Inj. Omeprazole	Yes	Yes
149.	Tab. Esomeprazole	Yes	Yes
150.	Cap. Esomeprazole	Yes	Yes
151.	Tab. Aluminium Hydroxide + Magnesium Trisilicate	Yes	Yes
152.	Syp. Aluminum Hydroxide + Magnesium Trisilicate	Yes	Yes
153.	Antacid Sodium citarate 30ml	Yes	Yes
154.	Magnesium trisilicate 300 mg	Yes	Yes
155.	ORS (Sachet)	Yes	Yes
156.	Tab. Bisacodyl	Yes	Yes
157.	Glycerine (Suppository)	Yes	Yes
	Cardiovascular Medicines		
158.	Glyceryl Trinitrate (Sublingual)	Yes	Yes
159.	Isosorbide Dinitrate (Sublingual)	Yes	Yes
160.	Tab. Enalapril	No	No
161.	Tab. Atenolol 50 mg	Yes	Yes
162.	Tab. Methyldopa	Yes	Yes
163.	Tab. Hydrochlorothiazide	Yes	Yes
164.	Inj. Hydrochlorothiazide	Yes	Yes
165.	Tab. Furosemide 40 mg	Yes	Yes
166.	Inj. Furosemide 40 mg	Yes	Yes
167.	Tab. Captopril 25 mg	No	Yes
168.	Tab. Amlodipine 5 mg	No	Yes
169.	Tab. Simvastatin 40mg	No	Yes
170.	Inj. Dobutamine: 10ug	No	Yes
171.	Inj. dopamine; 40 mg: 10ug	No	Yes
172.	Inj. Amiodarone 200mg	No	Yes
173.	Inj. Adenosine 6mg	No	Yes
174.	Inj. Verapamil 5mg	No	Yes
175.	Inj. Atenolol 2.5 mg	No	Yes
176.	Inj. Verapamil 20mg	No	Yes
177.	Inj. Bisoprolol 2.5 mg	No	Yes
178.	Tab. Captopril 12.5 mg	Yes	Yes
179.	Tab. Lisinopril 10mg	Yes	Yes
180.	Tab. Carvedilol 125mg	No	Yes
181.	Tab. Nifedipine 20mg	No	Yes
182.	Inj. Procainamide 20-25mg	No	Yes
183.	Inj. Sotalol 100mg	No	Yes
184.	Tab. Nitroglycerin 0.4mg	No	Yes
185.	Tab. Diltiazem 0.25mg	No	Yes
	Medicines Affecting Coagulation		
186.	Inj. Tranexamic Acid 500 mg	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
187.	Cap. Tranexamic Acid 500 mg	Yes	Yes
	Oxytocic Medicines		
188.	Tab. Misoprostol 25mcg	Yes	Yes
189.	Vaginal Misoprostol 25mcg	Yes	Yes
190.	Inj. Ergometrine	Yes	Yes
191.	Inj. Oxytocin	Yes	Yes
192.	Inj: Prostaglandin E2 (vial)	Yes	Yes
	Respiratory Medicines		
193.	Tab. Salbutamol 4 mg	Yes	Yes
193.	Salbutamol (Inhaler)	Yes	Yes
194.	Ipratropium 500ug	No	Yes
195.	Ammonium Chloride+ Chloroform + Menthol + Diphenhydramine + Sodium Citrate (Antitussive Expectorant)	Yes	Yes
196.	Oral Prednisolone 30mg	Yes	Yes
197.	Inj. Aminophylline	Yes	Yes
198.	Oxygen Cylinder	Yes	Yes
	Ophthalmic Medicines		
199.	0.5% Chloramphenicol (Eye Drops)	Yes	Yes
200.	Ciprofloxacin (Eye Drops)	No	Yes
201.	Betamethasone 0.5% w/v Neomycin eye drops	Yes	Yes
202.	Tetracycline (Eye Ointment)	Yes	Yes
203.	Tobramycin 0.3%	No	Yes
	ENT Medicines		
204.	Boroglycerine (Ear Drops)	Yes	Yes
205.	Polymyxin B + Lignocaine (Ear Drops)	Yes	Yes
206.	Ciprofloxacin (Ear Drops)	Yes	Yes
207.	Xylometazoline (Nasal Drops)	No	Yes
	Antirheumatics Drugs		
208.	Tab. Methotrexate 7.5 mg	No	Yes
209.	Tab. Hydroxychloroquine 400mg	No	Yes
210.	Tab. Leflunomide 10mg/20mg	No	Yes
211.	Sulfasalazine 1500mg-3000mg	No	Yes
212.	Tab. Prednisolone OR (suspension)	No	Yes
	I/V Infusions (Plasma Substitutes)		
213.	Plasma Expander (Infusion) 1000ml	No	Yes
214.	Glucose/Dextrose (Infusion) 1000ml	Yes	Yes
215.	Glucose/Dextrose (Ampule)	Yes	Yes
216.	Normal Saline (Infusion) 1000ml	Yes	Yes
217.	Dextrose + Saline (Infusion) 1000ml	Yes	Yes
218.	Ringer's Lactate (Infusion) 500ml	Yes	Yes
219.	Potassium Chloride (Solution) not in drip	Yes	Yes
220.	Inj. Sodium Bicarbonate	No	Yes
221.	Water for Injection (Ampule) not in drip	Yes	Yes
222.	Blood Products (Packed RBCs, Fresh Frozen Plasma Units)	No	Yes
	Vitamins, Minerals and Food supplements		
223.	Tab. Ascorbic Acid 500 mg	Yes	Yes
	Inj. Calcium Gluconate	Yes	Yes
224.	Tab. Calcium 100 mg	Yes	Yes
225.	Tab. Ergocalciferol (Vit. D)	Yes	Yes
226.	Tab. Ferrous fumarate	No	Yes
227.	Syp. Ferrous fumarate	Yes	Yes
228.	Tab. Folic Acid	No	Yes
229.	Tab. Ferrous salt + Folic Acid	Yes	Yes
230.	Inj. Vitamin K	No	Yes
231.	Vitamin A Supplement	No	Yes
232.	Tab. /Cap. Retinol (Vitamin A) after NIDs	Yes	Yes
233.	Tab. Zinc Sulphate	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
234.	Syrup Zinc	Yes	Yes
235.	Tab: Alendronate	No	Yes
236.	Tab. B Complex	Yes	Yes
237.	Tab. Multivitamins	Yes	Yes
238.	Multiple Micronutrients (Sachet)	Yes	Yes
239.	Ready to Use Treatment Food	Yes	Yes
240.	F100 and F75	No	Yes
	Dermatological		
241.	Benzyl Benzoate Lotion	Yes	Yes
242.	Betamethasone Cream/ Lotion	Yes	Yes
243.	Calamine Lotion	Yes	Yes
244.	Hydrocortisone Cream	Yes	Yes
245.	Polymyxin B + Bacitracin Zinc (Ointment)	Yes	Yes
246.	Silver Sulfadiazine Cream	Yes	Yes
	Medicines for Mental and Behavi oural Disorders & Tranquilizers		
247.	Inj. Chlorpromazine	No	Yes
248.	Tab. Clomipramine	No	Yes
249.	Tab. Haloperidol	No	Yes
250.	Tab. Diazepam 2 mg	Yes	Yes
251.	Inj. Diazepam 10 mg	Yes	Yes
252.	Tab. Alprazolam 0.5 mg	No	Yes
	Anxiolytics		
253.	Tab. Alprazolam 0.5 mg	Yes	Yes
254.	Tab. Diazepam 2 mg	Yes	Yes
	Contraceptives		
255.	Condoms	Yes	Yes
256.	Ethynylestradiol + Norethisterone (Combined Oral Pills)	Yes	Yes
257.	Progesterone Only Pills (Levonorgestrel)	Yes	Yes
258.	Emergency Contraceptive Pills (Levonorgestrel)	Yes	Yes
259.	IUCD (Copper T/Multiload)	Yes	Yes
260.	Inj. Medroxyprogesterone Acetate (Dmpa)	Yes	Yes
261.	Inj. Norethisterone Enanthate (Net-En)	Yes	Yes
262.	Inj. Estradiol Cypionate + Medroxyprogesterone Acetate	Yes	Yes
263.	Levonorgestrel-Releasing Implant (Subdermal)	No	Yes
264.	Etonogestrel-Releasing Implant (Subdermal)	No	Yes
	Vaccines and Sera		
265.	BCG Vaccine	Yes	Yes
266.	Oral Polio Vaccine	Yes	Yes
267.	Injectable Polio Vaccine	Yes	Yes
268.	Hepatitis B Vaccine	Yes	Yes
269.	Measles Vaccine	Yes	Yes
270.	Tetanus Toxoid	Yes	Yes
271.	Pentavalent Vaccine	Yes	Yes
272.	Pneumococcal Vaccine	Yes	Yes
273.	Rota vaccine	Yes	Yes
274.	Anti-Rabies Vaccines (PVRV)	No	Yes
275.	Anti-Snake Venom Serum	No	Yes
	Disposables/Antiseptics/ Disinfectants		
276.	Syringe 1 ml (Disposable)	Yes	Yes
277.	Syringe 3 ml (Disposable)	Yes	Yes
278.	Syringe 5 ml (Disposable)	Yes	Yes
279.	Syringe 10 ml (Disposable)	Yes	Yes
280.	Syringe 20 ml (Disposable)	Yes	Yes
281.	Syringe 50 ml (Disposable)	Yes	Yes
282.	IV Set	Yes	Yes
283.	Scalp Vein Set	Yes	Yes
284.	Volumetric Chamber (IV Burette)	Yes	Yes

