INDIAN PUBLIC HEALTH STANDARDS

COMMUNITY HEALTH CENTRE

2022

VOLUME-II

Ministry of Health & Family Welfare

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डॉ. मनसुख मांडविया
DR. MANSUKH MANDAVIYA

स्वास्थ्य एवं परिवार कल्याण
व रसायन एवं उर्वरक मंत्री
भारत सरकार
Minister for Health & Family Welfare
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Government of India

आज़ादी का अमृत महोत्सव

MESSAGE

The National Health Policy 2017 envisages the attainment of the highest possible level of health and well-being for all. It aspires to achieve increased and more equitable access to healthcare by improving quality and investments in public health. An important step towards improving quality of healthcare delivery is through the Indian Public Health Standards (IPHS); a set of uniform standards to provide norms and benchmarks for quality of infrastructure, human resources and services to be delivered from public health facilities at all levels.

Since the last revision of IPHS in 2012, a whole host of important programmes and initiatives, such as the National Urban Health Mission, National Health Policy, Ayushman Bharat, Health & Wellness Centres, free drugs, etc. have been introduced by the Government. An expert group was set up to deliberate and recommend the revised standards to factor-in the needs of the new programmes and interventions. In the recent years, there has been a paradigm shift from selective care to assured comprehensive care. Corona Virus Infectious Disease (COVID-19) which spread rampantly across the globe, widely affected the health systems of the country, and highlighted the need for a resilient health system with assured critical care and robust supply chain. The Revised IPHS provide guidance on the infra-structural, human resource, drugs, diagnostics, equipment, quality and governance requirements for delivering health services at health facilities.

The IPHS have been revised with this approach covering both urban and rural health facilities for ensuring care across the full continuum of care. The revised guidelines also move from a prescriptive approach to decentralized plan approach. The focus now is on reducing Out of Pocket Expenditure by introducing assured functionality of services areas critical for provision of care.

I believe that revised IPHS 2021 will serve as a benchmark for states/ UTs for an improved healthcare delivery system. Accordingly, service delivery defined for each level of health facilities will be the basis for developing other health system strengthening components such as infrastructure, human resource, medicines, equipment etc.

It is my sincere hope that all States and UTs shall utilize these guidelines for strengthening the public health facilities holistically and put in their best efforts to strive towards high quality of health care at all public health facilities and to achieve goals envisaged for better health outcomes for the country.

(Dr. Mansukh Mandaviya)

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एक कदम स्वच्छता की ओर

MESSAGE

Indian Public Health Standards (IPHS) is an important tool towards achieving the quality healthcare delivery and better health outcomes under the Public Health Care System. Government of India has been revising these standards from time to time taking into account the changes and updates in the existing national programme as per requirement of public health care services. It is essential for public health facilities to deliver quality health services and assured availability of drugs, diagnostic services and Human Resource so that the National and International commitments in health care at various forums can be addressed.

The revised IPHS 2021 is a comprehensive document which includes the minimum standards to be adhered by the public health facilities at rural and urban areas. The document ensures equitable access of essential public health services at primary care through Ayushman Bharat- Health and Wellness Centre; subsequent referrals to secondary care facility assuring emergency, specialist and critical care services.

I urge all States and UTs to adopt and put these Standards into practice for strengthening the public health facilities and put in their best efforts to strive for improved quality of health care services at all public health care system.

I would take this opportunity to congratulate the team at Ministry of Health and Family Welfare led by Secretary HFW, National Health Systems Resource Centre, all subject experts and state representatives for coming up with comprehensive standards. I am sure this will help the states and UTs in further improving the public health services with provision of assured critical care.

BPW

(Dr. Bharati Pravin Pawar)

"दो गज की दूरी, मास्क है जरूरी"

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Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

Message

Indian Public Health Standards (IPHS), last revised in 2012, are the benchmarks for quality of service delivery expected from various public health care facilities at all levels. They can also form the basis for assessing performance of public health care delivery system.

With the launch of National Urban Health Mission in 2013, National Health Policy in 2017, and Ayushman Bharat in 2018, the focus has shifted from selective health services to comprehensive and quality Primary and Secondary health care services to all population irrespective of their geographical location or financial status from Health & Wellness Centre (HWC) level to District Hospital level.

HWCs have been designated to provide 12 packages of comprehensive Primary Health Care while Community Health Centres (CHCs) have been designated to provide basic secondary care services nearer to the community with special focus to the under-served and remote areas of the country. District Hospitals supported by Sub-District Hospitals are the epicentre in a district for providing assured secondary care referral services for those referred from HWCs and CHCs.

Revision of IPHS guidelines for DHs, SDHs, CHCs and PHCs was required to include the widened scope of Comprehensive Primary Health Care services and strengthen the secondary healthcare service delivery. Government of India therefore constituted an expert group for revision of IPHS norms for DH, SDH, CHC, PHC, Polyclinics and UPHC. While undertaking revision, the experts have given due attention and care in incorporating the needs for various programmes in terms of services, and commensurate infrastructure, human resource, equipment etc. Focused attention has also been given to include delivery of comprehensive surgical services, widening public health surveillance, delivery of emergency and critical services, improving the availability of beds per one thousand population and capacity building of HR etc. in the revised guidelines.

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I extend my compliments to NITI Aayog for providing valuable guidance in development of the IPHS 2021. I also convey my thanks to Director General Health Services, National Health Mission team led by AS&MD, NHSRC, State and institutional representatives and all other experts for their best inputs in framing IPHS 2021.

I sincerely believe that all the States and UTs will expeditiously implement these standards to develop public healthcare institutions at all levels, so as to provide comprehensive and quality healthcare services to our citizens.

Place : New Delhi
Date : 21-09-2021

(Rajesh Bhushan)

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MESSAGE

Since the launch of the National Rural Health Mission in 2005, the Ministry of Health & Family Welfare, Government of India has endeavoured to provide universal and quality healthcare services to the people of India. To facilitate progress in this regard and to ensure quality services through public health facilities across the country, the MoHFW developed the Indian Public Health Standards for Sub-centres, Primary Health Centres (PHCs), Community Health Centres (CHCs), Sub-District and District Hospitals in 2007 and their subsequent revision ensued in 2012.

Several new programmes and initiatives have since been introduced, including National Urban Health Mission, NQAS, LaQshya, Free drugs and diagnostics, Health & Wellness Centres, SUMAN for maternal and new born care, NCD screening and their assured management, etc. necessitating revision of the IPHS.

The revised IPHS 2021 place a greater emphasis on the services to be provided at each level of public health facilities. To preserve equity in healthcare distribution, these services need to be acceptable, accessible, inexpensive, and responsive to the needs of the people, particularly for those who are marginalized. The revised IPHS provides benchmarks for rural & urban PHCs, Polyclinics in urban areas, non-FRU & FRU CHCs as well as District & Sub-District Hospitals in accordance with the changing needs.

This document endeavours to help the states and UTs in achieving the prescribed minimum standards for essential services and also strive for providing the desirable healthcare services for even better quality, assured primary, secondary as well as critical care services in the districts, which can be easily accessed by the community.

The constant guidance of Secretary H&FW helped in revising IPHS after extensive consultations with experts. I would like to thank the NITI Aayog, Directorate General of Health Services, officials of the NHM Program Divisions, teams at the National Health Systems Resource Centre, State government officials & experts whose inputs and contributions helped in development of the revised IPHS 2021.

I am confident these guidelines will prove useful to all the key stakeholders at state and district levels in improving the standards and quality of services being rendered at public health facilities.

(Vikas Sheel)

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FOREWORD

India has commitment to achieve Universal Health Coverage (UHC) by 2030. UHC envisages that all the people have access to quality health care services which can be accessed without facing any financial hardships or Out-Of-Pocket Expenditure (OOPE).

Since the last revision of Indian Public Health Standards in 2012 various new initiatives have been launched like Urban Health, augmenting emergency and critical care due to pandemics like COVID-19, provision of comprehensive surgical services beyond C-section, ensuring continuum of care under Ayushman Bharat, District Early Intervention Center, Integrated Public Health Labs, etc. therefore, a need was felt for the revision of IPHS 2012 guidelines.

These revised IPHS guidelines for PHCs, CHCs and DH & SDH have focus on ensuring services and accordingly standards for commensurate infrastructure, equipment, HR etc. to be given to States and UTs. The revised version also incorporates the commitments under NHP, 2017 to fulfill the objectives of delivering high quality services that are accountable, responsive, and sensitive to the needs of the community.

The revision of these standards was possible because of the combined efforts of all the experts who actively contributed as a part of main committee and sub-committee constituted by GoI. I would like to place my sincere thanks to DGHS, NCDC, Program Divisions, experts from Medical Colleges (AIIMS, PGIMER, VMMC, LHMC,), HLL, CDB, DCGI, NIHFW, Regional Directors of Health and Family Welfare, representatives of WHO, World Bank, UNFPA, JSS and other development partners, State/Union Territory Government representatives for their valuable inputs.

The continuous guidance given by the Secretary and AS&MD(NHM) helped us in framing the guidelines. I must give special thanks to the NHM Team especially the Directors and NHSRC Team for their continuous and untiring efforts in giving inputs, compiling responses, and undertaking several revised versions before the guidelines were finalized.

I request all the Principal Secretaries and Mission Directors in the States/UTs to initiate actions for providing commensurate resources through State and other budgetary channels for implementing IPHS 2021 guidelines at public health facilities. I hope that states will adopt these standards and utilize them to develop a state specific comprehensive road map for IPHS certification of their public health facilities.

(Vishal Chauhan)

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FOREWORD

In India, out of the total population of 1210.2 million as on 1st March, 2011, about 377.1 million are in urban areas registering an increase of 32% in the decade from 2001 to 2011. The overall slum population is estimated to be 20% of the total urban population. The National Urban Health Mission aims to address the health concerns of the urban poor by facilitating equitable access to health facilities.

In urban areas, usually the population density is high and there are various types of health care facilities which provide *in*-patient care. However, primary healthcare is inadequate and needs improvement especially in slums/poor localities. So, there was a felt need to expand primary health services in urban areas. Accordingly, a new initiative has been proposed to expand its reach in the community by bringing UHWC for a population of 10,000-20,000. Further, a polyclinic or specialist clinic at UPHC have been introduced for the first time in the programme.

The health care needs of the people in the urban area are different from rural areas. Therefore, looking at the various diversified needs of urban poor, the health facilities need to be equipped to deliver services like critical care, emergency care, and commensurate support services to address the shifting disease burden. Therefore, pre-existing UPHCs and UCHCs providing health care services also needed standards and norms under IPHS.

This is the first time that IPHS for urban health facilities have been developed after wide consultations with the states and experts. It is hoped that this will help states and UTs to upgrade their urban health facilities as per the norms defined under this document. The States/UT officials are expected to undertake gap analysis of services and prepare time bound action plan for filling these gaps for delivery of assured quality services to the people living in urban areas, particularly, in slums and vulnerable pockets.

My sincere gratitude to Shri Rajesh Bhushan, Secretary Health & Family Welfare, Ms. Vandana Gurnani, the then AS&MD and Shri Vikas Sheel, the AS&MD for their support and guidance. I appreciate the efforts taken by Shri Vishal Chauhan, JS (Policy), Director NUHM & NUHM team, Program Divisions of NHM, MoHFW, and NHSRC Team for formulating such uniform standards for the States/UTs which were very much required for further improving the implementation and penetration of urban health programs. I extend my heartfelt thanks to all the experts, state officials and development partners who worked for it and contributed towards the betterment of people in the country.

I hope the guidelines for Community Health Centres for urban and rural will help the States/UTs in improving the standards of services being rendered at public health facilities.

23/09/2021
(Dr. Harmeet Singh)

Dr. Himanshu Bhushan
Member Secretary

New Delhi
11th April 2022

The journey and the vision of IPHS 2022

For public health systems to deliver effectively, standards are important. Standards once developed need to be periodically revisited, so that they continue to be relevant for meeting program requirements. Revision of IPHS followed a systematic process that synthesised the evidences, norms, observations and professional views of the experts.

The IPHS 2022 focusses on the services to be delivered at each level of health facility, which form the basis for developing norms for other health system strengthening components like infrastructure, human resources and capacity building, drugs, diagnostics and equipment, administrative and support services, quality assurance and improvement, monitoring and supervision and related governance issues.

The revision took considerable time since the document was to be representative of the requirements of all the programs of the Health Ministry. Taking inputs from Program Divisions of MoHFW, States, Urban Local Bodies, Experts, Development Partners and other stakeholders helped us relate it further. Various rounds of group meetings and one-to-one discussions took place with all the Program Divisions, and thereafter inputs of senior officials of the Ministry were also incorporated.

It is important to pen down the path traversed for sharing the vision of IPHS 2022, the contribution of experts, the method and learnings, that have implications on implementation and subsequent iterations, which otherwise would be missed out by the people who read it. The long deliberations with the hospital planners, program officers and administrators on the numbers of HR, types of services, diagnostics, drugs, etc. is a reminiscence which I believe is imperative to share.

When it came to norms for human resources, it was unanimously viewed that field realities should not be allowed to dilute the standards. The expectation of services with quality ingrained cannot be fulfilled without adequate human resources. COVID-19 crisis reiterated this fact that human resources are not available in the required ratio which is paramount for service delivery. On one hand was the market demand for health services, and on the other hand was the scarcity of human resources in health, with long working hours and stress for those who chose to stay with public health institutions. This also highlighted the need for comprehensive planning for adequate infrastructure, services, and human resources in the IPHS.

The commitment for IPHS was unequivocal, right from Hon'ble Union Minister of Health and Family Welfare and Union Minister of State - MoHFW, to all senior levels of health functionaries Secretary (H&FW), AS & MD (NHM) and JS (Policy). During the 13th CCHFW, the Health Ministers of States/UTs, under the chairpersonship of the Hon'ble Union Minister of Health and Family Welfare, resolved to

achieve IPHS in all public health facilities across the country in a timebound manner. The Hon'ble Union Health Minister was also taking updates on the progress and his suggestions have been incorporated. Representatives from the NITI Aayog also gave valuable inputs and guidance from time to time.

During the process of this revision, deliberations were led by JS (Policy) Dr. Manohar Agnani, Mr. Vikas Sheel and Mr. Vishal Chauhan at various stages. I would like to place on record the inputs and contributions given by the present Health Secretary Shri. Rajesh Bhushan, former Health Secretary, Ms. Preeti Sudan, former AS & MD, Mr. Manoj Jhalani, and Ms. Vandana Gurnani, all Joint Secretaries (Policy) and ED NHSRC Dr. Atul Kotwal, in guiding us towards framing of these standards. I would also like to thank the experts from Medical Colleges like AIIMS -New Delhi, Patna & Bhopal, Lady Hardinge Medical College-Delhi, PGIMER-Chandigarh, VMMC and Safdarjung Hospital-Delhi and MGIMS-Sewagram. The contribution and valuable inputs given during the expert group meetings by Development Partners like UNICEF, UNFPA, WHO, World Bank, Jan Swasthya Sahyog (JSS), Medical Service Corporations of Kerala, Madhya Pradesh, Odisha, Rajasthan, Tamil Nadu, and also state and district representatives from Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu, Uttar Pradesh, West Bengal is acknowledged in developing these guidelines.

I also recognise the immense support given by the team from NHM and NHSRC for drafting these guidelines. The constant support by all the Advisors at NHSRC and their valuable inputs and suggestions helped in further improving the quality. I vividly recall the contributions of Ms. Mona Gupta in finalizing the HRH norms, Dr. J. N. Srivastava in drugs, Dr. Ranjan Kumar Choudhury, in equipment and oxygen and Dr. M. A. Balasubramanya on wellness components of health. The relentless efforts by the PHA team, particularly, Mr. Prasanth K.S., Mr. Ajit Kumar Singh, Dr. Smita Shrivastava, Dr. Kalpana Pawalia, Dr. Aashima Bhatnagar, Dr. Poonam, Ms. Diksha Rathee, Dr. Aditi Joshi, Dr. Ashutosh Kothari and Ms. Neelam Tirkey in updating IPHS after receiving inputs from the stakeholders cannot be forgotten.

I hope that States will adopt these standards and utilize them to develop a state specific comprehensive road map for IPHS certification of their public health facilities for meeting the commitments under NHM. It is important to know that the journey of the IPHS has been a dynamic one, and all the key stakeholders must be responsive enough to meet the ever-evolving requirements and challenges. The expected output is IPHS certification of public health facilities and provision of respectful, dignified, and quality services to the patients is the outcome envisioned.

The inspiration behind the IPHS 2022 is the conviction to build health facilities that give rich treatment to poor people. These standards play a critical role in minimising the out-of-pocket expenditure by the people who cannot afford healthcare in private sector. This document is dedicated to the citizens of the country so that they remain hopeful of our public health delivery system.

(Dr. Himanshu Bhushan)

TABLE OF CONTENTS

ANNEXURES

LIST OF ABBREVIATIONS

AERB	Atomic Energy Regulatory Board
AFB	Acid Fast Bacilli
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa- Rigpa and Homeopathy
BCC	Behaviour Change Communication
BIS	Bureau of Indian Standards
BMMP	Biomedical Equipment Management and Maintenance Programme
BMW	Biomedical Waste
BMWM	Biomedical Waste Management
BPHU	Block Public Health Unit
BSU	Blood Storage Unit
CDR	Child Death Review
CEmONC	Comprehensive Emergency Obstetric and New-born Care
CFC	Chloro Fluro Carbon
CHC	Community Health Centre
CRP	C-Reactive Protein
CSSD	Central Sterile and Supply Department
CVD	Cardiovascular Disease
DCIP	Dichlorophenolindophenol
DEWATS	Decentralised Wastewater Treatment System
DH	District Hospital
ETP	Effluent Treatment Plant
FAR	Floor Area Ratio
FEFO	First Expiry First Out
FSTP	Faecal Sludge Treatment Plant
FRU	First Referral Unit
GOI	Government of India
GTT	Glucose Tolerance Test
GWP	Greenhouse Warming Potential
HCG	Human Chorionic Gonadotropin

HEPA	High Efficiency Particulate Air
HPCL	High Performance Liquid Chromatography
HR	Human Resources
HRH	Human Resources for Health
HR-MIS	Human Resource Management Information System
HVAC	Heating, Ventilation and Air Conditioning
HWC-SHC	Health and Wellness Centre - Sub Health Centre
ICTC	Integrated Counselling and Testing Centre
IEC	Information Education and Communication
IFA	Iron and Folic Acid
INC	Indian Nursing Council
INR	International Normalised Ratio
IPD	Inpatient Department
IPHS	Indian Public Health Standards
IQC	Internal Quality Control
ISQua	International Society for Quality in Health Care
IYCF	Infant and Young Child Feeding
JSSK	Janani Shishu Suraksha Yojana
JSY	Janani Suraksha Yojana
LaQshya	Labour Room Quality Improvement Initiative
LBW	Low Birth Weight
LDR	Labour Delivery and Recovery Room
LHV	Lady Health Visitor
LSAS	Life Saving Anaesthesia Skills
MDSR	Maternal Death Surveillance and Response
MGPS	Medical Gas Pipeline System
MIS	Management Information System
MO	Medical Officer
MRD	Medical Record Room
MTP	Medical Termination of Pregnancy
NBC	National Building Code
NBCC	New-born Care Corner
NBSU	New-born Sick Unit
NCDs	Non-communicable Diseases
NDMA	National Disaster Management Authority
NESTROFT	Naked Eye Single Tube Red Cell Osmotic Fragility Test
NIDDCP	National Iodine Deficiency Disorder Control Programme
NLEP	National Leprosy Eradication Programme
NMHP	National Mental Health Programme
NPCD &VI	National Programme for Control of Blindness and Visual Impairment

NPCDCS	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke
NPPCD	National Programme For Prevention and Control of Deafness
NPPCF	National Programme For Prevention and Control of Fluorosis
NQAS	National Quality Assurance Standard
NRC	Nutrition Rehabilitation Centre
NSV	Non-scalpel Vasectomy
NTCP	National Tobacco Control Programme
NTEP	National Tuberculosis Elimination Programme
NUHM	National Urban Health Mission
OT	Operation Theatre
PEP	Post Exposure Prophylaxis
PMR	Physical Medicine and Rehabilitation
PSA	Pressure Swing Adsorption
PT	Prothrombin Time
PWD	Person with Disabilities
QOC	Quality of Care
RCH	Reproductive and Child Health
RKS	Rogi Kalyan Samiti
RMNCHA	Reproductive Maternal New-born Child and Adolescent Health
RPR	Rapid Plasma Reagin
RRT	Rapid Response Team
S. HDL	Serum High Density Lipoprotein
S. LDL	Serum Low Density Lipoprotein
S. VLDL	Serum Very Low Density Lipoprotein
SAM	Severe Acute Malnutrition
SDG	Sustainable Development Goal
SDH	Sub-district Hospital
SGOT	Serum Glutamic Oxaloacetic Transaminase
SGPT	Serum Glutamic Pyruvic Transaminase
SOP	Standard Operating Procedure
TLD	Thermoluminescence Dosimeter
TSSU	Theatre Sterile Supply Unit
UHC	Universal Health Coverage
ULB	Urban Local Body
UPHC	Urban Primary Health Centre
VDRL	Venereal Disease Research Laboratory Test
VIA	Visual Inspection Using Acetic Acid

READER'S GUIDE FOR COMMUNITY HEALTH CENTRE (CHC)

There is no right or wrong way to use the Indian Public Health Standards (IPHS) 2022. You can straight away go to the section you are interested in and consult IPHS for infrastructure, Human Resources for Health (HRH), drugs and diagnostics, or you can read through the entire book to understand what the expected standards are at a particular level of facility. We expect that the public health planners would use this book as a reference and return to it time and again.

Each book has sections dedicated to the objectives of IPHS, the guiding principles, the population norms, the essential and desirable standards (desirable services/human resources for health/diagnostic tests and equipment are over and above the indications mentioned as essential) for service provision, as well as framework for implementation of IPHS.

- **Section 1:** The **Background** section provides a brief on the journey towards the Global strategy for Health for All and Universal Health Coverage (UHC) and the reasons why the IPHS are needed.
- **Section 2:** The section on **Introduction** includes the rationale behind revising the IPHS. It briefly describes how IPHS can accelerate India's progress towards achieving UHC and the Sustainable Development Goal - 3 (SDG 3) in alignment with the National Health Policy 2017.
- **Section 3:** This section outlines the key **Objectives of the IPHS** for Community Health Centres (CHC) in rural and urban areas.
- **Section 4:** It includes the **Types or categories of CHCs,** purpose of establishing them and population norms at which the non-first referral unit (FRU) CHCs, and FRU CHCs are to be established in rural as well as urban areas.
- **Section 5:** It includes **Population Norms** for all types of CHCs (Non-FRU CHC, FRU CHC, FRU UCHC).
- **Section 6:** It contains the **General Principles** that are to be adopted by the States and Union Territories (UT) to strengthen service delivery and ensure better implementation of National Health Programmes.
- **Section 7:** Defines the minimum **Criteria** for the health care facility to be identified as 'IPHS Compliant'.
- **Section 8:** The section on **Service Provision** includes the details of:
    a. Basis for establishing health facilities, infrastructure requirement and general appearance and upkeep of facilities.
    b. Prescribed norms to be followed for illumination, fire safety, disaster and emergency preparedness, water and sanitation and power backup.
    c. Standard protocol to be adopted for better service delivery.
    d. HRH requirement for ensuring service availability, conduct and behavior standards and safety measures to be adopted for HRH.

e. Essential medicines to be available free of cost in the health facilities under the 'Free Drug Services Initiative' of the Government of India (GoI).

f. Essential diagnostics to be provided in the health facilities.

g. Equipment required for providing services being offered through the facilities.

h. Quality assurance protocol to be adopted including road map for healthcare facilities to achieve National Quality Assurance Standards (NQAS) certification.

i. Ensuring accountability and governance in service delivery.

j. Framework of implementation of IPHS.

BACKGROUND

1 SECTION

India has a rich past in the field of medical sciences where both physical and mental health were considered important parameters of health. The 'Charaka Samhita" was the mainstay for medicine for centuries and "Sushruta Samhita" was the ancient medical compendium of surgery compiled around the 6th century B.C.

The Buddhist era in the 6th century B.C. saw the establishment of "Viharas" which were monasteries that took care of the sick, impoverished, and specially challenged, in addition to medical education. Several hospitals were operational throughout King Ashoka's reign in the 2nd century B.C. This was the time when modern hospitals and health care systems were built. From the late 19th century through the early 20th century, the first medical colleges were established for organised medical training. Further, dispensaries were established at sub-district, district level hospitals and hospitals at provincial level were attached to medical colleges.

The present focus of public health has evolved slowly across the globe. Winslow defined public health as "*the science and art of preventing disease, prolonging life, and promoting health through the organised efforts and informed choices of society, organisations, public and private communities, and individuals*"[1] which gave a broader dimension addressing the wider determinants of health.

With the emerging recognition of public health, the government too initiated efforts that were directed towards formal training in public health. The public health workforce comprised of personnel from both medical and non-medical backgrounds including auxiliary nurse midwives (ANM), nurses, midwives, sanitary inspectors, sanitary assistants, health officers, and physicians. In 1946, the Health Survey and Development Committee *(Bhore Committee)* recommended the establishment of health centres for providing integrated curative and preventive services.

With Article 21, the Constitution of India guarantees that no person shall be deprived of his/her life or personal liberty. *"Life"* here was neither merely the physical act of breathing nor connotation of continued drudgery through life. It had a much wider meaning which included the right to live with human dignity, right to livelihood, right to pollution-free air and right to health. Article 47 enforced the government's commitment further by directing the State to raise the level of nutrition and standard of living and to improve public health. In the year 2005, the National Rural Health Mission or NRHM (now National Health Mission or NHM) was launched for *"attainment of universal access to equitable, affordable and quality health care services, accountable & responsive to people's needs, with effective intersectoral convergent action to address the wider social determinants of health."*

The 30th World Health Assembly (WHA) resolved in May 1977, that the main social target of governments and the World Health Organization (WHO) in the coming decades should be the attainment by all citizens of the world by the year 2000 of a level of health that would permit them to lead a socially and economically productive life. The Alma-Ata Declaration called on all governments to formulate national policies, strategies and plans of action to launch and sustain Primary Health Care (PHC) as part of a national health system. Thereafter, it was left to each country to innovate, according to its own circumstances to provide PHC.

[1] Ahmed F U. Defining public health. Indian J Public Health 2011 [cited 2021 Jul 18];55:241-5. Available from:https://www.ijph.in/text.asp?2011/55/4/241/92397

This was followed by the formulation and adoption of the Global strategy for 'Health for All' by the 34th World Health Assembly in 1981. 'Health for All' meant that health had to be brought within the reach of everyone in a given community. It implies the removal of obstacles to health that, is to say, the elimination of malnutrition, ignorance, disease, contaminated water supply, unhygienic housing, etc. It depends on continued progress in medicine and public health. The foundation for UHC was a universal entitlement to comprehensive health security and an all-encompassing obligation on the part of the State to provide adequate food and nutrition, appropriate medical care, access to safe drinking water, proper sanitation, education, health-related information, and other contributors to good health.

To meet all these national and international commitments, it became essential for public health facilities to deliver quality services. To meet these objectives, the IPHS which were basically a set of uniform standards, were launched to deliver quality services to all citizens with dignity and respect. Thus, the IPHS for Sub-Centres, PHCs, CHCs, Sub-District Hospitals (SDH) and District Hospitals (DH) were published in 2007 and revised in 2012, as a reference point for public health care infrastructure planning and upgradation in the States and UTs. They provide guidance on the health system components such as infrastructure, human resources for health, drugs, diagnostics, equipment, quality, and governance requirements for delivering health services at these facilities.

INTRODUCTION

2
SECTION

The delivery of services through the public health sector in India follows the three-tier structure of primary, secondary, and tertiary health care services. This covers both rural and urban areas. While health services in rural areas have always been an integral part of the public health sector, focus on urban health came during Reproductive and Child Health (RCH) – I and continued in RCH-II as part of NRHM. However, in 2013, while reorganising the National Health Mission, the National Urban Health Mission (NUHM) was launched with the aim of providing affordable PHC through UPHCs, UCHCs and outreach services to the urban population in India, with special focus to people living in listed, unlisted slums, homeless, rag-pickers, migrants, and other vulnerable population.

Since the last revision of the IPHS in 2012, a number of new initiatives, interventions, programmes and projects have been introduced in the public health system. The introduction of comprehensive primary health care through strengthened sub-centres and PHCs (now known as Health and Wellness Centres or HWC), and similarly, in urban areas, Urban Health and Wellness Centres, speciality UPHCs (Polyclinics), are some of the new additions.

Since then, key policy shifts have been proposed under the National Health Policy (2017) for public health care delivery system in the following areas:

- **Clinical care:** From standalone curative to a preventive, promotive and rehabilitative approach for achieving comprehensive wellness in health.
- **Primary care:** From selective care to assured comprehensive care with linkages to referral hospitals.
- **Drugs, diagnostics, and emergency services:** From user fees and cost recovery to assured free drugs, diagnostic and emergency services to all in public hospitals.
- **Infrastructure and human resource for health development:** From a normative approach to a targeted approach to reach underserved areas with *"time to care approach"*.
- **Urban health:** From token interventions to on-scale assured interventions to organise PHC delivery and referral support for urban poor. Also, to advocate for collaboration with other sectors to address wider determinants of urban health.
- **National Health Programmes:** Integration with health systems for programme effectiveness and in turn contributing to strengthening health systems for efficiency.

To accommodate these developments, it is essential to incorporate them in existing IPHS so that the revised IPHS 2022 can be informed by stakeholder feedback about the relevance and usefulness of these standards and remain fit-for-purpose with emerging evidence and advancements in health, science, and technology.

The 2022 IPHS guidelines have been framed for:

- District Hospitals (DH) & Sub-District Hospitals (SDH).
- Community Health Centres (CHC) – rural and urban.
- Primary Health Centres (PHC) and Health and Wellness Centre for rural and urban, including Multispecialty UPHC (Polyclinics)in urban areas.
- Sub-health Centre- Health and Wellness Centre (SHC-HWC) for rural and urban areas.

Additionally, the 2022 revised guidelines emphasise services to be delivered at each level of facility. Service delivery defined for each level of health facility will be the basis for developing other health system strengthening components viz. infrastructure, human resource for health, drugs, diagnostics/equipment, quality improvement, monitoring/supervision, governance, and leadership.

The 2022 IPHS norms will retain the earlier approach of supporting government health facilities to attain a minimum acceptable functional standard (indicated as 'Essential') while striving and aspiring for improvement (indicated as 'Desirable') so as to accelerate India's progress towards achievement of UHC and SDG 3 in alignment with the National Health Policy, 2017.

This document lays out norms for CHCs and UCHCs for delivery of secondary health care. It aims to support states with implementation of IPHS at public health facilities and includes the general principles that apply to the norms used. This considers health service provision holistically for a district and implementation of norms which should be based on the local burden of disease and its projection in terms of likely future trends.

OBJECTIVES OF IPHS FOR CHC/UCHC

3 SECTION

The broad objectives of the IPHS for CHC in rural and urban areas include the following:

1. To define uniform benchmark ensuring high quality services that are accountable, responsive, and sensitive to the needs of the community.
2. To specify the minimum assured (Essential) and achievable (Desirable) services that are expected to be provided at CHCs in both rural and urban areas.
3. To achieve and maintain an acceptable standard of quality of care at public health facilities.
4. To facilitate monitoring and supervision of the facilities.
5. To provide guidance and tools for governance and leadership.
6. To provide guidance on health systems strengthening components which includes architectural design of facilities, human resources for health, drugs, diagnostics, equipment, administrative and logistical support services to improve the overall health related outcomes.

4
SECTION

TYPES/CATEGORIES OF CHC/UCHC

In comparison with the IPHS guidelines of 2012, the revised IPHS 2022 guidelines classify the rural and urban CHC as:

A. **Non-FRU CHCs (rural):** Non-FRU CHCs are those that provide essential services including preventive, promotive, curative, palliative, and rehabilitative services etc. Curative services include normal delivery, stabilisation of common emergencies, etc. Non-FRU CHCs in rural areas will have 30 essential beds.

B. **FRU CHCs (rural and urban):** FRU CHCs, in addition to the above services, provide specialised care which can be rendered through specialists (physicians, surgeons, obstetricians, paediatricians, and anaesthesiologists) and the accompanying infrastructure (functional operation theatre and blood storage unit). Both elective and emergency surgical services of secondary level care shall be provided. FRU-CHCs will provide surgical services and go beyond obstetric services. (**Annexure 2 & 3**).

Thus, while CHCs in rural areas can be either non-FRU CHC or FRU CHC, the UCHC in urban areas will function only as FRU UCHCs. Non-FRU CHCs will have 30 essential beds. For FRU CHCs in rural areas, 30 beds, maternity and surgical services will be essential while in a 50 bedded FRU CHC, additional ophthalmic, orthopaedic, and ENT services will be desirable. Similarly, for FRU UCHCs 50 beds, maternity and surgical services will be essential in all the cities. The same with 100 beds (in metropolitan cities/cities with population of more than 1 million), will have additional ophthalmic, and orthopaedic services as desirable.

The flexibility will be with the states to decide the proportion of facilities as non-FRU and FRU CHCs depending on population norms of five lakhs and/or time to care approach, availability of HR, case load and other such parameters. Likewise for urban areas, besides the above factors, the states shall have flexibility to decide the number of UCHCs depending on availability of other health facilities in the area (polyclinics, maternity homes, SDH/DH, and tertiary/medical college hospitals), to reach saturation levels as per norms.

However, since the population of urban areas varies widely, the bed requirement for UCHC shall also vary in different cities, based on the classification of non-metro or metro under the National Urban Health Mission (NUHM). Nevertheless, the number of beds at a particular UCHC is flexible and will be influenced by individual state policy taking into account the estimated facility case load, local burden of disease, access to health care and local demands.

In urban areas, following a strategic review of the 'time to care' approach and availability of other health facilities in the city/district, states should prioritise whether the existing infrastructure of UCHCs (non-functional or sub-optimally functioning) shall be utilised as such for providing secondary care or be designated as multispecialty UPHC (polyclinics) for providing assured ambulatory/day-care specialist care to the community (in case of non-feasibility of providing in-patient care and/depending on needs of the state).

BLOCK PUBLIC HEALTH UNIT (BPHU)

All CHCs at block headquarters level (in rural and urban areas) are to be developed as Block Public Health Units (BPHU).

Every block in the country is envisaged as having a CHC/Block PHC/SDH at the Block Headquarter (HQ) which serves as a hub for referral from the SHCs and PHCs of the block. However, the situation across states is variable, with the Block CHC functioning as just another PHC in some states, while in some other states, the block CHC also serves as a First Referral Unit. Currently, the block health facility is only equipped to provide selected clinical services, a limited range of public health functions and administrative control of the health institutions within the block.

The BPHU are expected to have four functional areas: clinical service delivery, public health functions, Block Public Health Laboratory to serve both clinical, public health functions, and HMIS unit. The clinical and diagnostic services will be delivered as per Indian Public Health Standards (IPHS) and efforts will be made to improve the quality and timeliness of reporting of service delivery and public health related data. The BPHUs will also promote decentralised planning and the preparation of block health plans that feed into district health plans.