Sr. No.	Medicine/Supplies	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
285.	IV Cannula (18, 20,22 & 24G)	Yes	Yes
286.	Adhesive Tape	Yes	Yes
287.	Sterile Gauze Dressing	Yes	Yes
288.	Paper tape	No	Yes
289.	Antiseptic Lotion	Yes	Yes
290.	Cotton Bandage (3", 4" & 6")	Yes	Yes
291.	Absorbent Cotton Wool	Yes	Yes
292.	Crepe Bandage	Yes	Yes
293.	Examination Gloves (All Sizes)	Yes	Yes
294.	Sterile Surgical Gloves (All Sizes)	Yes	Yes
295.	Silk Sutures Sterile (2/0, 3/0, 4/0) with needle	Yes	Yes
296.	Chromic Catgut Sterile Sutures (different sizes) with needle	Yes	Yes
297.	Face Mask Disposable / Personal Protective Equipment	Yes	Yes
298.	Blood Lancets	Yes	Yes
299.	Slides	Yes	Yes
300.	Endotracheal Tube (different sizes)	Yes	Yes
301.	Nasogastric Tube (different sizes)	Yes	Yes
302.	Resuscitator Bag with Mask	Yes	Yes
303.	Disposable Airways (different sizes)	Yes	Yes
304.	Clean Delivery Kits	Yes	Yes