Objectives

The objectives of block public health unit will be to:

- Promote decentralized planning of public health activities with rural and urban local bodies through participatory process. District Plan will be inclusive of Block plans, Panchayat/urban local body plans.
- Serve as the referral point for the HWC- PHC and HWC-SHC in the block, in order to reduce crowding at higher level facilities, and provide comprehensive primary health care (delivery of clinical and public health services).
- Strengthen disease surveillance (both human and animal) to support evidence generation/forecast of potential outbreaks through robust data reporting using HMIS.
- To create a platform for collaboration, coordination among multi-disciplinary sectors to address social determinants of health.
- Ensure accountability for health outcomes within the block.

Note: For details on Block Public Health Unit refer to the "Operational & Technical Guidelines on XV-FC Health Grants through local government" and "Pradhan Mantri- Ayushman Bharat Health Infrastructure Mission".

5
SECTION

POPULATION NORMS FOR CHCs

Community Health Centre in rural areas (CHC) is to be established for a population norm of 80,000 (in hilly and tribal areas) and 1,20,000 (in plains) and/or time to care approach. To establish effective convergence and linkages with citizen centric services, a CHC should be established at the Community Development Block/Taluka/Tehsil/Circle Level. This will also supplement the three-tier Panchayati System (Gram Panchayat, Block Panchayat and Zila Panchayat).

The Community Health Centre in urban areas (UCHC) is set up as a secondary care referral centre in metro cities with a population of 5 lakh and above and population of 2.5 lakh in non-metro cities. These facilities are in addition to existing facilities (SDH/DH) that cater to the urban population in the locality. A UCHC should be established at the Ward/Town/ULB/Block/City/District level to establish effective convergence and linkages with citizen centric services. It is a 50 bedded facility that provides in-patient medical, and surgical services and facilities for institutional delivery. For the metros and million plus cities, the UCHCs are established at 5 lakh population and are 100 bedded facilities.

GENERAL PRINCIPLES OF IPHS

6 SECTION

1. IPHS defines the standards in the local context of the country and its implementation is the state's/UTs responsibility with technical support from MoHFW. IPHS does not define the implementation process. However in the interest of rendering quality patient services, it suggests that in-house hiring of clinical and critical staff should be prioritized rather than those services which can efficiently be run even through outsourcing model like security, cleaning, laundry, etc.
2. While planning and designing primary and secondary care health services at public facilities, health needs of the entire district should be considered as a whole rather than focusing on individual facilities within the district. This holistic assessment should include a systematic review of the burden of disease in that district, the local epidemiology and the specific needs and requirements of communities in its different parts. While planning services at various levels, the 'continuum of care' approach needs to be ensured for the population.
3. For each district/city, the final number of health facilities will be influenced by its population, time to care, geographical need, local epidemiology and burden of disease, community requirements and health seeking behaviour of the population. Every district should have a district health action plan, with all health facilities identified and mapped, and indicating the type and level of services they provide.
4. Depending on the services provided at a particular facility, it may be deemed as a primary or secondary care service provider facility:
    - Health and Wellness Centres (Sub-centres and PHCs), in both rural and urban areas will provide primary care services.
    - Multispecialty polyclinics nearer to the community will provide ambulatory specialist services, particularly in urban areas.
    - CHCs in rural areas can be either non-FRU or FRU depending on the range of services provided. In urban areas, CHCs will provide services at par with FRU.
    - District and Sub-district hospitals will provide secondary care services.
5. FRUs indicate functionality and go beyond obstetric services. Such units where both elective and emergency surgical services of secondary level care are being provided with complimentary functional infrastructure, HR, equipment, drugs, diagnostics and support services would qualify to become FRUs.
6. While it is expected that all UCHCs will eventually provide secondary care, those unable to do so can be converted into multispecialty polyclinics to provide assured specialist day care services rather than in-patient secondary care.
7. While operationalising FRUs, the population norms of five lakhs and/or time to care approach should be taken into consideration. The principle for time to care approach should ensure availability of emergency care services and stabilisation of the patient within the 'Golden Hour' from onset of the emergency. States should prioritise at least 50% of the CHCs to be preferentially strengthened as FRU-CHCs.

8. Additional FRU CHCs can be created in some areas to meet time to care approach for sparsely populated locations.
9. The specific set of services to be provided at a particular facility should be clearly identified from the list of services provided in the IPHS. This will help identify requirements for infrastructure, HR, drugs, diagnostics, and equipment.
10. Requirements of individual national health programmes (in terms of service delivery, infrastructure, human resource for health, drugs, and diagnostics) have been reviewed and included in IPHS. Therefore, achieving IPHS compliance would go a long way in fulfilling the requirements of various health programmes.
11. IPHS prescribes norms for allopathic services. However, AYUSH services have been retained in IPHS 2022 as desirable. The HR, medicines, and other inputs required for AYUSH services shall be given by the Ministry of AYUSH.
12. All statutory and regulatory standards relevant to a particular facility should be followed and adhered to in accordance with the latest national/state guidelines, rules, and regulations.
13. A Citizens' Charter should be prominently displayed near the entrance of the facility. This should provide information about the various services being offered, timings, responsibilities of patients and providers, details of referral vehicles and facilities, the number of free drugs and diagnostics being provided and other citizen friendly information. Patients' rights should be ensured, and they should also be made aware of their responsibilities (e.g., to keep the facility clean and avoid spitting in corners, avoiding over-crowding by attendants, respecting visiting hours, not causing any harm to public property or indulging in violence against healthcare professionals etc.). A sample Citizens' Charter is placed at **Annexure 1**.

CRITERIA FOR IPHS COMPLIANCE

7 SECTION

For any CHC to be considered as compliant with IPHS norms, a minimum standard for both the quantity and quality of services should be achieved. A CHC will be deemed as IPHS compliant if it fulfils the criteria i.e, providing all the 'Essential' services rendered through the corresponding availability of infrastructure, HR, drugs, diagnostics and equipment identified for that level of facility.

The norms for service provision, infra-structural and human resource for health requirements, drugs, diagnostics and equipment, quality assurance, monitoring and governance will apply uniformly across all facilities in rural and urban areas. General guidance on these components is presented in the sections that follow.

The mechanism and criteria for IPHS certification can be accessed at the link given below:

https://nhsrcindia.org/IPHS2022

8 SECTION

SERVICE PROVISION

Secondary care specialist services closer to the community are envisaged to be delivered at the two types of CHCs (FRU and non-FRU) with assured multidirectional linkages (for referral and follow-up).

Services should be offered and distributed across the district in such a way that out-of-pocket expenditure of the community is reduced, especially for the vulnerable and marginalised. Apart from curative services, there should a strong focus on health promotion, prevention, palliation, and rehabilitation at both primary and secondary levels of facilities.

Non-FRU CHCs are envisaged to deliver services related to maternal and child health (including normal delivery), infectious diseases, nutritional disorders including iron-deficiency anaemia, mental health conditions, non-communicable diseases, Eye, Oral and ENT care. Early identification and treatment of these diseases coupled with prevention, promotion and risk reduction at community level is the only way to address disease burden at the population level.

Services at FRU CHCs include specialist care, operative services and blood transfusion facilities in addition to maternal and child health care services.

All the CHCs are to be expanded by integrating the functions of clinical services and public health surveillance for improved public health actions. It will also strengthen the diagnostic capacity of the laboratory both for clinical conditions and public health surveillance and serve as the hub for health-related reporting through a robust HMIS.

The services to be provided at both types of facilities are identified as 'essential' and 'desirable'. The former includes those 'minimum assured services' that every facility at that level must provide. Desirable services are those that a facility should aspire to ultimately achieve (if not already being provided), over a period of time, depending on the resource availability and capacity of States and also the needs of the community. The desirable services are in addition to Essential services. The details of services to be provided by CHC/ UCHC are placed at **Annexure 2 & 3**.

To ensure continuum of care, assured referral with facility readiness to manage referred cases must be established. The referral transport network should have the requisite number of equipped ambulances (depending on population norms) with adequately trained manpower. Follow-up care at the community level/primary health care centre level should also be linked.

Service Flow at Non- FRU CHC/FRU-CHC (Rural & Urban)

The suggestive flow of services as underneath should be followed for IPHS compliance in any CHC:

Enquiry→ Registration→ Waiting→ Nursing Station→ Clinic→ Dressing room/Injection Room→ Diagnostics (lab/imaging)→ Drug dispensation→ Appraisal by the patient *through Mera Aspataal* feedback→ Exit

Collaboration with other sectors have been identified and listed for certain services (such as nutritional support with the Women and Child Development (WCD) department, school health with the education

department and vector control activities with the urban local bodies or ULBs and Panchayati Raj institutions or PRIs.

All infrastructure plans, human resource for health and equipment requirements should be based on the range of services to be provided at that facility. This will also help in rational planning of budgetary allocation.

8.1. INFRASTRUCTURE

The CHCs/UCHCs should be located such that they are easily accessible by the rural/urban community which they target to serve.

The infrastructure for all facilities should follow the rules and regulations as laid down in the National Building Code and the relevant state by-laws.

Sufficient space and infrastructure should be provisioned for the services being provided. Planning should be prospective and considering the expected burden of disease and future trends (such as the increasing prevalence of non-communicable and lifestyle related diseases). New infrastructure should be planned, designed, and built taking into account future expansion – both with regard to the quantity and range of services to be provided.

Old and dilapidated facilities may need to be demolished to build new infrastructure at the same site. However, while demolishing any old building, it should be ensured that alternate arrangements are made for effectively running the existing services, till the establishment of new infrastructure. Factors to be considered while building a new facility either at the same site or selecting a new site for a forthcoming facility include:

- Ensuring easy accessibility by the public (with good road connectivity).
- Ensuring the facility is not in a low-lying flood prone area.
- Ensuring it is adequately serviced by public utilities such as water, electricity and telephone connectivity, sewage, and storm-water disposal. In areas where these are not available, appropriate substitutes should be identified such as a deep well for water, generators for electricity and radio communication for telephony.
- Ensuring elderly and disabled friendly access.
- Minimising exposure to air, noise, water and land pollution and ensuring facility buildings are vector-breeding proof.
- Reviewing land utilisation in adjoining areas, the general topography, proximity to local bus stands, railway station and other modes of transport and obtaining necessary environmental (including seismic safety), fire safety and administrative clearance.
- The local agency by-laws and rules should be strictly adhered with.

While adhering to these, 60-65% of the total area of the facility should be reserved for landscaping, play area, circulation area etc. and the remaining 35-40% should be the plinth area (including residential areas). The built-up portion will include areas for core clinical services, support services such as Central Sterile Supply Department (CSSD), kitchen and mechanised laundry, residential areas and the knowledge hub (teaching and training sites).

An estimated 80% of the built-up areas should be dedicated to core patient services and clinical areas. Use of this space for administrative and related services (offices and general stores) should be avoided.

Wherever possible, new construction should be more vertical than horizontal (within state norms and compliant with the National Building Code) so that there is more space available for creating green spaces.

While maps for the general layout, flow and suggested dimensions are provided for each level of facility, these may have to be adapted to fit space constraints. The existing infrastructure, where possible and appropriate, can be changed, renovated, or upgraded to fit these requirements as far as possible. Some degree of flexibility and innovative planning will therefore be required to accommodate additional services to be provided in existing infrastructure and ensure that the facility is compliant with necessary rules and regulations while remaining fit for purpose, from a clinical perspective. Where lack of space is a particular concern (as in urban areas or pre-existing spaces), the possibility of expansion of vertically based on floor area ratio (FAR) rather than horizontally should be seriously considered, while bearing in mind that at least 10 metres of space all around the boundary wall should be left open. Adequate width to allow easy access to the fire engine should be provisioned for and in no case should it measure less than 6 metres.

As a general principle and wherever possible, the clinical areas, especially Emergency services, labour, delivery and recovery room (LDR) complex, and the outpatient department (OPD) should be on the ground floor. Administrative offices, teaching and training areas and general storerooms should be located on higher floors. In this document, a suggestive layout plan for CHC (common for both rural and urban) has been provided (**Annexure 4**). For such CHC/UCHC where space is a constraint, appropriate workflow and quality should be ensured in the existing infrastructure.

The foundation of the health facility infrastructure should be strong enough to meet the requirement of the seismic zones of that area and any future vertical expansion. It should strictly adhere to the statutory fire safety norms. An open area to facilitate the management of disasters and emergencies is also recommended.

Emphasis should be given to create a positive, client friendly ambience and environment around the facility. This includes due consideration to the provision of facilities for patient registration, waiting areas, clear way finding and signposting, parking, gardens, washrooms, drinking water and disabled friendly facilities. Processes such as registration and drug dispensing should be computerised with electronically supported queue systems in all service areas. The facility should be environment friendly with scope for adequate natural light, water harvesting and solar energy, if appropriate. All health care facilities should be resilient to climate and environmental changes and infrastructural requirements for certain support services can be common for all facilities.

8.1.1. General Appearance and Upkeep

The facility should have a high boundary wall with at least two gates for entry/exit. There should be no encroachment in and around the facility. There should be no unwanted/outdated posters or hoardings on the walls of building and the boundary of the facility. As per The Noise Pollution (Regulation & Control) Rules, 2000; an area of 100m around the hospital should be defined as a *"Silence Zone"*. Clear access to vehicles should be maintained. No vehicle should be parked outside the gate and no waiting areas should be allowed for autos, bus etc.

Adequate lighting should be ensured so that the facility is clearly visible from the approach road. The facility should be plastered and painted in a uniform colour scheme and be free from seepage, cracks, and broken windowpanes. The floors should be anti-skid and non-slippery.

8.1.1.1. Wayfinding/Signage

Adequate and clear signage should be displayed on the main and connecting roads to the facility. They should be in a font which is easily visible and legible from a distance. A board clearly indicating the name of the facility, should be placed at the front of the facility; each department and room should be clearly marked (including English, Hindi, and local language). Colour coding could be used for clarity at larger facilities.

The layout of the CHC should be displayed near the entrance. Safety, hazard, and caution signs should be prominently displayed at relevant places. A fluorescent fire exit plan should be considered where appropriate. Tactile pathways should be made for visually incapacitated visitors.

8.1.1.2. Parking

Clear access for vehicles and ambulances should be maintained, especially near the Emergency department. Inside the premises, there should be an open space available in line with the average expected load of vehicles for parking. Wherever possible, separate parking spaces should be allotted for staff parking and visitor parking. Fringe parking can be created if such space is available.

8.1.1.3. Garden and Landscaping

Gardens, landscapes, and open spaces give a positive, healing environment that reduces stress, anxiety, and mental fatigue. So wherever possible, identify and promote greenery and open spaces. Herbal gardens should be promoted on the campus. A dedicated play area for children should also be identified.

General greenbelts and landscaping including plantation of shrubs and trees help to a certain extent in enhancing the environmental quality. Planting of trees in internal streets and in open spaces should be done carefully to take advantage of both shade and sunshine without obstructing the flow of wind circulation and sight. Their advantage for abating glare and for providing cool and/or warm pockets in congested areas should also be taken.

The types of plants, distance between trees/plants from the building and distance between plants should be carefully worked out keeping in view the structural safety and aesthetic requirements of buildings.

8.1.1.4. Facility Entrance

This should take into consideration the flow of facility traffic at different speeds – from the walking wounded and patients on wheelchairs to fast moving ambulances. There should be a clear and separate entrance for the Emergency area, OPD area and the main entrance for other clinical services, including in-patient areas. Entrance for service areas such as supplies and logistics and equipment should ideally be separate.

8.1.1.5. Environmentally Friendly Features

The facility should be environment friendly and energy efficient. Where possible, the use of rainwater harvesting, solar energy and energy-efficient bulbs/equipment should be encouraged. Use of low-energy LED lighting or alternate low-energy option to save indoor lighting energy cost is recommended. The facility should have a plan for usage of renewable energy with battery backup during times of storms, floods, or power blackouts. Refrigerants used in the Heating, Ventilation & Air-conditioning (HVAC) equipment should be Chloro fluoro carbon (CFC) free, with a low Greenhouse warming potential (GWP) when available. When choosing the technology, guidelines and standards issued by the Ministry of New and Renewable Energy must be adhered to (provided in the Gazette of India April 16, 2018, No 1456).

While constructing the facility building, the effect of sun, rain, wind, soil, and other climatic factors which could have an adverse effect on the building needs to be considered, e.g., excessive rain can lead to spoilage of medicines in drug stores. To minimise heat island effect which results in increasing the room temperature and causing other heat related issues, use material with a high solar reflective index to cover at least 75% of the exposed roof area or provide vegetation to cover at least 50% of the exposed roof area.

8.1.1.6. Disabled and Elderly Friendly Access

For easy access of non-ambulant (wheelchair, stretcher), semi-ambulant, visually disabled, and elderly people, infrastructural norms in line with the 'Guidelines and Space Standards for barrier-free built environment for Disabled and Elderly Persons' of the Government of India should be followed. Provisions of the 'Rights of Person with Disabilty Act 2016' should be implemented.

In order to support the needs of visually impaired visitors, it is also advised that tactile signs be used with good contrast between letters and background, which should also contrast well with the background upon which it is mounted. It is recommended to install one/two rows of tactile guiding blocks along the entire length of the proposed accessible route. Care must be taken to ensure there are no obstacles, such as trees, poles, or uneven surfaces, along the route traversed by the guiding blocks.

8.1.1.7. Circulation Areas, Corridors, and Ramps

The flooring of circulation areas such as corridors, lifts, ramps, staircases, and other common spaces should be anti-skid and non-slippery. The size of corridors, ramps, and stairs should be conducive for maneuverability of wheeled equipment. Corridors should follow fire safety norms and should be wide enough to easily accommodate two passing trolleys along with some additional space for equipment. In all two-way swing doors or doors in general, circulation areas should be provided with vision panels giving a visibility from a height of 800 mm to 1500 mm. Also, there should be clear headroom of at least 2100 mm height above the tactile guiding blocks. This will enable both the wheelchair user and the ambulatory disabled to be noticed by a person on the opposite side and hence prevent him/her from being accidentally struck by the door. Ramps shall have a slope of 1:15 to 1:18 and should be checked for maneuverability of beds and trolleys at turning points.

8.1.1.8. Disaster And Emergency Preparedness

All health care facilities should be resilient to climatic and environmental changes. They should also be capable of handling sudden health care needs during disasters and unforeseen emergencies/epidemics/ pandemics. While creating infrastructure seismicity of zones needs to be considered. Wherever the health facilities are already existing, possible retrofitting should be planned.

Health care facilities should have a dedicated disaster management plan (in line with the national and state disaster management plan). The respective state health departments and state disaster management authorities, along with state public works department, play a crucial role in preparation and implementation of disaster management plan. The plan should include formation of a disaster management committee and identification of an open space nearby that can be quickly cordoned off for managing heavy load of patients.

All staff members should be trained on relevant disaster prevention and management procedures. Structural and non- structural earthquake proof measures (in line with State Government guidelines) should be incorporated. These must include but not be limited to simple non-structural measures like fastening of shelves, almirahs and movable equipment, as appropriate. Similarly, in flood prone areas, structural provisions like raised floor, sloping reinforced cement concrete (RCC) roof for quick rainwater drainage, etc should be factored in.

There should be clearly defined authority, roles, and responsibility of all cadres of staff and the mechanism for mobilisation of resources. All staff members should be trained on relevant disaster prevention and management procedures. Regular mock drills should be conducted, competence assessed, gaps identified and an action plan for addressing these prepared.

Detailed provisions regarding disaster and fire preparedness are placed at **Annexure 5.**

Guidelines for Hospital Safety, 2016 - NDMA

"Building spaces that are directly adjoining, and visible from, a main vertical evacuation route, robustly and reliably protected from heat, smoke and flame during and after a fire or any type of disaster, where people can temporarily wait with confidence for further information, instructions, and/or rescue assistance must be provisioned for. These must also be without any obstructing or interfering with the evacuation travel of other building users should also be provisioned for".

Further details are available in the link provided: https://nidm.gov.in/PDF/pubs/NDMA/18.pdf

8.1.1.9. Electric Power Supply

The public health facilities should have access to adequate, affordable, and reliable electricity supply. Distribution of electric load along with load balancing to various equipment and installations in a facility is very important since overloading at any point can result in a mis-happening like electric fire hazard or damage to the equipment. Similarly, fluctuation in voltage also adversely affects the equipment and hence automatic voltage regulators which regulate fluctuating input power voltage and maintain constant output voltage should be provided. So, putting electrical installation is a specialised job and must be given due importance to ensure proper care with reduced risks to the patient. Adequate number of electric points on the various walls (at < 1.5 m height from the floor) needs to be ensured for easy connection. Use of explosion proof plugs, plug connector and socket is essential to ensure safety against explosion.

New electrical appliances should have a 3-5 star rating from the Bureau of Energy Efficiency or equivalent recognised organisation to minimise the energy input. Use of low-energy LED lighting or alternate low-energy option to save indoor lighting energy cost is recommended. Appropriate power backup/inverter should be in place to ensure there is no disruption of services and cold chain for vaccine and diagnostics must be properly maintained.

Monitoring for safe electricity: There should be a constant digital display for neutral and earthing. The voltage between neutral and earthing should not be more than 5 volts otherwise it can harm the semiconductor devices. Hence, digital display should be installed to monitor the voltage between neutral and earthing. More details are shared in **Annexure 5**.

8.1.1.10. Fire Safety

Compliance as per state and central government guidelines for fire regulations should be ensured while planning for a CHC. Availability of open spaces, clearly visible fire exits with proper illumination and lighting (even during interruption in electric supply) are some of the important considerations for creating fire safe infrastructure.

As a principle, none of the fire exit doors should be kept locked. These doors should be fire resistant with provision for opening towards the outside with a push bar system. Fire detectors, extinguishers, sprinklers, and water connections for the water should be functional and easily accessible. Periodic monitoring and audit for fire safety and drills should be organised and conducted. All health care facilities should be so designed, constructed, maintained, and operated as to minimise the possibility of a fire emergency requiring evacuation of occupants, as safety of hospital occupants cannot be assured adequately by depending on evacuation alone. Hence measures must be taken to limit the development and spread of a fire by providing

appropriate arrangements within the hospital through adequate staffing and careful development of operative and maintenance procedures consisting of:

- Design and construction
- Provision of detection, alarm and fire extinguishment
- Fire prevention
- Planning and training programmes for isolation of fire
- Transfer of occupants to a place of comparative safety or evacuation of occupants to achieve ultimate safety

The facility should have an identified nodal officer for ensuring fire safety. Detailed norms for disaster management and preparedness including safe electricity have been placed in **Annexure 5.**

8.1.1.11. Illumination

The illumination and lighting in the CHC/UCHC should be according to the prescribed standards as per the Bureau of Indian Standards (BIS) given below. Shadow-less lights in the operation theatre and delivery rooms should be provided. Emergency portable light units should be provided in the wards and department.

Table: Illumination at CHC/UCHC

S. No.	Department	Illumination (lux)
1	Reception and waiting room	150
2	Wards	
2a	General	100
2b	Beds	150
3	Operation Theatre	
3a	General/Minor OT	300
3b	Tables	Shadowless lighting
4	Laboratories	300
5	Radiology	100
6	Casualty and OPDs	150
7	Stairs and corridor	100
8	Dispensaries/Medicine store	300

8.1.1.12. Water Supply

Arrangement should be made for round-the-clock piped water supply along with an overhead water storage tank with provision to store at least three days of water requirement. Water supply preferably through two independent sources should be ensured. Separate water tank for OT should be made available. It should have pumping and boosting arrangements. Approximately 340-450 litres of water per bed (including emergency and LDR beds) per day is required for a CHC. Separate provision for firefighting and water softening plants must be made available. The lid of all water tanks should be closed at all times and their cleaning ensured on regular basis (at an interval of maximum three months). Also, records should be maintained accordingly.

In view of critical shortage of water, conservation of water by the rainwater harvesting and by use of recycled water to the maximum extent possible is required. The facility should encourage use of a safe clean rainwater harvesting system to help reduce the municipal water demand and enhance ground water table. Fitment requirements for water supply in various areas is given in the table below.

Table: Water supply requirements at CHC/UCHC

S. No.	Fitments	Hospital for indoor patients' wards (male & female)	Hospital with outdoor patients		Administrative building	
			Male	Female	Male	Female
1	Water closet	One for every 6 beds	One for every 100 persons	Two per 100 persons	One for every 25 persons	One for every 15 persons
2	Wash basins	Two for up to 24 persons, add one for every additional 24 beds	One for every 100 persons	One for every 100 persons	One for every 25 persons	One for every 25 persons
3	Baths with shower	One bath with shower for every 6 beds	-	-	One on each floor	One on each floor
4	Bed pan washing sinks	One for each six beds in a ward	-	-	-	-
5	Cleaners sink	One for each ward	One per floor (minimum)	One per floor (minimum)	One per floor (minimum)	One per floor (minimum)
6	Kitchen sinks and dish washers	one per ward	-	-	-	-
7	Urinals	One per 20 persons.	One per 50 persons	-	One/20 persons add one per additional 20 persons. From 101 to 200 persons add @ 3% and over 200 persons add 2.5%	

8.1.1.13. Drainage and Sanitation

The construction and maintenance of drainage and sanitation system for wastewater, surface water, sub-soil water and sewerage shall be in accordance with prescribed standards.

A separate drainage system for effluents being generated from various service areas to Effluent Treatment Plant (ETP) needs to be in place, so that all effluents are treated before discharge. Provision for an Effluent Treatment Plant (ETP) based on the estimated effluent load (and separate from the treatment of sewage) should also be provided at the public health facilities.

As per Bio Medical Waste Management Rules, it is mandatory to establish an Effluent Treatment Plant at a health facility with more than 10 beds. Faecal Sludge Treatment Plant (FSTP) by Decentralised Wastewater Treatment System (DEWATS) method is a greener and climate resilient alternative that is suggested so that the treated wastewater is also re-utilised for gardening, landscaping while the wastewater is completely treated and even the sludge, after drying is utilised as manure.

8.1.1.14. Waste Management

All such waste which can adversely harm the environment or health of a person is considered as infectious and termed as BMW. Every health care facility should ensure collection, transportation, treatment, and disposal of bio-medical waste as per the latest Biomedical Waste Management Rules (BMWM). Each health care facility should ensure that there is a designated central waste collection room situated within its premises for storage of BMW, till the waste is picked and transported for treatment and disposal at a Common Biomedical Waste Treatment Facility. Such a room should be under the responsibility of a designated person

and be under lock & key. It should also be ensured that disposal of human anatomical waste, soiled waste and biotechnology waste is done within 48 hours.

As per BMW management guidelines, deep burial pits need to be constructed only at such CHCs where the common biomedical treatment plant is located at a distance of more than 75 kms. Before disposal of BMW in the pits, the facility needs to ensure that BMW is decontaminated and shredded.

General waste consists of all the waste other than BMW and which has not been in contact with any hazardous or infectious, chemical, or biological secretions and does not include any waste sharps. Such waste is required to be handled as per Solid Waste Management Rules and Construction & Demolition Waste Management Rules, as applicable.

Liquid waste management is another area which needs adequate attention for separate drainage system to the Effluent Treatment Plant (ETP). Other wastes consist of electronic equipment, used batteries, and radio-active wastes which are not covered under BMW but have to be disposed as and when such wastes are generated as per provisions laid down under E-Waste (management) Rules, batteries (management & handling) Rules and Rules/Guidelines under the latest Atomic Energy Act, respectively.

8.1.1.15. Infrastructure for Clinical Services

Subsequent to the general principles for infrastructure, following considerations should be kept in mind while planning for infrastructure of clinical services.

1. Outpatient services

The facility should be planned keeping in mind the maximum peak hour patient load with scope for future expansion, if possible. The OPD wing should have an approach from the main road with signage visible from a distance.

Before entering for registration, the CHC should have enough space (open or closed) to hold and undertake preliminary screening for any symptom of infections which can quickly be transmitted, especially during epidemics and pandemics.

2. Registration area

It should be well ventilated, lit, and spacious with each counter ensuring minimum space of 15-20 square meter. At least two counters including one dedicated for women, elderly and specially challenged should be provisioned for. For registration, computers with an attached printer should be available with facility for computerised registration. A patient calling system with electronic display should be promoted for easy communication at the registration counter, there should either be no glass barrier between visitors and the registration clerk, or it should be at a height that allows audible communication between them.

Patients should be given an OPD registration slip mentioning the date, patient's particulars, OPD details and a token number or use of an electronically supported queue system.

3. Waiting area

Adequate seating arrangement/chairs should be available. Waiting area should be organised in designated areas such as near registration counter, OPD, laboratory/imaging room, casualty, and outside OT. This should be built to a scale of one sq ft per one-third of peak hour load for the registration area and about one-half of peak hour load for OPD areas. Adequate seating arrangement preferably which occupies less space and is easy to maintain can be placed. Messages that urge people to provide seats to the elderly, pregnant women,

children, and patients should be properly displayed. In maternity OPD, provision should be there for seating all pregnant women while waiting in the queue.

Adequate space should be allocated for persons using mobility devices, for example wheelchairs, crutches and walkers, white cane etc., as well as those walking with the assistance of others. The dimensions prescribed in the NBC manual may be used for guidance while designing facilities and equipment to be used by persons who are specially challenged.

Waiting area for OPD should have a patient-friendly ambience and can have colourful wall paintings. Play area can also be built for paediatric patients which can be equipped with toys, games, puzzles etc. to create an environment where they enjoy and learn while waiting to be treated.

Patient amenities in waiting areas should include:

Essential amenities

- Fans
- Clean drinking water
- Clean and gender sensitive toilets

Desirable amenities

- Air-conditioning
- Television/LCD or Electronic Public Address Set-up in waiting area displaying/broadcasting facility related information, health related IEC, emergency announcements, etc.

4. Nursing Station

A common nursing station in the OPD complex is required where nurses can record patient's weight, vital parameters such as blood pressure, pulse, temperature, respiratory rate, etc. and guide patients before they enter the consultation/examination room. The stations should have space for nurses to sit, keep equipment/ consumables to measure vitals and maintain records. Digital record keeping is preferred.

5. Consultation room

This should have enough space with minimum area of 12 sqm to accommodate the required furniture and examination equipment so that interaction with patients can be conducted with privacy and dignity. It should be well lit and ventilated with minimum furniture in the room which is compact so that there is adequate space for the patient and/or attendant. An examination table, X-ray view box, single curtain screens and hand washing facilities should be provided, as needed. The services to be provided, cleaning schedule and monthly performance chart should be clearly displayed in the room. Specialty-wise consultation rooms are provided as under:

Table: Specialty wise consultation services in CHC/UCHC

Service area	CHC – Non-FRU	CHC– FRU		UCHC– FRU	UCHC– FRU
	30 beds	30- beds	50 beds	50 beds	100 beds
Outpatient services					
Medicine	E	E	E	E	E
Surgery	D	E	E	E	E
Paediatrics	D	E	E	E	E
Obstetrics and Gynaecology	D	E	E	E	E

Service area	CHC – Non-FRU	CHC– FRU		UCHC– FRU	UCHC– FRU
	30 beds	30- beds	50 beds	50 beds	100 beds
Pre-Anesthetic check-up room and consultation	D	E	E	E	E
Family medicine	D	D	D	D	D
Oral/Dental	E	E	E	E	E
Ophthalmology	-	-	D	D	E
Orthopedics	-	-	D	D	E
ENT	-	-	D	D	D
Pathology/Microbiology/ Biochemistry	-	D	E	E	E
NCD Clinic	E	E	E	E	E
Counselling	E	E	E	E	E
Family welfare clinic	E	E	E	E	E
Immunization	E	E	E	E	E
Nutrition	E	E	E	E	E
AYUSH	D	D	D	D	D
Health & wellness services	E	E	E	E	E
Dressing room	E	E	E	E	E
Physiotherapy	E	E	E	E	E
Physical medicine and rehabilitative services	-	-	-	-	D

Note: The desirable OPD services will be over and above the essential services.

6. Examination room

It should be co-located with the consultation room, or both can be part of the same room with arrangements that allow privacy for examination of the patient (curtain). It should have adequate space for an examination table, curtains (wheeled, wall mounted, single piece), free movement around the examination table and wall mounted cupboard where Essential equipment and registers can be kept. Three colours should not be used in clinical service areas of a health facility – red/pink, blue and yellow to avoid interference with examining pallor, cyanosis, and icterus respectively. Larger examination rooms/OPDs will be needed for certain specialties, e.g., dentistry (for dental chair) and eye care (for vision testing).

In FRU CHCs, ultrasound services, nursing station and separate toilet should be attached/at one place for obstetrics and gynaecology services. The Ultrasound room attached to the obstetric services should contain a patient couch, chair and adequate space for the equipment. The lighting must be appropriate for proper examination. Hand-washing facility and toilet should be attached with ultrasound room. Immunization clinic with waiting room having an area of 3 m × 4 m and cold chain facility in Maternity/Paediatric Clinic must also be provided.

7. Adolescent friendly health clinic

A dedicated room should be available specifically for adolescent population entailing a whole gamut of clinical and counselling services on diverse adolescent health issues ranging from Sexual and Reproductive health to Nutrition, Substance Abuse, Injuries and Violence (including gender-based violence), NCDs and Mental Health issues at various levels of health care facilities. The room should be designed in a way that it ensures privacy and confidentiality. It should have provision of space for adolescent counselling and space to keep necessary commodities and equipment.

8. Counseling room

A dedicated room should be available for counselling services on diverse health issues at CHC/UCHC. The room should be designed in a way that it enables both interpersonal and group counselling as and when required. Integrated counselling should be done, and the design of the room should ensure privacy and confidentiality. It must have provision of space for keeping necessary commodities and equipment.

9. Clinical/Central laboratory

The laboratory should be situated such that it has easy access to Emergency, IPD as well as OPD patients. Lab services should be available during daytime (general working hours) whereas emergency lab services should be functional round the clock (24x7). Both general and out-of-hours laboratory services (e.g., emergency services) should be provided from one central laboratory. The collection point must provide space for patient reception, registration, waiting area and toilet facility. There should be adequate specimen collection area for blood, urine, and faeces. Hatch windows may be provided through which the specimens may be passed through. Every block headquarter public health facility which may be CHC, SDH Taluk hospital etc, have been sanctioned a block public health unit with the public health lab, so, all these labs should be integrated to avoid duplication

The Laboratory should have adequate space from the point of view of workload as well as maintenance of cleanliness and hygiene to prevent cross-contamination and infections. A minimum area of 150 m^2 is suggested for a lab load with 100 collections. This may be scaled up as per requirement. The sample collection point must provide space for patient reception, registration, waiting area and toilet facility.

The design should help in implementing a "*Single Prick Policy*" i.e., irrespective of the number of tests or location of the testing labs, blood sample of a patient would be taken only once, at the first point of contact. The laboratory area should not be a thoroughfare and various testing areas should be clearly marked. The layout should ensure logical flow of specimens from receipt to disposal. Zoning must clearly identify areas of restricted access while ensuring efficient functionality of the lab i.e., testing for routine, emergency, and critical care cases, demarcated areas for collection and delivery of reports, sample collection, sample processing and reporting, etc.