The item mentioned in Blue font is critical to ensure essential interventions

C: Essential Equipment, Supplies, and Furniture – PHC center level facilities

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
Emergency & Routine				
1.	First Aid box	Yes	Yes	Yes
2.	Electric Oven	Yes	Yes	Yes
3.	Beds with mattress	No	Yes	Yes
4.	N95/ Surgical masks & Personal protective equipment	Yes	Yes	Yes
5.	Emergency OT light	No	Yes	Yes
6.	Oxygen Cylinder with flow- meter	Yes	Yes	Yes
7.	Ambu Bag (Paediatric)	Yes	Yes	Yes
8.	Ambu Bag (Adult)	Yes	Yes	Yes
9.	Suction Machine Heavy Duty	Yes	Yes	Yes
10.	Laryngoscope with 4 blades (Adult & Peds)	Yes	Yes	Yes
11.	Endotracheal tubes (all sizes)	Yes	Yes	Yes
12.	Oral Air Way (all sizes)	Yes	Yes	Yes
13.	Resuscitation Trolley	Yes	Yes	Yes
14.	Nebulizer	Yes	Yes	Yes
15.	Stethoscope	Yes	Yes	Yes
16.	BP Apparatus (Dial)	Yes	Yes	Yes
17.	BP apparatus Mercury (Adult & Paeds)	Yes	Yes	Yes
18.	Dressing Set for Ward	Yes	Yes	Yes
19.	Thermometer Clinical/ Infra-red	Yes	Yes	Yes (and Rectal)
20.	Torch with batteries	Yes	Yes	Yes
21.	Macintosh sheets	Yes	Yes	Yes
22.	Drip stands	Yes	Yes	Yes
23.	Instrument Trolley	Yes	Yes	Yes
Growth Monitoring / Labour Room				
24.	Soap and soap tray	Yes	Yes	Yes
25.	Weighing machine (salter)	Yes	Yes	Yes
26.	Weighing machine (Adult)	Yes	Yes	Yes
27.	Weighing machine (tray)	Yes	Yes	Yes
28.	Height-weight machine	Yes	Yes	Yes
29.	ORT Corner	Yes	Yes	Yes
30.	Feeding bowls, glasses & spoons	Yes	Yes	Yes
31.	Plain Scissors	Yes	Yes	Yes
32.	Demonstration table	No	No	Yes
33.	Delivery table (Labour Room)	No	Yes	Yes
34.	Delivery set (each contain) Partogram Kocher Clamp 6 inch Plain Scissors Tooth Forceps 1 Kidney Tray Needle Holder 7 inch Medium size Bowl Outlet Forceps 8 inch	No	Yes	Yes
D&C set (each Contain)				
35.	Metallic Catheter Uterine Sound Sim's Speculum medium	Yes	Yes	Yes

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
	Set D&E Sponge Holders Hagar's Dilator 0-8 cm Kidney Tray Bowl 4 inch Bowl 10 inch Vulsellum 8 inch Set Uterine Curette Plain Forceps 8 inch Macintosh sheets Torch with batteries			
Caesarean Section Set (each Contain)				
36.	Doven's retractor Green Army tag Big Bowl Cord Clamp 7 inch Kocher Clamp Straight 8 inch Kocher Clamp Curved 8 inch Towel Clip Artery Forceps 6 inch Allis Tissue Forceps 8 inch Needle Holder 8 inch Needle Holder 6 inch Kidney Tray Bowl 4 inch Vulsellum 8 inch Knife Holder 4 number Plain Forceps 7 inch Tooth Forceps 7 inch Curve Scissors Thread Cutting Scissors Sponge Holder 10 inch Vacuum Suction Apparatus Baby Resuscitation Apparatus Adult weighing scale Electric Suction Machine Autoclave Fetal Heart Detector Obs/Gyne: General Set Dressing Set for Ward Eclampsia beds with railing Baby Intubation set Examination Couch with wooden stairs Mucus Extractor Neonatal Resuscitation Trolley Incubator Macintosh sheets Torch with batteries	No	No	Yes
Inpatient (Beds/Wards)				
37.	Bed with side table/locker	No	Yes	Yes
38.	Electric Suction Machine	Yes	Yes	Yes
39.	Electric Sterilizer Oven	Yes	Yes	Yes
40.	Oxygen Cylinder with flowmeter and Stand	Yes	Yes	Yes
41.	Stretcher	Yes	Yes	Yes
42.	Examination Couch with wooden stairs	Yes	Yes	Yes
43.	Wheelchair	Yes	Yes	Yes