The tabletop should be acid and alkali proof. There should be provision for safety, including eye flushing devices, emergency shower and fire extinguishers. The drainage system of work areas where highly corrosive liquids are used should consist of glass lined iron traps and pipes. Counter sinks for hand washing should be provided. Chemical and stain resistant materials should be used for laboratory work. Storage space should be adequate to facilitate storage for refrigeration, reagents and supplies, maintenance of patient records with separate storage space for inflammable items. Vented storage for volatile solvents should be provided.

The laboratory should be cleaned regularly including at the beginning and end of the day and at times of spill. The use of personal protective equipment (full body suit, apron, gloves, mask, face shield, etc.,) and scrupulous attention to hand hygiene must be adhered to.

10. Medical imaging

Imaging services should be located at a place which is accessible to OPD and emergency. The room housing imaging equipment should have an appropriate area to facilitate easy movement of staff and proper patient positioning. The room should have a sub-waiting area with toilet facility and a change room facility.

Appropriate structural shielding should be provided for walls, doors, ceiling, and floor of the room housing the imaging equipment so that the radiation exposure is kept to the minimum and does not exceed the respective limits for annual effective doses as per directives issued by the Competent Authority. An appropriate overlap of shielding materials should be provided at the joints or discontinuities. Radiation protection devices such as barrier, apron, goggles, and thyroid shields should be used during operation of imaging

equipment. These devices should be verified periodically for their shielding adequacy. The requirements for radiation protection devices are as specified in *Chapter 2- AERB guidelines on Medical Diagnostic Radiology*. TLD badges should be provided to all operators and workers involved during the imaging procedure. During non-working hours, TLD cards must be stored along with Control TLD card outside the X-ray room (in a radiation free area).

The control console of the equipment should be installed in a separate room located outside but adjoining to a room and must be provided with appropriate shielding, direct viewing and oral communication facilities between the operator and patient. The gantry and couch should be placed such that it enables the operator to have a complete view of the patient from the control room viewing window. In case of room housing radiography equipment, chest stand shall be located in the room such that no significant stray radiation reaches at control console/entrance door/areas of full-time occupancy such that dose limits are not exceeded.

A permanent radiation warning symbol and instructions for pregnant/likely to be pregnant women shall be placed on the entrance door of the X-ray installation, illustrating that the equipment emits high energy electro-magnetic radiation.

11. Drug dispensing counter

The drug dispensing counter should be located in an area conveniently accessible from all clinics. It should be well ventilated, lit, and spacious with each counter ensuring minimum space of 15-20 square meter. Storage space should be built for inventory worth consumption in a week. Separate space for storage of temperature sensitive, narcotic drugs should be ensured. There should be a computerised system for receiving, inspecting, storing, and dispensing of drugs. Principles for effective storage of drugs such as first-expiry-first-out (FEFO), checking of pilferage, date of expiry and pest and rodent control should be in place.

12. Emergency Care

A six bedded emergency area in 50 bedded FRU CHC/UCHC, 11 beds for 100 bedded FRU-UCHC and a four bedded emergency area in 30 bedded non-FRU CHC and FRU CHC should be established to manage the common emergencies. The design/workflow of the Emergency should conform to the layout plan as per "*Operational and Technical Guidelines on Emergency Services at District Hospitals*".

- The emergency wing should have easy accessibility and quick response.
- Emergency service provision through adequately trained human resource for health should be available round-the-clock.
- It should preferably have a distinct entry independent of OPD main entry so that minimum time is lost in attending to cases which need resuscitation and also to others requiring emergency management.
- Stretchers, wheelchairs, and trolleys should be available at the entrance of the emergency at a designated area. There should be easy approach and access for ambulances with adequate space for free passage of vehicles and a covered area for alighting patients.
- Lay out should be such that it follows the functional flow for clinical management of the patient.
- Signage of emergency should be displayed at the entry of the facility with additional signage at key points.
- The Emergency area should have close linkages with the emergency OT, procedure room, dressing room, plaster room, lab, and radiology services. There should be ready access to vital diagnostic and supportive equipment such as ECG, pulse oximeter, cardiac monitor with defibrillator, and multipara monitor.
- Regular monitoring must be done to ensure availability of buffer stock of various consumables and their periodic replenishment, training of various stakeholders such as doctors, allied health

professionals and security personnel, mock drills including inter-departmental drills, adequate human resource for health, and rapidly available ambulance services.

13. Operation theatre complex

In FRU CHC, one elective and one round-the clock Operation Theatre (one additional OT in 100 bedded UCHC FRU) should be provisioned for. Location of OT complex should be in a quiet environment, free from noise and other disturbances, contamination, and possible cross infection. Close linkages with the surgical ward, imaging, laboratory, blood bank/storage unit, and Theatre Sterile Supply Unit (TSSU) should be ensured. This unit also needs constant specialised services such as piped suction and medical gas supply, electric supply, heating, air-conditioning (Air Handling Unit), ventilation and an efficient lift service, if theatres are located on upper floors. Ductless Air Handling Units should be preferred.

Zoning should be maintained to keep theatres free from microorganisms. There should be four well defined zones of varying degree of cleanliness/asepsis; namely, Protective Zone, Clean Zone, Aseptic or Sterile Zone and Disposal or Dirty Zone. Normally there are three types of traffic flow, namely, patients, staff, and supplies. All these should be properly channelised. An OT complex should also have a Reception, Pre-operative Room and Post-Operative Resting Room. Operating room should be made dust- proof. The temperature should be always maintained at 21$\pm$ 3 degree Celsius inside the theatre. Corresponding relative humidity should be between 50-60%. Ideally there should be minimum 20 air -changes per hour (ACH) and out of these, four should be fresh air changes. Appropriate devices should be installed inside the OT to monitor and display these conditions.

Following parameters must be assessed and monitored regularly to ensure effective management of OT complex:

- Temperature, humidity inside the OT.
- Differential pressure inside and outside the OT.
- Maintenance record of the Air Handling Unit, frequency of air exchange per hour and cleaning of its filter.
- Last HEPA filtration report and HEPA validation report.

There should also be a scrub room where the operating team washes and scrubs their hands and arms. A pair of surgeon's sinks and elbow or knee operated taps are essential in the scrub area. There should be a trolley change area for shifting the patient from protective to clean and from clean to sterile zone. Laminar flow should be maintained in the operation theatre. OT should have a single leaf door with self-closing device and viewing window for communication. The OT complex should also have a sub-sterilising unit i.e., TSSU attached to the OT, limiting its role to cleaning of surgical instruments on an emergency basis only. There should be enough storage room to keep functional equipment. This will ensure adequate space inside the theatre. A separate documentation room and pantry for staff is also desirable.

Theatre refuse, such as, dirty linen, used instruments and other disposable/non disposable items should be removed in separate zipped bags to a designated room (dirty utility room) after each surgery via hatch box and dirty utility corridor. Non-disposable instruments after an initial wash are given back for instrument sterilisation and the rest of the disposable items are disposed of and destroyed. Dirty linen is sent to the laundry through a separate exit/dumb waiter. This room should be provided with a sink, slop sink, work bench and draining boards. A separate room for trolley wash must also be provisioned for.

14. Labour room complex

Since the country has achieved more than ninety per cent institutional deliveries, the focus is now to achieve quality in the delivery of maternal and child health services. Respectful maternity care emphasises the need for women to be treated with dignity and respect. The Labour Delivery Recovery (LDR) design model ensures respectful maternity care by accommodating the birthing process from labour through delivery and

recovery of mother and baby in one suite. The patient is moved from this suite only in case of complications requiring surgery or after recovery.

Privacy of women must be ensured by having walls between labour beds. Area requirement for one LDR unit (consisting of one labour bed and space for alternate birthing positions) is 225-350 sq. ft. Natural light and views by means of window is essential as windows are an important aspect of sensory orientation and psychological well-being of mothers. Lighting in the suite should be dimmable. Darkness spurs the body to produce melatonin, which in turn increases the production of oxytocin. Oxytocin is the hormone that causes uterus to contract during Labour. Thus, to induce un-medicated labour, a conducive environment backed by infrastructural design is necessary.

The suite should be located in the labour room complex near the obstetric OT and preferably on the ground floor. For planning purposes, taking an average length of stay in the LDR as 12 hours, two LDR beds have been estimated at 30 bedded Non-FRU & FRU CHC, while three LDR beds have been estimated at every 50 bedded FRU CHC in rural and urban areas & 100 bedded UCHC.

While planning Labour Room Complex, it should be considered that any pregnant woman coming for delivery should first be taken to the examining room for quick triaging followed by a detailed examination. This will help the service provider to decide whether the delivery needs care by the midwives or by the Obstetricians/Doctor. Accordingly, she should be transferred either to midwifery led care unit (MLCU) or to Obstetrician Led Care Unit (OLCU) within the same complex. However, both the units will have LDRs as explained above. Following principles should duly considered while planning the Labour Delivery Recovery Complex:

- It should not be a thoroughfare and have provisions to change footwear at the entry.
- A dedicated triage space should be ensured.
- The unit should be air conditioned with an attached toilet with each labour bed. Drinking water and hot water facilities should be available.
- Separate areas for dirty linen and decontamination should be clearly demarcated.
- Other facilities such as Doctors Duty Room, nursing station, staff changing room, store with capacity to keep consumption worth not more than one week should be provisioned for.
- Cleanliness shall always be maintained by regular washing and mopping with disinfectants and should be done after every delivery. Autoclaved delivery kits and other instruments should be ensured.
- The area should be away from draught of air and should have power connection for plugging in the radiant warmer. Clear floor area should be provided in the room for New-Born Care Corner (NBCC). It is a space within the labour room, (20-30 sq ft in size), where a functional radiant warmer is present.

15. Nutritional rehabilitation centre (NRC)

Under Nutrition Rehabilitation Centre (NRC), children with Severe Acute Malnutrition (SAM) are admitted as per the defined admission criteria and provided with medical and nutritional therapeutic care. It is desirable to establish a 10 bedded NRC at FRU CHC and UCHC to manage the nutritional disorders in closer proximity of the community. The NRC should comprise of the following areas:

- Reception
- Play area
- Counselling area
- Nursing station
- Kitchen with cooking demonstration aids
- Store
- Toilet

16. Inpatient wards

The beds should be placed either on one side or both sides of the nursing station ensuring good visibility and ventilation. Toilets should be conveniently located. Security arrangements should be adequate and appropriate, for example, female security guard for maternity ward.

Every ward should have a procedure room, a small store for 5-7 seven days' supply of drugs and linen, pantry, and janitors/housekeeping room. A changing room will help ensure privacy and dignity of patients. All beds in the ward should have a wall fitted cupboard for the patient's belongings. Call bells with switches for all beds should be provided in all types of wards with indicator lights and location indicator situated in the nurse's duty room. In every ward, (1/3rd of the total beds in a ward) should be demarcated with a separate port for oxygen, suction and air with multi-para monitors so that patients can be provided emergency and/or short-term support.

17. Communication systems

A 24 x 7 working telephone line for both incoming and outgoing calls should be available at public health facilities. Information about the facility in terms of OPD hours, lab/imaging services, specialty clinics, ambulance services, national and state programmes/schemes, and other information as mentioned in Citizens' Charter should be available to public through this channel. Besides telephone and mobile network, web facilities can also be used.

Internal communication systems through either telephone line or wireless services for connecting areas such as emergency, labs, imaging, wards, OT, administration etc. should be established. A 24 x 7 communication room should be present with linkages to the ambulance services for emergency preparedness and any state centralised health call centre(s). Besides the telephone and mobile network, web facilities can be used for both routine and emergency communication. Communication plan during times of emergency should be a part of disaster management plan. Training of staff through orientation, mock-drills, regular supervision should be done on a regular basis.

18. Storeroom

CHC/UCHC should have adequate and spacious stores located away from patient traffic with facility for storing drugs, consumables, records, linen, furniture, equipment, and sundry articles. Service areas should only have a small space for keeping 5-7 days stock of drugs and linen whereas the main store should have enough area for storing adequate drugs and supplies of the facility.

Stores should be designed in such a way that spoilage, damage, and other losses are minimized. Compactor system as compared to conventional racks may be used. Buffer stocks should be kept in separate spaces or cupboards in the drug store and basic principles like 'first expiry- first out' for drugs and vaccines should be followed. Stored materials should be periodically inspected. Dunnage, to prevent moisture, termite and insects passing up the material, should be 45 cm high for outside stacks built on ground, and 30 cm high for stacks on floors. Depending on the volume of items requiring temperature control during storage, adequate number of refrigerators should be available. A separate inspection and stock holding section/area should be provisioned for so that there is no chance of mixing of old and new stocks.

The store should also have space clearly earmarked for keeping necessary records and registers, inventories, and records of financial accounts. A proper system of collection, sorting, filing, indexing and storage of documents along with quick retrieval should be designed for effective and efficient record keeping management. In light of Right to Information Act 2005, it is also a mandatory requirement. Digitisation of records, wherever possible should be done while adhering to data security guidelines of Government of India.

19. Administrative unit

Administrative block with provision for CHC In-charge Office and the following areas should be provided:

- Office
- Meeting hall
- Record room
- Staff room/cubicles including Establishment and Accounts (number to be based on number of administrative staff)
- Kitchen/Pantry

The administrative unit/block should be located on the top floor and away from clinical areas.

8.1.2. Other Support Services

8.1.2.1. Blood Storage Units

Blood Storage Units (BSUs) should be licensed and available in FRU-CHCs as per the Revised Guidelines for Blood Storage Units by Government of India. The unit should have a minimum area of 10 square meters. It should be well lit, clean, and air-conditioned. The access to BSU area should be restricted to blood storage staff and there should not be any thoroughfare. Clearly demarcated areas with adequate space for sample receiving, blood grouping and cross matching, red cell antibody screening (Coombs' test), issue of blood, blood/component storage and documentation for each process, should be there to prevent overcrowding. The doors, frames, casework, and bench tops shall be of non-absorptive, non-fibrous and non-corrosive material (the use of organic material such as wood is to be avoided). The edges of the bench tops should be able to contain spills of liquids by having marine edges or drip stops. Benches, doors, door handles, drawers, and furniture etc., should have rounded rims and corners to prevent accidental injury.

8.1.2.2. Mechanized Laundry

Ideally, mechanized laundry situated at the Sub-District Hospital (SDH) should act as the hub for cleaning linen of all CHCs/UCHCs and PHCs/UPHCs/Polyclinics in that sub-district. Wherever SDHs are not available, FRU CHCs should have mechanised laundry. In either case, once the segregated linen reaches laundry, it should be processed for decontamination, washing, drying, ironing, tailoring (if needed) and storage of clean linen.

8.1.2.3. Dietary Services

Dietary services should be provided at the CHCs/UCHCs by qualified and adequately trained staff. To ensure quality, it is important that infection prevention measures are properly enforced and monitored by qualified personnel. The dietary service should be easily accessible from outside (along with vehicular accessibility) and have separate rooms for the dietician and stocking of special diets. It should be located such that the noise and cooking odours from the department do not cause any inconvenience to the other departments. Apart from normal diet, diabetic, semi solid, and liquid diet should be available. Food should be distributed in prepacked individual plates in covered containers fitted in a trolley. Kitchen food waste should be segregated at source. Quality and quantity of diet should be checked by a dietician on a regular basis.

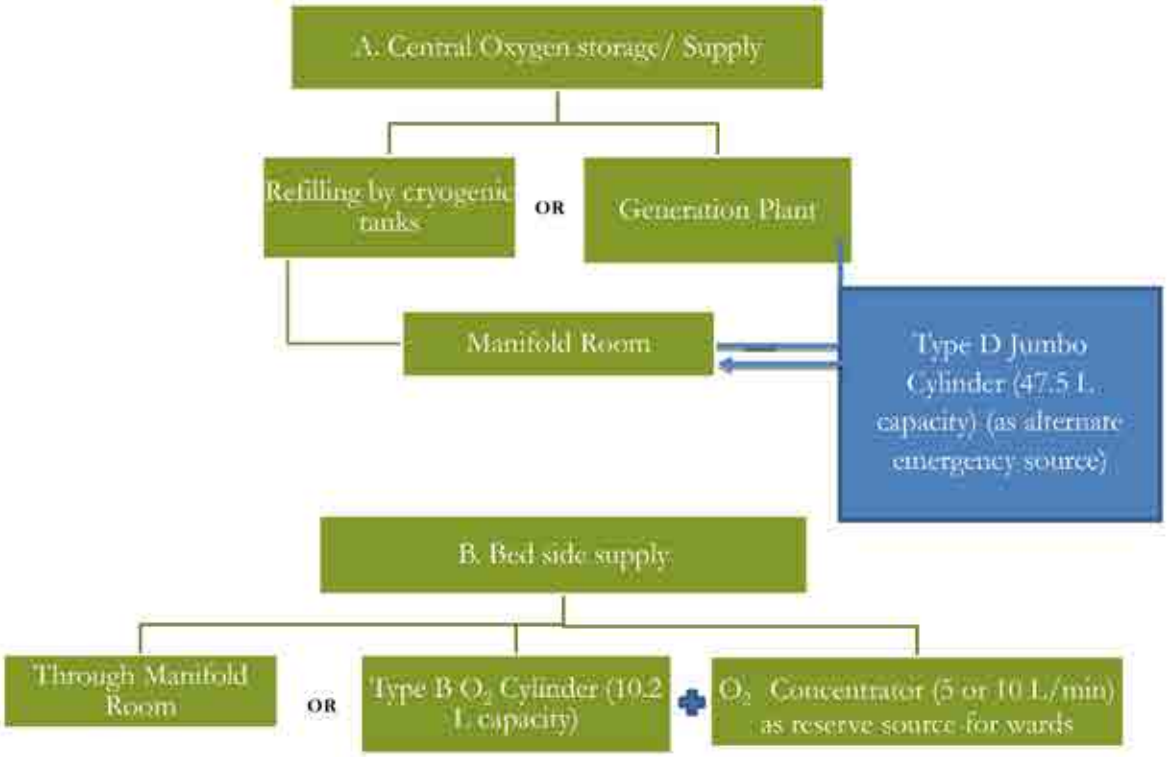
8.1.2.4. Medical Gas Pipeline System

Medical Gas Pipeline System (MGPS) is designed to provide a safe and effective method of delivering medical & anaesthetic gases, vacuum & compressed air from the source of supply to the appropriate terminal unit by means of a pipeline distribution system.

Facilities with more than 50 beds would have MGPS which can be utilised for supply of oxygen from a storage tank or an oxygen generation plant to bed side or critical care units like OT, labour room, emergency, and other critical beds.

The Medical Gas Pipeline System supplies medical gases like oxygen and nitrous oxide and mixtures of gases to different areas of Community Health Centre. The supply of oxygen to hospital can be basically through a storage system or from a generating unit.

Figure: Medical Gas Pipeline System (MGPS)



Generation is through PSA technology[2] which could either be at the bed side (oxygen concentrator) or at the institution level (oxygen generation plant). Storage of oxygen, the categories of which will depend upon the capacity of the storing system. e.g., oxygen cylinder (Type D) or liquid oxygen which is supplied through cryogenic tanker etc. The bed side supply would either utilize the oxygen concentrator or Type B oxygen cylinders.

Manifold (for medical gases)

A definite area for "manifold" to be designated in the facility as per *'Gas cylinder rule 1981, ISO 7396-1:2016 and Indian Explosive Acts, 1984*. Manifold helps by connecting to a Jumbo-sized oxygen cylinder[3] (Type D)

[2] *Pressure swing adsorption (PSA) is a technology used to separate the oxygen from a mixture of gases under pressure according to the species molecular characteristics and affinity for an adsorbent material. The Generator with this technology can produce significantly more oxygen at 90-95.4 % purity.*

[3] *These cylinders are filled at a gas manufacturing plant, either via a cryogenic distillation or a process known as pressure swing adsorption (PSA), and transported to health facilities to be connected to manifold systems.*

which also acts as an alternate and emergency source of oxygen supply in case when generation plant or storage tank (primary source) fails due to any reason.

Manifold should be in a cool, clean area that is constructed of fire-resistant materials. Non-Conductive flooring must be present. Adequate ventilation to allow leaking gases to escape, safety labels and separate places for empty and full cylinders to be ensured.

The medical gas pipelines should be made of copper, seamless pipe with flux less silver brazing having non-returnable valves (NRV) as per HTM/ASTM standard and Lloyd's/TUV/SGS certified.

The MGPS final delivery points should be colour coded as per HTM02-01/NFPA 99 C/EN (ISO -7391-1)/din standard. Maintenance of oxygen manifold, central pipelines and pressure levels should be monitored by a dedicated team of train manpower to maintain the oxygen supply system at the facility.

Oxygen delivery systems in Community Health Facility-Suggested indicative norms

Table 2: Indicative norms for oxygen delivery systems in Community Health Facility

S. No.	Facility type/bed capacity	Oxygen supported beds	OT	D type (7000 L) cylinder	B type (1500 L) cylinder	Oxygen concentrator (10 litres)	Remarks
1.	FRU UCHC 100 beds	43	3	40*	20**	10**	*Oxygen cylinder bank with manifold (20X20) Type D cylinder) for 24 hours depending upon uses and case load **Reserve cylinders & concentrators (PSA Plant/LMO Plant)
2.	CHC (FRU) 50 bed*	26	2	30*	15**	07**	*Oxygen cylinder bank with manifold (15X15 Type D cylinder) for 24 hours depending upon uses and case load **Reserve cylinders & concentrators (PSA Plant/LMO Plant)
3.	CHC (FRU) 30 bed*	20	2	20*	10**	05**	*Oxygen cylinder bank with manifold (10X10 Type D cylinder) for 24 hours depending upon uses and case load **Reserve cylinders & concentrators
4.	CHC (Non-FRU) 30 bed	18	2	20*	10**	05**	*Oxygen cylinder bank with manifold (10X10 Type D cylinder) for 24 hours depending upon uses and case load **Reserve cylinders & concentrators

**Oxygen delivery system at CHC (FRU) having Type D (Jumbo) oxygen cylinder (7000 L oxygen capacity) shall be through oxygen cylinder bank with Medical Gas Pipeline System. For every one-day delay in re-filling, a backup of filled 15 Type B oxygen cylinder or 3 Type D cylinders/bed/day should be planned as reserve stock.*

Important notes regarding Oxygen delivery systems

1. The requirement of oxygen indicated is as per the norms conveyed to the states/UTs (vide 2217044/2021/o/o JS (NV) file T-20017/03/2021-NCD). However, the actual requirement of the health care facility will vary depending upon bed occupancy, oxygen uses per bed and other local considerations including patient load.
2. While calculating the total requirements of the facility the above factors along with periodicity of refilling cylinder or oxygen capacity of PSA/LMO plants needs to be considered. Ideally every facility must ensure 48 hours in house storage of oxygen with assured refilling at regular defined periodicity.
3. For ambulances being served through National Ambulance Service network with toll free number have in built oxygen capacity, however all standalone ambulances/Patient Transport vehicle should have two Type B (capacity of 1500 litres of oxygen) oxygen cylinder per ambulance.
4. The capacity of the PSA plant for installation at higher altitudes areas should be higher than the calculated norms requirements in order to cater the deficiency of oxygen in the atmosphere.
5. There is a requirement of one flowmeter with pressure regulator per bed for both oxygen supported and ICU beds.
6. A separate dry, well ventilated well-lit room away from the main area should be available for storage of cylinders.
7. Oxygen cylinder refilling should be done with the nearest government facility (if available) or IOL supported facility under MoU/price agreement.

8.1.2.5. Residential Quarters

All the essential medical staff and allied health professionals should be provided with residential accommodation so that Essential staff is available 24x7. Facility for parking, recreational activities, play areas should be made available. Well-equipped transit accommodation facilities at larger facilities such as District Hospitals and geographically and strategically selected SDHs can serve as a hub for health workers of all grades posted at nearby CHCs.

Transport arrangements (such as employees led pooled shuttle service to and from the accommodation to the facility) will allow for staff to work at remote facilities while providing their families greater opportunities for quality education and employment. Alternatively, house rent allowance can be provided.

8.1.2.6. Guest House

CHCs/UCHCs having 100 or more beds can have linkages with the accrediatated nearby guesthouses/ dharamshalas etc for relatives and visitors of admitted patients. List of such guest houses can be provided to those patient's attendants who desires to avail these services at their own cost.

8.1.2.7. Toilets

Functional and clean toilets that are gender friendly and suitable for those who are specially challenged must have a facility for running water and flush. Cleanliness of toilets determines the cleanliness of the hospital. It is important to adhere to infection control measures, keep toilets dry and free of dampness and seepage. Architectural design, location, plumbing, and drainage play a key role in defining the cleanliness of toilets. Being a high source of infection, it is critical that the toilets are well maintained and cleaned on a regular basis.

8.2. HUMAN RESOURCES FOR HEALTH

There is need to emphasise planning of service delivery before investing in other components like infrastructure, human resource for health, drugs, diagnostics, equipment etc. Services defined above in the document have been categorised as essential and desirable and with this reference human resource have been categorised in a similar manner. For essential services, human resource should be provisioned for. The human resources for health indicated under desirable is an addition to human resources for health indicated under essential. The number and type of staff in terms of specialists, GDMOs, Staff Nurses, allied and other health care professionals, administrative and support staff mentioned below has been developed taking into consideration services and programme requirements of CHCs.

While planning for human resource, it is important to prioritize in-house hiring of such staff which is required for rendering clinical services (eg Specialists, GDMOs, Nurses, Technicians, etc) rather than those whose services can be outsourced like Security guard, data entry operators and other group 4 employees.

As the number of Family Medicine Physicians in the system increases, it is strongly recommended that they should be deployed in the public health system. This inclusion can be in a phased manner with posts being first sanctioned at the CHC level in the short-to-medium term, but at the same time looking at offering posts in primary care settings in the long term.

While IPHS norms for human resources for health at various levels of facilities is a good starting point to identify positions and vacancies, the actual number to be deployed at a particular facility will depend upon certain performance parameters for nurses, including nurse to patient ratio differential in terms of level of care provided. For allied health professionals, the parameters are based on the amount of work done per shift. Care should be taken that the human resource for health should not be below an agreed critical number. Details are placed at **Annexure 6**.

It should also be noted that transfer/deputation of staff in less than three years to other service areas/ facilities should be avoided. If there is a need for additional staff, it should be based on the service area performance against agreed targets and standards. Staffing requirements (especially for nursing and allied health professionals) should also include arrangements to cover for leave and holidays.

Although every service area in Non-FRU CHC/FRU -CHC and UCHCs will need all essential staff however, the critical areas like OT, LDR, Emergency, etc are such areas where different types and level of HR are complementary to each other and are needed for getting optimal outcome. So, recruitment for these areas should be undertaken with a focus on availability of the core team rather than standalone HR/Speciality, for example, an OT, apart from the surgeon and anaesthesiologist, will also include the full complement of nursing staff (OT nurse, assistant nurse), allied health professionals (OT assistant) and support staff (theatre Sanitation staff, other ancillary staff).

The rationale deployment of HRH must be prioritised to cater to the increasing workload of the facilities. Based on the gap analysis for the full complement of services, rational deployment of staff should be done. Specialists, LSAS and CEmONC trained doctors should be posted at secondary care facilities on priority basis. Deputations to other facilities are also not encouraged under IPHS. Doing so, will result in wastage of highly skilled and scarce resources. It also leads to compromise in delivery of assured quality services. In addition, the ratio of support staff for every service area should be maintained in accordance with the standards described to ensure optimum functioning of health care services.

An accurate, timely, reliable, and complete Human Resource for Health Policy at the State level backed by an efficient Human Resource Management Information System (HR-MIS) can be used for better health planning and effective utilization of the existing human resource. Information and monitoring regarding deputation, training, promotion, posting, transfer, leave, suspension, termination and retirement should be utilised for a transparent payment and transfer system.

Whenever an administrative post is considered for a doctor/nurse sanctioned to provide a clinical service, the following principles should apply:

- The health care staff like doctors and nurses providing patient care services ideally should not be given managerial responsibilities, however, if required or the local situation demands he/she should not be given more than one administrative/programme manager responsibility.
- Dedicated time should be set aside and allotted for staff to provide their programme manager/ administrative function – in addition to their clinical duties (example one day/week or 2 hours/day for programme activities). This should be factored in when developing performance indicators for staff, during staff appraisals and when assessing workload of the unit (for example, when requesting for additional staff).

Measures to ensure safety of health workers

Financial and non-financial incentives such as additional weightage for further education (e.g., specialist post-graduation training and continued professional development), preferential access to quality education for children and job opportunities for spouses, staff accommodation or house rent allowance, insurance cover and other benefits will greatly facilitate the achievement of IPHS and retention of human resources in public health system. Annual performance appraisals based on ToR developed for each category of staff should be done. Also, regular health check-up of all categories of staff should be done.

The human resources for health and general principles for identifying the number of health workforce under each category recommended for CHCs is described under five broad categories. Some of the key responsibilities and number required of certain staff is described here. Number required for all staff is placed at **Annexure 6**. ToRs of all staff at public health facilities as per GoI guidelines should be referred to for detailed job description. (**Annexure 7**) Number indicated as 'desirable' is over and above the number indicated under 'essential'. Leave and Training Reserves of 15% or as per the state cadre rule is recommended for all staff in IPHS.

The HRH for CHCs is summarised under the following heads:

1. **Administrative staff**
2. **Doctors (Medical Officers and Specialists)**
3. **Nursing staff**
4. **Allied and health professionals**
5. **Support staff**

8.2.1. Administrative staff

- The CHC In-charge will be responsible for overseeing the general administration and management of the facility.
- Nursing In-charge will be responsible for overseeing the general administration of nursing services.
- As there is a shortage of specialists, a hospital manager should be considered for managerial staff members so that doctors are free to provide clinical care.
- Sanitary Inspector for overall supervision of housekeeping and Sanitation staff, monitoring of adherence to infection control protocols, routine pest, and rodent control etc. The person appointed will also be responsible for calculation of chlorine requirement, sampling and testing of water, microbiological samples etc.

- Data Entry Operator will be needed for specific areas, e.g., one for CHC in charge office, and one for HMIS. In addition to this, one each for every registration counter should also be counted. Data entry in other areas can be done by existing staff, apart from data entry operators, training of all staff on computer skills should be done.
- Health Information Management Professional/Medical Record Analyst/Medical Record Assistant is required for collection, deficiency checking, coding, and indexing, analysis and statistical reporting, filing, numbering, storage, and retrieval of records. They are also custodians of medico-legal documentations and responsible for coordinating issue of birth/death/medical certificates and notification of communicable/notifiable disease cases.
- Finance Officer/Accountant will be responsible for maintaining RKS, Treasury route and NHM accounts, audits, and timely submission of financial utilization certificate to concerned authority.
- The staff positioned at GR help desk will be responsible for receiving, registering, ensuring immediate assistance, and facilitating resolution of grievances.

8.2.2. Doctors (Specialists and Medical Officers)

- There is one Essential specialist at non-FRU CHC (preferably General Medicine), and five Essential specialists provisioned at a FRU CHC and UCHC for specialised care.
- The specialists of CHCs and UCHCs can also provide services at the PHC and UPHC/Polyclinic levels respectively through fixed day clinics.

8.2.3. Nurses

In Patient Services

As per the Indian Nursing Council (INC) regulations, there should be one nurse for every six beds in the general wards. Considering an 8-hour shift, nurses will be needed in three shifts to cover a 24-hour period.

Operation Theatre

Two nurses will be needed to cover every OT shift. Round the clock OT will need six nurses to provide 24-hour cover. On the other hand, elective OT that may run for one shift only will need two nurses to cover each of these shifts. There should also be a nurse in-charge of the OT complex and an additional two nurses for the common pre- operative and post-operative areas.

Labour Room Complex

In the maternity unit i.e., LDR, trained midwives can be posted instead of nurses, as and when the former is available. In either case, one nurse/midwife will be needed to monitor every two LDR beds. In addition, one trained neonatal nurse will also be needed to monitor every four neonates.

Outpatient Department (OPD)

In OPD clinics, it is expected that every patient before going to the consultation room, will first go to the nursing station to get their vitals checked. They will also be supporting the doctors while examining the patients, particularly the female patients to ensure their privacy and dignity. After consultation, nurses will explain treatment and prescription to patients.

8.2.4. Allied Health Professionals

- The number of allied health professionals required at a facility depends on their job responsibilities and workload. In addition, to calculate the number of staff required, certain estimations have also been factored in.

- The clinical psychologist and physiotherapists are placed as an essential HRH for FRU & Non-FRUs, and the social worker is placed as essential for FRU-CHCs in urban and rural areas.
- Apart from providing advice and support for general in-patients and/or specific OPD clinic settings, dieticians will also need to provide dietary advice and guidance for NRCs.
- Counsellors have been recommended to cover requirements of the major national health programmes. Wherever possible, integration of counsellors who provide advice for similar and/or overlapping programmes should be preferred over counsellors for individual programmes. In case of the former, states will need to develop, strengthen, or access training modules to cover related programmes for integrated counselling. In addition, recruitment of both male and female counsellors is imperative to cover for issues where gender sensitivity is important.

8.2.4.1. Medical Laboratory Technologist/Lab technician

- All lab technicians will perform integrated functions even if their source of salary is from different programmes. The state should ensure to give refresher training to all Lab technicians so that they are proficient in performing various lab tests/assignments.
- All laboratory staff should report to the central lab to identify their duty allocated for the week/ month (e.g., routine tests in the clinical/central lab, emergency unit, programme tests, etc.). All labs should be functional 24 x 7. Since a lot of samples are to be collected early in the morning, it is expected that the OPD lab will be functional from 8 am onwards.

8.2.4.2. Pharmacist

- It has been estimated that a pharmacist will dispense about 120 prescriptions per day. In addition to this, he/she will also be responsible to maintain the drugs and equipment inventory.

8.2.4.3. Other Allied Health Professionals

- One OT technologist/OT Technician and TSSU assistant will be required for every shift in all OT complexes. They will be responsible for ensuring functionality of all equipment used in OT and TSSU.
- A Radiology and Imaging Technologist/Radiology technician should be available.
- Dental Assistants are expected to support dental surgeons in routine dental procedures.
- Optometrist/Ophthalmic Assistant/Vision Technician are responsible for refraction, screening of glaucoma, cataract, corneal blindness, and other related disorders.

Minimum Performance Benchmark

Minimum performance benchmarks for some key health care staff are indicated in the table below. There can be assignments given by the In-charge of a health care facility which can be beyond the deliverables.