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
44.	Patient Screen	Yes	Yes	Yes
45.	AirWays (different sizes)	Yes	Yes	Yes
46.	Suction Pump (Manual)	Yes	Yes	Yes
47.	Drip Stand	Yes	Yes	Yes
			Procedure Room	Operation Theatre
48.	Examination Couch with wooden stairs	No	Yes	No
49.	Hydraulic Operation Table	No	No	Yes
50.	OT Light	No	No	Yes
51.	Gel for ultrasound	No	Yes	Yes
52.	ECG machine and roll	No	Yes	Yes
53.	Shadowless Lamps with 9 Illuminators	No	No	Yes
54.	Anesthesia machine with ventilator	No	No	Yes
55.	Multi-parameter	No	No	Yes
56.	McGill forceps	No	No	Yes
57.	Patient Trolley	No	No	Yes
58.	Oxygen Cylinder (large size with regulator)	No	No	Yes
59.	Oxygen Cylinder (medium size with regulator)	No	Yes	Yes
60.	Nitrous oxide cylinder with regulator	No	No	Yes
61.	Instrument trolley	Yes	Yes	Yes
62.	Dressing Drum (large size)	Yes	Yes	Yes
63.	Stands for Dressing	Yes	Yes	Yes
64.	Basin	Yes	Yes	Yes
65.	Basin stands	Yes	Yes	Yes
66.	Towel Clips	No	Yes	Yes
67.	BP handle	No	Yes	Yes
68.	BP Blades	No	Yes	Yes
69.	Dissecting Forceps (Plain)	No	Yes	Yes
70.	Needle Holder (Large size)	No	Yes	Yes
71.	Sponge Holder Forceps (large)	No	Yes	Yes
72.	Skin Retractor (small size)	No	Yes	Yes
73.	Metallic Catheter (1-12)	No	Yes	Yes
74.	Dilator Complete Set	No	Yes	Yes
75.	Surgical Scissors (various size)	No	Yes	Yes
76.	Proctoscope	No	Yes	Yes
77.	Thames Splint V.S	No	Yes	Yes
78.	Rubber Sheet	No	Yes	Yes
79.	Scalpels 6”	No	Yes	Yes
80.	Allis Forceps Long	No	Yes	Yes
81.	Allis Forceps 6 inches	No	Yes	Yes
82.	Chaetal Sterilize Forceps 10’’ long	No	Yes	Yes
83.	Introducer for Catheter	No	Yes	Yes
84.	Smith Homeostatic Forceps Curved	No	Yes	Yes
85.	Arm Splint different sizes	No	Yes	Yes
86.	Instrument Cabinet	No	Yes	Yes
87.	Spotlight	No	Yes	Yes
88.	Hand Scrub set with chemical	No	Yes	Yes
89.	Thermometer	No	Yes	Yes
90.	Laryngoscope adult/peds	No	Yes	Yes
91.	Kidney Tray S.S	No	Yes	Yes
92.	Stand for Drip	No	Yes	Yes
93.	Bucket	No	Yes	Yes
94.	Air Cushion (Rubber)	No	Yes	Yes