Table: Minimum performance standards for key health care staff

S. No.	Staff	Break up of activities
1.	**General Medicine**	• OPD = 60 pts/day • IPD = 20 pts/day • 10 procedures/week
2.	**General Surgery**	• OPD= 60 pts/day • IPD= 20 pts/day • OT= 7 major surgeries/week
3.	**Obstetrics & Gynaecologist**	• OPD= 60 pts/day • IPD= 20 pts/day • OT= 7 major surgeries/week

S. No.	Staff	Break up of activities
4.	**Paediatrician**	• OPD= 60 pts/day • IPD= 20 pts/day • 10 procedures/week
5.	**Anaesthesiologist**	As per the surgical requirement in OT's, in-charge and emergency services, pain clinics
6.	**Ophthalmologist**	• OPD= 60 pts/day • IPD= 20 pts/day • OT= 10 major surgeries/week
7.	**Medical Officer**	• OPD = 75 patient/day • IPD assistance with specialists • OT assistance, emergency and other duties
8.	**Dentist**	• OPD = 20 pts/day • Dental procedures= 8-10 (30 min./patient)
9.	**Staff Nurse**	As per INC norms (for OPD, IPD shifts and specialist services)
10.	**Medical Laboratory Technologist/Lab technician**	100 tests/day (semi-autoanalyzer), 200 tests/day (autoanalyzer)
11.	**Clinical Psychologist**	15-20 counselling sessions/day (30 min/per patient/day)
12.	**Physiotherapist**	15-20 physiotherapy intervention/day (15-20 minutes/service) Physiotherapy advice for IPD patient
13.	**Social Worker**	• Assess and support welfare needs (10 patient/day) • Counselling (15-20 minutes/patient) • Home visit 4/week
14.	**Counsellor**	20-25 counselling sessions (Group/Interpersonal)/day
15.	**Dietician**	• Providing dietary advice to patients, 20 patient/day • Providing nutritional and health & wellness Services • Conducting nutritional assessment • Taking anthropometric measurements • Participating in medical rounds • Record keeping
16.	**ECG Technologist/ECG Technician**	30-40 ECG/day technical support with TMT's
17.	**OT technologist/OT Technician**	Assisting in OT's, maintaining infection control practice, maintaining all equipment and instruments
18.	**Radiology and Imaging Technologist/Radiology technician**	X-ray: 30-40 pts/day
19.	**Optometrist/Ophthalmic Assistant/Vision Technician**	• 30-40 cases per day. • Detection of cataract and other basic eye ailments • Appropriate referrals • Linkages with RBSK team for refraction and issue of spectacles
20.	**Dental Technician**	Fabricating dental prosthetics including bridges, crowns, and dentures. Maintaining dental laboratory records. Ensuring adherence to infection prevention protocols including sterilisation.
21.	**TSSU Assistant**	Sterilisation services on time, packaging and labelling, pre-sterile storage, autoclaving and storage, documentation of servicing sessions
22.	**Pharmacist**	120 dispensations of prescription/day, maintaining stock registers, store, inventory management

8.2.5. Support staff

- Working shifts and allocation of areas to the support staff shall be the responsibility of hospital in-charges or the person deputed by him/her.
- As indicated in the document, IPHS does not define the implementation process. However, in the interest of rendering quality patient services, it suggests that in-house hiring of clinical and technical staff should be prioritized rather than those services that can be efficiently run even through outsourcing model like security, housekeeping, cooks, food trolly bearers etc.

8.2.5.1. Sanitation staff

- The Sanitation staff is responsible for cleaning and mopping with disinfectant of all the floors, staircases, corridors, ceilings, toilets etc. of all OPDs, wards, OT, and support care areas as per cleaning protocols of the facility. They will also be responsible for cleaning of the overall campus. They are responsible for transportation and storage of all waste material including biomedical waste (BMW) at the designated BMW storage room. Cleaning blood spills and others such as human excrement, urine, vomitus, sterile body fluids, as and when required is also the responsibility of the Sanitation staff.
- The staff should be trained as per 'Pradhan Mantri Kaushal Vikas Yojana' or state sponsored skill development programme prior to appointment in specific service area.
- Number of Sanitation staff required in specific areas as mentioned below accounts for three shifts in round the clock functional service areas such Emergency, OT, LDR, wards, NRC etc. Certain service areas may not require staff in all three shifts, e.g., OPD, kitchen, diagnostics, administrative areas, outer premises, and stores.
- Hiring of certain category of staff for cleaning of kitchen, CSSD, laundary etc, will depend upon operational mode of respective areas. In house hiring will only be needed if they are not outsourced.

8.2.5.2. Housekeeping (including ward attendants)

- Housekeeping services are essential in providing a safe, clean, aesthetic, and hygienic environment for not only the patients, attendants, and visitors, but also for health care providers.
- They are responsible for cleaning, disinfection and maintenance of equipment used in patient care, sorting and transportation of items to and from patient care areas to support care areas. They are also expected to transport samples to labs.
- The staff should be trained for bed making, patient's personal hygiene, turning and positioning patients, transferring patients from wards to other areas, and other patient care activities.
- In the Labour room complex, the housekeeping staff should be responsible for bed making and assisting the nursing staff in patient care activities.
- The staff should be trained as per 'Pradhan Mantri Kaushal Vikas Yojana' or state sponsored skill development programme prior to appointment in specific service area.
- Adequately trained sufficient number of housekeeping staff/ward attendents should be available round the clock either in house or through outsourcing. Its number can be decided locally by the state/district health authorities.

8.2.5.3. Security Guards

- Security guards and/or provision of CCTV cameras should be made available round the clock for ensuring safety of staff, property, and essential commodities. Security is also needed for restricted access areas such as emergencies, OTs etc. There should be female security staff for female ward and LDR.

- The hospital should be divided into various security zones. Security cameras should be placed in a way that covers all details of these zones. Security requirements of various areas should be laid down Security persons must be designated to watch every zone at a regular interval in the control room. For each area, security guards should be trained accordingly and preferably not rotated. All security guards should be trained in fire safety.
- Entry and exits of the hospital needs to be synchronised with the patient flow and services available at various floors. Since this will depend upon the size of the hospital, horizontal/vertical extension, So, its number will vary from one health care facility to another and as such needs to be decided locally.
- Adequately trained sufficient number of security guards should be available round the clock either in house or through outsourcing for managing all entry points, outer premises and critical care areas like OT, LDR, ICU/HDU/SNCU/MNCU, Emergency etc.

8.2.5.4. Food Trolley Bearer

They are responsible for sorting and transporting food trolleys to and from patient care areas to dietary services. They should be skilled in respectful distribution of food trays to patients. They will also aid the Sanitation staff in cleaning of utensils and trolleys.

Hiring of this category of staff will depend upon the operational mode of the kitchen. In house hiring will only be needed for hospitals having 300 or more beds, that too if the kitchen is not outsourced.

8.2.6. Capacity Building

All posts related to a particular service area must be filled to ensure that the facility is functional. Induction and specialised training of the entire team prior to posting in a particular service area should be ensured. Along with the placement of qualified HRH, the States should make all efforts to continuously build on their skills and competence as per their job requirement.

Special attention should be paid for the training of CHC in charge as S/he also has to look after the overall health of the communities and ensure implementation of the National Health Programmes in their catchment area.

Different training programmes for induction, skill building and leadership, new programmes and if required, refresher training should be planned systematically. Diligent records of all trainings attended by HRH should be maintained by the facility in-charge. Cross-learning should be promoted where HRH upon successful completion of the training programme briefs other staff about key learnings.

8.2.7. Conduct and Behavioural Standards

The HRH placed in the public health facilities should adhere to the highest ethical and behavioural standards and provide patient care with utmost respect for the dignity of life. It is important that states orient health professionals to discharge their duties in a professional and courteous manner, facilitating greater acceptability of HRH in the community as well. They should also be oriented to the concept of gender sensitivity and efforts should be made to ensure that gender sensitivity is inculcated in their conduct and actions.

Soft skills including an empathetic attitude, manners and courteousness at bedside should be a core value, especially towards the marginalised and vulnerable. The privacy and dignity of patients should be maintained, and the principles of patient confidentiality strictly adhered to. Dress codes (with a name badge) and adherence to punctuality should be emphasised.

8.2.8. Safety Measures for HRH

It is crucial that safety of the HRH providing services at all levels is ensured. Towards this end, the following must be adhered to:

- Provision of protective gear like gloves, masks, gowns, caps, PPE, lead aprons, dosimeters etc. and their use by health care workers must be as per standard protocols in place.
- Promotion of hand hygiene and practice of standard precautions by health care workers should be standard practice.
- Display of SoPs at strategic locations in the hospital.
- Regular training of health care workers in standard precautions, patient safety, infection control and BMW management should be part of their training requirements.
- Immunization of health care workers against Tetanus, Typhoid and Hepatitis B should be ensured.
- Provision of round the clock Post Exposure Prophylaxis (PEP) against HIV in case of needle stick injuries should be initiated in the emergency department.

8.3. MEDICINES

Access to essential medicines is a major determinant of health outcomes and an integral, and often crucial component of health care. An approach to ensuring access to medicines has been promoted through *"Essential Medicine Policy"*. It is necessary for states to prioritise which medicines should be made available based on the existing demographic profile and disease prevalence rate.

Expenditure incurred on irrational or unnecessary drugs and diagnostic tests leads to out-of-pocket expenditure. Government procurement of generic drugs in bulk, substantially lowers the cost compared to the price paid for a branded drug by an individual consumer. If quality essential drugs are provided free of cost to all patients visiting public health facilities, it would bring significant savings to patients. Based on the above and adhering to the "Free Drug Service Initiative by GoI", all essential medicines should be available free of cost in all CHCs/UCHCs.

The list of medicines mentioned under IPHS is part of the List of Essential Medicines for different levels of facilities and is placed under **Annexure 8**.

The state should identify a specified number of drugs that are critical for service delivery in OPD, IPD and the emergency and ensure that these are available round the clock. All medicines required in the Emergency and those that are included in national health programmes must be included in the EML for that facility. Additional medicines for the management of locally prevalent diseases should also be included. These norms do not preclude the inclusion of other medicines which are on the state list of essential medicines but not mentioned in the IPHS guidelines. With the launch of universal NCD screening and comprehensive primary care, long term dispensing (one to three months) of medicines for management of chronic illnesses such as diabetes and hypertension has been initiated.

Procurement, adequate storage space and systematic registers and records will need to be maintained for these. Temperature sensitive medicines should be stored in proper cold chain/refrigerator as deemed by the manufacturer's instructions. Relevant AYUSH medicines and a pharmacist to dispense them should be available at facilities where AYUSH services are being provided.

The CHC/UCHC should have SoPs for indenting, stocking of medicines, logistics for their stocking up and transportation. Indenting based on consumption, stock rotation and the distribution network should be robust and ideally through a centralised drug purchasing and distribution system to ensure there is no

stock-out of essential medicines at public facilities. This will ensure quality check and provision for recall, if required. Additionally, monitoring the rational use of higher generation antibiotics, slow- and fast-moving drugs, timely replacement of rapidly prescribed drugs, maintaining a buffer stock of critical drugs and quality control are other essential parameters.

Systems for the local purchase of drugs during emergency situations and critical stock-outs, including during outbreaks and epidemics, should be in place. Every effort should be made to procure generic drugs and include a mechanism for robust quality control. There should be a computerised system for receiving, inspecting, handing over, and retrieval of drugs. A mechanism for checking quality of drugs, inventory management, storage of narcotic drugs, checking of pilferage, date of expiry and pest and rodent control should be in place.

All prescriptions should be clear, legible, in capital letters and must contain the generic/non-propriety name. Ideally, computerised prescriptions should be ensured. Standard treatment guidelines should be followed for drug prescriptions and patient management. Prescription audits should include a review of drugs being prescribed from outside (as they are not available at the facility) and those that are not being prescribed under their generic names. Internal audit of stores should also be done on a regular basis to assess procurement of items as per laid down procedures by the respective state governments.

To prevent pilferage, there should be a fixed working hours of the store beyond which functioning, and receipt of supplies should not be allowed.

8.4. DIAGNOSTICS

Diagnostics are an integral part of the health care system and provide information needed by service providers to make informed decisions about care provision related to prevention, screening, detection, treatment, and management. Limited availability and access to quality laboratory and radiology services are among the major challenges contributing to delayed or inappropriate responses to disease control and patient management. The availability of necessary reagents and equipment, laboratory personnel and their capacity building, mechanisms for internal and external quality assurance and follow-up with clinicians should be strengthened.

The diagnostics mentioned under IPHS (**Annexure 9**) should be a part of the list of tests being offered at different levels of facilities. Additional diagnostic tests for the management of locally prevalent diseases should also be included (screening tests for Kala Azar in locally endemic areas).

The important and essential lab imaging and other diagnostic and support services have clearly been defined either as essential or desirable. Wherever applicable such services need to be established and delivered as per the centre, state and local applicable guidelines.

These norms do not preclude the inclusion of other diagnostic tests that the state decides to provide at public health facilities.

This is mentioned under the 'Free Diagnostics Initiative' as per the GoI guidelines and must be offered in-house through the public health system. The complete list of all tests being provided should be clearly displayed. For specialised, advanced, and specific diagnostic tests, linkages with District Hospitals, Medical Colleges and National Reference Laboratories should be established. In all cases, transport must be managed carefully in order to maintain integrity of the sample, giving attention to temperature, preservation needs, special transport containers and time limitations. It is also important to ensure the safety of those handling the material before, during and after transport.

Along with lab services, imaging services such as Ultrasound, X-Ray, etc. should also be provided while adhering to PCPNDT & the Atomic Energy (Radiation Protection) Rules, 2004, promulgated under the Atomic Energy Act, 1962 respectively. It is mandatory for all users of imaging equipment to obtain the requisite License from AERB for carrying out the above activities.

The test and test results should be provided to patients during the same working hours as the OPD and the availability of doctors so that repeat visits by the patient or their family members can be avoided. Round the clock functionality is recommended to cater to the needs of the emergency services. The turnaround time for test results should also be standardised, adhered to, and monitored.

The availability of necessary reagents and equipment, laboratory personnel and their capacity building, mechanisms for internal and external quality assurance and follow-up with clinicians should be strengthened. Internal Quality Control (IQC) to detect, evaluate and correct errors due to test system failure, environmental conditions, or operator performance, before patient results are reported is also an essential measure.

Validation of procedures and equipment should be carried out by running samples in parallel, using both old and new equipment and methods for a period of time to determine that expected results can be obtained. These validation procedures should be completely recorded. The staff posted in diagnostic services can be trained under EQAS programme run by government institutes.

8.5. EQUIPMENT

Medical equipment plays a significant role in patient care. It is a crucial component of health systems, as it enables the service providers to diagnose, monitor and treat various kinds of diseases. Having appropriate quality of medical equipment, helps to prevent patients from being denied any health service/s. All the necessary equipment to provide clinical, support and other services should be quality assured through the state procurement policies and procedures. All the areas having critical and electric equipment to have conductive flooring with proper earthing. The list of equipment provided in these guidelines placed at **Annexure 10** is not exhaustive. Additional equipment, if required, can be procured to provide the full range of services being offered at the facility.

A systematic and robust programme for biomedical equipment maintenance and monitoring should be in place at all public health facilities. It is important to improve functionality and life of equipment while improving health care services in public health facilities along with reducing cost of care and improving quality of care. Provisions have been made in IPHS for biomedical engineers and technicians to oversee equipment maintenance at public health facilities within the district. An effective equipment audit assesses the present equipment status and ensures better equipment procurement in the future. The audit should be done on a periodic basis and contain details like name, cost of equipment, date of purchase, manufacture and installation, name and address of supplier, department where installed, environmental control, spare parts inventory, technical manual, after sales service agreement, guarantee, warranty period, life of equipment, depreciation per year, up/down time, date of condemnation and replacement. Number of services delivered by each major equipment must be noted to analyse value for the money invested in purchasing high-cost equipment.

Along with maintenance and monitoring programme, it is also essential that a condemnation policy is in place at all facilities so that the practice of out-of-use equipment and furniture being scattered around the facility is mitigated. Condemnation should be done periodically by the condemnation committee after careful examination of items. The list of items with codification number, date of purchase, repair, and other relevant details should be thoroughly prepared by the committee.

The maintenance of medical equipment requires a wide range of technical abilities, and the cost and time required to train a technician increases with the level of skill that has to be attained. Training of technicians to do front-line maintenance for medical equipment in public health facilities is essential. The selection of candidates should emphasise technical aptitude and motivation rather than just academic qualification. Practicing electricians and plumbers already working in health facilities could be one such resource pool. Multi-skilled training should be encouraged. For example, frontline medical equipment maintenance can be combined with electrician training. The content of training should emphasise more on practice (70%) and less on theory (30%). These courses can be offered at district level under the ambit of DH strengthening programme.

Biomedical equipment management and maintenance programme (BMMP) is an initiative by the Ministry of Health and Family Welfare to provide support to state governments to outsource medical equipment maintenance comprehensively for all facilities to improve functionality and life of equipment, simultaneously improving health care services in public health facilities. This will help in reducing cost of care and improve quality of care too.

8.6. QUALITY ASSURANCE

Well maintained infrastructure, adequate & skilled human resource for health, functional equipment & instruments, and sufficient drugs & consumables ensure the fulfilment of the 'Structural' requirements for establishing a well-functional health facility. However, for attaining enhanced satisfaction with improved clinical outcomes, it becomes equally pertinent to ensure 'Quality' in the 'Processes' of the care within a health facility.