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
95.	Gastric Tube	No	Yes	Yes
96.	Macintosh sheets	Yes	Yes	Yes
97.	Torch with batteries	Yes	Yes	Yes
98.	Urine Collection Bags instrument trolley	No	Yes	Yes
99.	Generator	No	Yes	Yes
100.	Air-Conditioner (split 1.5 tons)	No	Yes	Yes
			Dental Unit	
101.	Dental Chair	No	Yes	Yes
102.	Light	No	Yes	Yes
103.	Torch with batteries	No	Yes	Yes
104.	Handpiece unit	No	Yes	Yes
105.	Suction	No	Yes	Yes
106.	Compressor	No	Yes	Yes
107.	Dental hand instruments (set)	No	Yes	Yes
108.	Aseptic Trolley	No	Yes	Yes
109.	Dental Autoclave	No	Yes	Yes
110.	Amalgamator	No	Yes	Yes
111.	Dental X-ray unit	No	Yes	Yes
112.	Intraoral X-ray film Processor	No	Yes	Yes
113.	X-ray view box	No	Yes	Yes
114.	Lead apron	No	Yes	Yes
115.	Ultrasonic Scaler	No	Yes	Yes
116.	Dental Operating stool	No	Yes	Yes
117.	Ultraviolet sterilizer	No	Yes	Yes
	Lab Equipment and Reagents			
118.	Centrifuge (Bench Top)	No	No	Yes
119.	Centrifuge Machine	No	No	Yes
120.	Stopwatch	No	Yes	Yes
121.	Ice Lined Refrigerator (ILR)	Yes	Yes	Yes
122.	Small refrigerator	Yes	Yes	Yes
123.	X-ray Machine	No	Yes	Yes
124.	Darkroom accessories	No	Yes	Yes
125.	X-ray films (All Size)	No	Yes	Yes
126.	X-ray illuminator	No	Yes	Yes
127.	Needle cutter/ Safety Boxes	No	Yes	Yes
128.	Availability of Ultrasound & ECG Services	No	Yes	Yes
129.	Laboratory Chemicals	Yes	Yes	Yes
130.	Binocular Microscope	Yes	Yes	Yes
131.	Urine meter (bag)	Yes	Yes	Yes
132.	DLC Counter	Yes	Yes	Yes
133.	Haemocytometer	Yes	Yes	Yes
134.	ESR Racks	Yes	Yes	Yes
135.	ESR Pipettes	Yes	Yes	Yes
136.	Water Bath	Yes	Yes	Yes
137.	Centrifuge Tubes (Plastic)	No	Yes	Yes
138.	Centrifuge Tubes (Glass)	No	Yes	Yes
139.	Glass Pipettes various sizes corrected	No	Yes	Yes
140.	Jester Pipettes Fixed – various sizes	No	Yes	Yes
141.	Jester Pipettes Adjustable – various sizes	Yes	Yes	Yes
142.	Sputum collection containers	Yes	Yes	Yes
143.	Urine collection containers	Yes	Yes	Yes
144.	Test tubes including blood sample	Yes	Yes	Yes

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
	tubes			
145.	Test Tube Racks	Yes	Yes	Yes
146.	Pipette Stands	Yes	Yes	Yes
147.	Hemoglobinometer	Yes	Yes	Yes
148.	Table lamp	No	Yes	Yes
149.	Lancets (pack)	Yes	Yes	Yes
150.	Tube Sealer	No	Yes	Yes
151.	Blood grouping Viewing Box	No	Yes	Yes
152.	Surgical Blades	No	Yes	Yes
153.	Test Tube Holder	Yes	Yes	Yes
154.	Baskets	No	Yes	Yes
155.	Wooden Boxes	No	Yes	Yes
156.	Hepatitis B & C and HIV AIDS Kits	No	Yes	Yes
157.	Reagent	No	Yes	Yes
158.	Gas Burner	Yes	Yes	Yes
159.	Stainless-Steel Test-Tube Racks	No	Yes	Yes
160.	Wooden Slides Box	Yes	Yes	Yes
161.	Glucometer and sticks	Yes	Yes	Yes
162.	Urine Testing kits	Yes	Yes	Yes
163.	RDT for Malaria	Yes	Yes	Yes
	Linen			
164.	Bedsheet	Yes	Yes	Yes
165.	Pillow	Yes	Yes	Yes
166.	Pillow cover	Yes	Yes	Yes
167.	Towel (large and small)	Yes	Yes	Yes
168.	Tablecloth	Yes	Yes	Yes
169.	Blanket	Yes	Yes	Yes
170.	Curtain	Yes	Yes	Yes
171.	Dusting cloth	Yes	Yes	Yes
172.	Blinds	Yes	Yes	Yes
173.	Overcoat	Yes	Yes	Yes
174.	Staff Uniform	Yes	Yes	Yes
	Transport			
175.	Ambulance	Yes (in selected BHUs)	Yes	Yes
176.	Jeep for field activities	No	No	Yes
177.	Motorcycle for field activities	Yes	Yes	Yes
178.	LHS vehicle	Yes	Yes	Yes
	Miscellaneous			
179.	Office tables	Yes	Yes	Yes
180.	Officer Chairs	Yes	Yes	Yes
181.	Bench	Yes	Yes	Yes
182.	Blinds, Curtains, Screens for privacy	Yes	Yes	Yes
183.	Steel Almirah	Yes	Yes	Yes
184.	Wooden File Racks	Yes	Yes	Yes
185.	Four-Seater Chairs	Yes	Yes	Yes
186.	Fog machine 60 liter	Yes	Yes	Yes
187.	Spray pumps (2)	Yes (2)	Yes (4)	Yes (8)
188.	Inverter AC	Yes (2 for the patient waiting area)	Yes (3 for patient waiting area and labor room)	Yes (9 for patient waiting areas and Indoor and OT)
189.	Facility board/s	Yes	Yes	Yes
190.	Services availability board/s	Yes	Yes	Yes
191.	Room nameplates	Yes	Yes	Yes

Sr. No.	Equipment/Supplies Name	Availability (Yes/No)		
		8/6 BHU (Rural) Dispensary (Urban) GP Clinic (Pvt)	24/7 BHU Plus Medical Centre (Urban) Medical center (Pvt)	RHC Health Centre (Urban) Nursing Home (Pvt)
192.	Stationary and stationery items	Yes	Yes	Yes
193.	Table set and Pens	Yes	Yes	Yes
194.	Paper ream	Yes	Yes	Yes
195.	Health education display in waiting areas	Yes	Yes	Yes
196.	LCDs	Yes (1)	Yes (2)	Yes (6)
197.	Protocol display and chart booklets in provider's rooms	Yes	Yes	Yes
198.	Fire extinguisher	Yes	Yes	Yes
199.	Gardening tools	Yes	Yes	Yes

D. Essential Equipment, Supplies, and Furniture – at First Level Hospital

Sr. No.	Equipment/Supplies/ Furniture	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
	Emergency and Routine		
1.	First Aid box	Yes	Yes
2.	Electric Oven	Yes	Yes
3.	Beds with mattress	Yes	Yes
4.	N95/ Surgical masks & Personal protective equipment	Yes	Yes
5.	Emergency OT light	Yes	Yes
6.	Torch with batteries	Yes	Yes
7.	Oxygen Cylinder with flow- meter	Yes	Yes
8.	Ambu Bag (Paediatric)	Yes	Yes
9.	Ambu Bag (Adult)	Yes	Yes
10.	Suction Machine Heavy Duty	Yes	Yes
11.	Laryngoscope with 4 blades (Adult & Peds)	Yes	Yes
12.	Endotracheal tubes (all sizes)	Yes	Yes
13.	Oral Air Way (all sizes)	Yes	Yes
14.	Resuscitation Trolley	Yes	Yes
15.	Nebulizer	Yes	Yes
16.	Stethoscope	Yes	Yes
17.	BP Apparatus (Dial)	Yes	Yes
18.	BP apparatus Mercury (Adult & Paeds)	Yes	Yes
19.	Dressing Set for Ward	Yes	Yes
20.	Thermometer Clinical	Yes	Yes
21.	Drip stands	Yes	Yes
22.	Instrument Trolley	Yes	Yes
	Growth Monitoring / Labour Room		
23.	Soap and soap tray	Yes	Yes
24.	Weighing machine (salter)	Yes	Yes
25.	Weighing machine (Adult)	Yes	Yes
26.	Weighing machine (tray)	Yes	Yes
27.	Height-weight machine	Yes	Yes
28.	ORT Corner	Yes	Yes
29.	Feeding bowls, glasses & spoons	Yes	Yes
30.	Plain Scissors	Yes	Yes
31.	Demonstration table	Yes	Yes
32.	Delivery table (Labour Room)	Yes	Yes

Sr. No.	Equipment/Supplies/ Furniture	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
33.	Delivery set (each contain) Partogram Kocher Clamp 6 inch Plain Scissors Tooth Forceps 1 Kidney Tray Needle Holder 7 inch Medium size Bowl Outlet Forceps 8 inch Macintosh sheets Torch with batteries	Yes	Yes
	D&C set (each Contain)		
34.	Metallic Catheter Uterine Sound Sim's Speculum medium Set D&E Sponge Holders Hagar's Dilator 0-8 cm Kidney Tray Bowl 4 inch Bowl 10 inch Vulsellum 8 inch Set Uterine Curette Plain Forceps 8 inch Macintosh sheets Torch with batteries	Yes	Yes
	Caesarean Section Set (each Contain)		
35.	Doven's retractor Green Army tag Big Bowl Cord Clamp 7 inch Kocher Clamp Straight 8 inch Kocher Clamp Curved 8 inch Towel Clip Artery Forceps 6 inch Allis Tissue Forceps 8 inch Needle Holder 8 inch Needle Holder 6 inch Kidney Tray Bowl 4 inch Vulsellum 8 inch Knife Holder 4 number Plain Forceps 7 inch Tooth Forceps 7 inch Curve Scissors Thread Cutting Scissors Sponge Holder 10 inch Vacuum Suction Apparatus Baby Resuscitation Apparatus Adult weighing scale Electric Suction Machine Autoclave Fetal Heart Detector Obs/Gyne: General Set Dressing Set for Ward Eclampsia beds with railing Baby Intubation set Examination Couch with wooden stairs Mucus Extractor Neonatal Resuscitation Trolley Incubator Macintosh sheets Torch with batteries	Yes	Yes

Sr. No.	Equipment/Supplies/ Furniture	Availability (Yes/No)			
		Taluka Headquarter Hospital / <50 bedded Private Hospital		District Headquarter Hospital / >50 bedded Private Hospital	
Inpatient (Beds/Wards)					
36.	Bed with side table/locker	Yes		Yes	
37.	Electric Suction Machine	Yes		Yes	
38.	Electric Sterilizer Oven	Yes		Yes	
39.	Oxygen Cylinder with flowmeter and Stand	Yes		Yes	
40.	Stretcher	Yes		Yes	
41.	Examination Couch with wooden stairs	Yes		Yes	
42.	Wheelchair	Yes		Yes	
43.	Patient Screen	Yes		Yes	
44.	AirWays (different sizes)	Yes		Yes	
45.	Suction Pump (Manual)	Yes		Yes	
46.	Drip Stand	Yes		Yes	
		Procedure Room	Operation Theatre	Procedure Room	Operation Theatre
47.	Examination Couch with wooden stairs	Yes	Yes	Yes	No
48.	Hydraulic Operation Table	No	Yes	No	Yes
49.	OT Light	Yes	Yes	Yes	Yes
50.	Gel for ultrasound	Yes	Yes	Yes	Yes
51.	ECG machine and roll	Yes	Yes	Yes	Yes
52.	Shadowless Lamps with 9 Illuminators	No	Yes	Yes	Yes
53.	Anesthesia machine with ventilator	No	Yes	Yes	Yes
54.	Multi-parameter	No	Yes	Yes	Yes
55.	McGill forceps	Yes	Yes	Yes	Yes
56.	Patient Trolley	Yes	Yes	Yes	Yes
57.	Oxygen Cylinder (large size with regulator)	No	Yes	Yes	Yes
58.	Oxygen Cylinder (medium size with regulator)	Yes	Yes	Yes	Yes
59.	Nitrous oxide cylinder with regulator	Yes	Yes	Yes	Yes
60.	Instrument trolley	Yes	Yes	Yes	Yes
61.	Dressing Drum (large size)	Yes	Yes	Yes	Yes
62.	Stands for Dressing	Yes	Yes	Yes	Yes
63.	Basin	Yes	Yes	Yes	Yes
64.	Basin stands	Yes	Yes	Yes	Yes
65.	Towel Clips	Yes	Yes	Yes	Yes
66.	BP handle	Yes	Yes	Yes	Yes
67.	BP Blades	Yes	Yes	Yes	Yes
68.	Dissecting Forceps (Plain)	Yes	Yes	Yes	Yes
69.	Needle Holder (Large size)	Yes	Yes	Yes	Yes
70.	Sponge Holder Forceps (large)	Yes	Yes	Yes	Yes
71.	Skin Retractor (small size)	Yes	Yes	Yes	Yes
72.	Metallic Catheter (1-12)	Yes	Yes	Yes	Yes
73.	Dilator Complete Set	Yes	Yes	Yes	Yes
74.	Surgical Scissors (various size)	Yes	Yes	Yes	Yes
75.	Proctoscope	Yes	Yes	Yes	Yes
76.	Thames Splint V.S	Yes	Yes	Yes	Yes
77.	Rubber Sheet	Yes	Yes	Yes	Yes
78.	Scalpels 6”	Yes	Yes	Yes	Yes
79.	Allis Forceps Long	Yes	Yes	Yes	Yes
80.	Allis Forceps 6 inches	Yes	Yes	Yes	Yes
81.	Chaetal Sterilize Forceps 10’’ long	Yes	Yes	Yes	Yes
82.	Introducer for Catheter	Yes	Yes	Yes	Yes
83.	Smith Homeostatic Forceps Curved	Yes	Yes	Yes	Yes
84.	Arm Splint different sizes	Yes	Yes	Yes	Yes
85.	Instrument Cabinet	Yes	Yes	Yes	Yes
86.	Spotlight	Yes	Yes	Yes	Yes
87.	Hand Scrub set with chemical	Yes	Yes	Yes	Yes
88.	Thermometer	Yes	Yes	Yes	Yes
89.	Laryngoscope adult/peds	Yes	Yes	Yes	Yes
90.	Kidney Tray S.S	Yes	Yes	Yes	Yes

Sr. No.	Equipment/Supplies/ Furniture	Availability (Yes/No)			
		Taluka Headquarter Hospital / <50 bedded Private Hospital		District Headquarter Hospital / >50 bedded Private Hospital	
91.	Stand for Drip	Yes	Yes	Yes	Yes
92.	Bucket	Yes	Yes	Yes	Yes
93.	Air Cushion (Rubber)	Yes	Yes	Yes	Yes
94.	Macintosh sheets	Yes	Yes	Yes	Yes
95.	Torch with batteries	Yes	Yes	Yes	Yes
96.	Gastric Tube	Yes	Yes	Yes	Yes
97.	Urine Collection Bags instrument trolley	Yes	Yes	Yes	Yes
98.	Generator	No	Yes	Yes	Yes
99.	Air-Conditioner (split 1.5 tons)	Yes	Yes	Yes	Yes
Dental Unit					
100.	Dental Chair	Yes		Yes	
101.	Light	Yes		Yes	
102.	Torch with batteries	Yes		Yes	
103.	Handpiece unit	Yes		Yes	
104.	Suction	Yes		Yes	
105.	Compressor	Yes		Yes	
106.	Dental hand instruments (set)	Yes		Yes	
107.	Aseptic Trolley	Yes		Yes	
108.	Dental Autoclave	Yes		Yes	
109.	Amalgamator	No		Yes	
110.	Dental X-ray unit	Yes		Yes	
111.	Intraoral X-ray film Processor	No		Yes	
112.	X-ray view box	No		Yes	
113.	Lead apron	Yes		Yes	
114.	Ultrasonic Scaler	No		Yes	
115.	Dental Operating stool	Yes		Yes	
116.	Ultraviolet sterilizer	No		Yes	
Lab Equipment and Reagents					
117.	Centrifuge (Bench Top)	Yes		No	
118.	Centrifuge Machine	Yes		No	
119.	Stopwatch	Yes		Yes	
120.	Ice Lined Refrigerator (ILR)	Yes		Yes	
121.	Small refrigerator	Yes		Yes	
122.	X-ray Machine	Yes		Yes	
123.	Darkroom accessories	Yes		Yes	
124.	X-ray films (All Size)	Yes		Yes	
125.	X-ray illuminator	Yes		Yes	
126.	Needle cutter/ Safety Boxes	Yes		Yes	
127.	Availability of Ultrasound & ECG Services	Yes		Yes	
128.	Laboratory Chemicals	Yes		Yes	
129.	Binocular Microscope	Yes		Yes	
130.	Urine meter (bag)	Yes		Yes	
131.	DLC Counter	Yes		Yes	
132.	Haemocytometer	Yes		Yes	
133.	ESR Racks	Yes		Yes	
134.	ESR Pipettes	Yes		Yes	
135.	Water Bath	Yes		Yes	
136.	Centrifuge Tubes (Plastic)	Yes		Yes	
137.	Centrifuge Tubes (Glass)	Yes		Yes	
138.	Glass Pipettes various sizes corrected	Yes		Yes	
139.	Jester Pipettes Fixed – various sizes	Yes		Yes	
140.	Jester Pipettes Adjustable – various sizes	Yes		Yes	
141.	Sputum collection containers	Yes		Yes	
142.	Urine collection containers	Yes		Yes	
143.	Test tubes including blood sample tubes	Yes		Yes	
144.	Test Tube Racks	Yes		Yes	
145.	Pipette Stands	Yes		Yes	
146.	Hemoglobinometer	Yes		Yes	
147.	Table lamp	Yes		Yes	
148.	Lancets (pack)	Yes		Yes	

Sr. No.	Equipment/Supplies/ Furniture	Availability (Yes/No)	
		Taluka Headquarter Hospital / <50 bedded Private Hospital	District Headquarter Hospital / >50 bedded Private Hospital
149.	Tube Sealer	No	Yes
150.	Blood grouping Viewing Box	No	Yes
151.	Surgical Blades	No	Yes
152.	Test Tube Holder	Yes	Yes
153.	Baskets	No	Yes
154.	Wooden Boxes	No	Yes
155.	Hepatitis B & C and HIV AIDS Kits	Yes	Yes
156.	Reagent	No	Yes
157.	Gas Burner	Yes	Yes
158.	Stainless-Steel Test-Tube Racks	No	Yes
159.	Wooden Slides Box	Yes	Yes
160.	Glucometer and sticks	Yes	Yes
161.	Urine Testing kits	Yes	Yes
162.	RDT for Malaria	Yes	Yes
	Linen		
163.	Bedsheet	Yes	Yes
164.	Pillow	Yes	Yes
165.	Pillow cover	Yes	Yes
166.	Towel (large and small)	Yes	Yes
167.	Tablecloth	Yes	Yes
168.	Blanket	Yes	Yes
169.	Curtain	Yes	Yes
170.	Dusting cloth	Yes	Yes
171.	Blinds	Yes	Yes
172.	Overcoat	Yes	Yes
173.	Staff Uniform	Yes	Yes
	Transport		
174.	Ambulance	Yes	Yes
175.	Jeep for field activities	No	No
176.	Motorcycle for field activities	Yes	Yes
177.	LHS Vehicles (If LHWP functional at THQ/DHQ hospital)	Yes	Yes
	Furniture		
178.	Office tables	Yes	Yes
179.	Officer Chairs	Yes	Yes
180.	Bench	Yes	Yes
181.	Blinds, Curtains, Screens for privacy	Yes	Yes
182.	Steel Almirah	Yes	Yes
183.	Wooden File Racks	Yes	Yes
184.	Four-Seater Chairs	Yes	Yes
185.	Fog machine 60 liter	Yes	Yes
186.	Spray pumps (2)	Yes (8)	Yes (16)
187.	Inverter AC	Yes	Yes
188.	Facility board/s	Yes	Yes
189.	Services availability board/s	Yes	Yes
190.	Room nameplates	Yes	Yes
191.	Stationary and stationery items	Yes	Yes
192.	Table set and Pens	Yes	Yes
193.	Paper ream	Yes	Yes
194.	Health education display in waiting areas	Yes	Yes
195.	LCDs	Yes	Yes
196.	Protocol display & chart booklets in provider's rooms	Yes	Yes
197.	Fire extinguisher	Yes	Yes
198.	Gardening tools	Yes	Yes


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Benefit Package


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