As a health care provider, while it is important to ensure provision of safe and evidence based clinical care, it is equally fundamental to provide the care that makes patients' and visitors' experiences rewarding. Ensuring 'Quality of Care' as a key component would require undertaking conscious and concerted efforts to identify 'Gaps' by measuring Quality of Care (QoC) in all its three dimensions, namely structure, process and outcome (*Donabedian Model of QoC).*

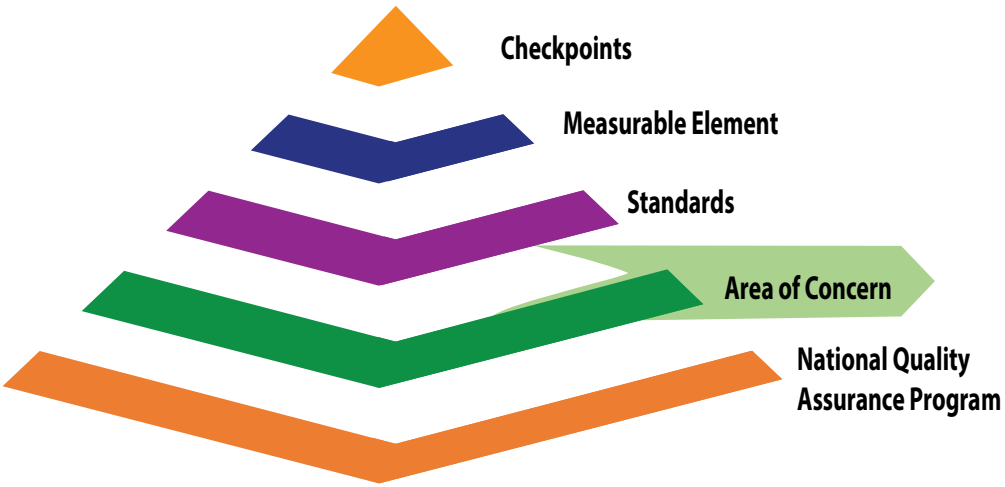
Subsequently, available resources are channelised, and focused efforts undertaken for closing gaps and bringing about 'Improvement' in the services. High Touch Surfaces in all regular occupied spaces should be mopped and sanitised on daily basis. Good sanitation & hygiene, design & maintenance practices reduce cross infections, thereby reducing risk of Hospital Acquired Infections (HAI). Products that are manufactured with carcinogens, mutagens, reproductive toxicants and teratogens, asthma-causing agents, respiratory irritants, and chemicals that aggravate existing respiratory conditions should not be procured. Usage of aldehyde products for fumigation and fogging are banned at the facility. CHC/UCHC shall have an ongoing induction training program for all the housekeeping staff for cleaning different areas in the hospital. Provide ongoing and regular staff training and communication on safe handling, storage and disposal of chemicals and materials.

Facilities should have a written and agreed protocol for critical and non-critical areas. This should include the frequency of cleaning for different areas, type of reagents to be used, the method of cleaning and a mechanism to monitor its quality (cleaning checklists for washrooms etc.). Sanitation staff should have appropriate training in all these aspects. A sample of cleaning protocols is placed at **Annexure 11**.

For ensuring provision of 'Quality of Care,' International Society for Quality in Healthcare (ISQua) accredited National Quality Assurance Standards (NQAS) for District Hospitals, CHCs/UCHCs, multispecialty polyclinics, PHCs/UPHCs and Health and Wellness Centre, Sub-centres and UHWCs have been formulated by MoHFW, GoI. Setting standards is a dynamic process which provide a roadmap for health facilities to improve care.

The main pillars of Quality Measurement Systems are Quality Standards. These have been defined for various level of facilities under NQAS and grouped within the eight areas of Concern. Each standard further has specific Measurable Elements. These standards and Measurable elements are checked in each department of a health facility through department specific checkpoints. Click here to see these defined standards.

Figure: Measurement system under NQAS



A well-built institutional framework from facility (Quality team) to the National level (Central Quality Supervisory Committee) supports the seamless implementation of the standards *(Figure 2- Institutional Framework under NQAS)*. Facilities which can meet the defined standards and criteria are certified and incentivised (subject to annual surveillance and ensuring sustainable changes). With this, National Quality Assurance Programme (NQAP) envisages to instil the culture of quality and safety in health systems.

Figure: Institutional Framework under NQAS

It is expected that all public health facilities would implement these standards by undertaking the following steps:

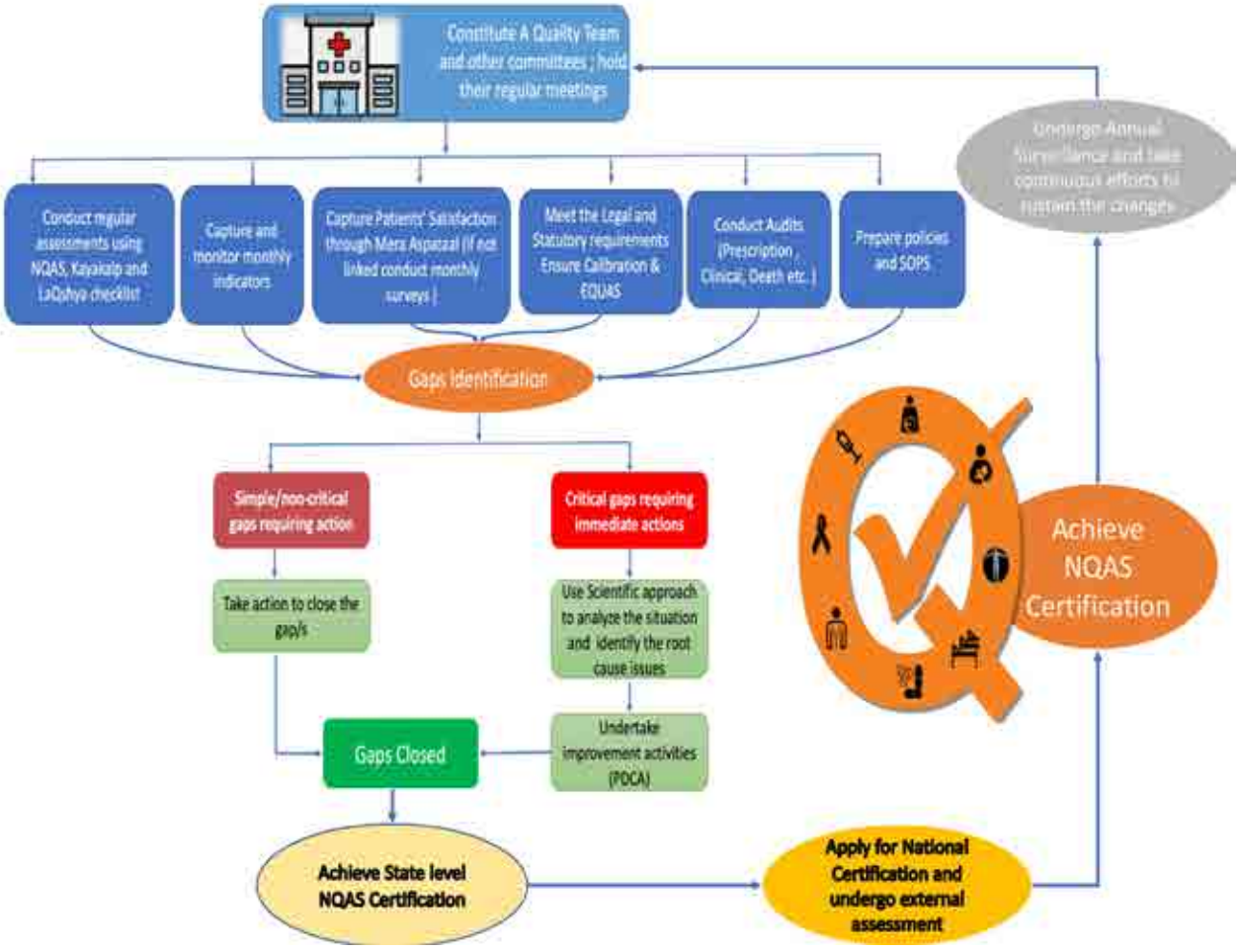
- Formation of Quality team
- Plan for Quarterly Internal Assessment
- Conduct the Monthly Patient Satisfaction Survey
- Collate and Analyse Key Performance Indicators
- Define Quality Policy and Objectives
- Plan for Medical and Death Audits

- Prepare SoPs and Work Instructions
- Ensure External Quality Assurance of Lab-EQAS and Calibrate measuring Equipment
- Traverse Assessed Gaps
- Provide Quality Certification at State and National levels
- Sustain and Incentivise

Under the ambit of the National Quality Assurance Programme, various other initiatives like Kayakalp, LaQshya and *Mera Aspataal* (My Hospital) have been initiated to work on specific domains of quality improvement. These domains together support implementation of the National Quality Assurance Programme.

- Kayakalp aims to promote cleanliness, hygiene, and infection prevention. It is an award scheme in which facilities are assessed at three-levels, namely internal, peer and external, using an objective checklist covering eight thematic areas, namely(a) Hospital upkeep, (b)Sanitation & Hygiene, (c) Waste Management, (d) Infection control, (i) Support Services (f) Hygiene Promotion (g) Beyond the hospital boundary and (h) Eco-friendly facilities. Facilities scoring 70% and above after external assessment get recognised and incentivised.
- LaQshya is a quality improvement initiative, which aims to improve facility-based quality of care around birth, which normally takes place in the Labour Room and Maternity OT of a high case-load facility.

Figure: Roadmap for health care facilities to achieve NQAS certification



- *Mera Aspataal* (My Hospital) & MusQan are an ICT based platform that capture 'Voice of Patients' visiting and receiving care from the health care facilities. Inputs received on Mera Aspataal support facilities to identify "*Dissatisfiers"* and takes up further actions to mitigate them.

Patient Safety and Infection Control

Patient safety and infection control measures

- Hand washing facilities in all areas should be installed. Compliance with the correct method of hand hygiene by health care workers should be ensured.
- Safe clinical practices as per standard protocols to prevent health care associated infections should be instituted. (**Annexure 11**).
- There should be proper written hand over system between health care staff.
- Safe injection practices as per the prescribed protocol should be followed.
- Ensuring safe disposal of BMW as per rules should be adhered to.
- For reducing environmental pollution including due to mercury, GoI Guidelines should be adhered to.
- Guidelines for Airborne Infection Control should be followed.
- Regular training of health care workers in patient safety, infection control and biomedical waste management should be scheduled and held.

8.7. IMPLEMENTATION OF IPHS

This section covers aspects related to clinical governance, monitoring, governance, Rogi Kalyan Samiti (RKS) and accountability.

8.7.1. Clinical Governance

The quality of care at public facilities can be significantly improved by adopting and implementing a robust mechanism for clinical governance. This will cover a range of quality improvement initiatives:

- **Risk management:** By putting in place systems to reduce risk, efforts are made to ensure a safe and effective environment where patients receive high-quality service while health professionals work in an enabling 'no-blame' culture. Various interventions to improve patient safety, reduce clinical errors and improve quality of care provided should be introduced or strengthened. This includes a thorough review of maternal and child deaths (MDSR/CDR); incident reporting (near-miss reporting; adverse event reporting) so that the appropriate lessons are learnt to avoid future mistakes and the corrective actions are undertaken. Particular attention is paid to patient safety, infection control, biomedical waste management and health care worker safety. Early detection of warning signs is critical for early intervention and prevention of clinical errors (increase in post-surgical infections or increase in cases of cervical tears).
- **Clinical audit:** To assess and improve quality of care, the same is measured by health workers and departments against agreed standards, identifying of gaps and instituting of corrective measures. A re-audit to confirm corrective actions are sustained will effectively close the audit loop.
- **Evidence based care and effectiveness**: This includes adherence to SoPs, Standard Treatment Protocols and latest guidelines for national/state health programmes to ensure high quality, standard and consistent care is provided. Facility-based quality teams should orient staff on standard protocols.
- **Education, training and continuing of professional development**: The quality and capacity of health workers at public facilities should be enhanced with continuous professional development. Refresher courses and in-service training must be conducted after completing a thorough training needs assessment.
- **Patient and care experience and involvement**: Feedback from patients about the quality of services is of paramount importance. These should be conducted regularly and must include both

OPD and IPD services. Review of feedback and suggestions received should be used to address gaps and deficiencies in service delivery. The GoI '*Mera Aspataal*' application is one mechanism to obtain feedback about quality of services from patients visiting public health facilities. Community participation and involvement of civil society organisations in quality improvement initiatives is vital. In addition, an assured grievance redressal system is mandatory at all facilities. This should include provision for written complaints (through a help desk or complaints box, letters to administrators, online reporting) and a formal system for escalation and resolution in a time-bound manner. Facilities should monitor number of grievances received and resolved every month. A mechanism for appeals should also be built in. Awareness should be raised so that users are aware about the existence of this facility.

8.7.2. Monitoring

It is assumed that rigorous monitoring, continuous support and encouragement by supervisors and higher levels of management and most importantly ownership by staff will be strengthened as part of continuous quality improvement initiatives. So, every CHC/UCHC should have a nodal officer for infection control under the supervision CHC In- Charge. The RKS of the facility should periodically review reporting on adverse events, infection control measures, safe clinical, injection and blood transfusion practices etc.

Internal monitoring mechanisms include systematic and proper record keeping and timely reporting. A mechanism for robust internal and external monitoring is vital to maintain standards, identify gaps and address deficiencies in service delivery at public health facilities.

Internal mechanisms will include daily rounds by CHC in charge, Hospital Manager, Nursing In-charge, proper record keeping and maintenance, supportive supervision, and regular system of audits (clinical audit, death audit, disaster preparedness audit) as part of clinical governance. As per GoI/state guidelines, the accounting and finance audit also needs to be undertaken.

Health intelligence in terms of standard formats capture data on key performance indicators to facilitate a system for robust internal monitoring. This should be regularly reviewed by senior administrative and clinical personnel to enable gap analysis. An action plan with corrective measures along with the person/ department responsible and timelines should be prepared and reviewed at the next meeting.

A variety of measures should be used for external monitoring which include patient satisfaction surveys, social accountability through Jan Aarogya Samitis/Rogi Kalyan Samitis and/or Panchayati Raj Institutions, community surveys and Jan Sunwais and Jan Samvads, systematic assessments with a defined checklist by senior/deputed health officials.

Laboratories should be monitored through an internal and external quality assurance programme.

8.7.3. Governance

Effective governance of the public health system includes establishment of institutional arrangements and policies along with their continuous monitoring to ensure proper implementation. Apart from promoting good leadership, it also includes specific interventions such as the establishment of facility based RKS; building accountability in to the system (performance appraisal, target setting and monitoring, social audit, displaying citizens' charter); patient centric services (patient feedback, reducing out-of-pocket expenditure, improving the patient experience, grievance redressal); compliance with statutory norms (Acts and regulations) and ensuring robust clinical governance (adherence with SoP's and standard treatment guidelines, adverse incident reporting, near miss reporting, clinical audits and MDSR/CDR).

Some aspects of governance mechanisms in the public health facilities are described below:

8.7.3.1. ROGI KALYAN SAMITIS (RKS)

These are health facility-based committees (at PHC, CHC, SDH and DH level) that have been created to hold hospital management and administration accountable for ensuring access to equitable and high-quality services without financial hardship to service users and to enable community oversight in the functioning of health facilities.

The RKS should be constituted according to national guidance and should play an active role in supervision of provision of quality services and improving patient experience through regular meetings and follow-up. At the facility level, the RKS should ensure the following:

- Enable active citizen participation for improvement of patient care and welfare in the facility.
- No user fees are charged for national government funded programmes that are provided as a service guarantee for people accessing public sector health facilities (mother and child health services/SUMAN, national programmes for TB, HIV, and malaria, NCD prevention and control programme).
- Confirm that patients below the poverty line, the vulnerable and marginalised do not incur any financial hardship for their treatment and create mechanisms to cover part/full cost of transport, diet and stay of attendant(s).
- Agree a structure for user fees that are minimal and do not create a financial barrier for accessing health care.
- Provision of non-clinical services (safe drinking water, diet, litter-free premises, clean toilets and linen, security and help desks).
- Essential drugs and diagnostics to be made available. They can also procure essential drugs/ diagnostics not available at the health facility from RKS funds. However, such local purchases must only be seen as a short-term measure.
- Promote a culture of user-friendly behaviour amongst service providers.
- Operationalise a Grievance Redressal mechanism.
- Create mechanisms for capturing patient feedback, at least at the time of discharge and take timely and appropriate action on such feedback.
- Overall facility maintenance to ensure the facility conforms/aspires to conform to IPHS norms.
- Facilitate the operationalisation of national and state health programmes as appropriate for that level of facility.
- Proactively seek out participation from charitable and religious organisations, community groups and corporates for cleanliness and upkeep of the facility.
- Facilitate contribution from the community in cash, kind (drugs, equipment, diet) and labour (including free professional services).

8.7.3.2. Accountability

Health officials in an administrative/management position in the facility, in coordination with District Health Authorities, must improve effectiveness and efficiency in the system by building mechanisms to strengthen the accountability of service providers.

A system of annual performance appraisals which is objective, built upon key performance indicators from job descriptions and is linked to promotions, incentives and contract renewal should be introduced (or strengthened).

Management Information System (MIS): Computer with Internet connection is to be provided for entering facility MIS. Provision of flow of Information from PHC/CHC to district hospital and then to district headquarters and further to the state health organisation should be established. Relevant information with regard to emergency, outdoor and indoor patients should be recorded and maintained for a period of time as stated in the state health policy.

Feedback from the community using different methods such as patient feedback (Mera Aspataal), community/ social accountability, *Jan Sunwai* and *Jan Sanwad* must be encouraged, and timely and appropriate action taken on the feedback received.

Every facility must have a Citizens' charter displayed in a prominent place in a legible and locally appropriate format. This should include information on the range of services offered, timings, entitlements, user charges, rights and responsibilities of users and grievance redressal procedures. A list of free drugs and diagnostics provided at the facility must also be displayed. The total number of essential medicines and tests should be displayed in the Citizens' Charter as well.

8.7.3.3. Grievance Redressal

GoI has come out with a robust grievance redressal system where grievances or complaints can be registered through a call centre, web portal or a help desk. Every health facility including CHCs should have assured linkages with registration and time-bound redressal of grievances through this channel.

Apart from any centralised system introduced by the state (call centre), there should also be a method to lodge local complaints (complaints box, receipt provided for a complaint letter or an opportunity to meet with the facility in charge of the CHC/UCHC). This should include a formal system of escalation and resolution of grievances in a time-bound manner. Facilities should monitor the number of grievances received and resolved every month. Awareness should be raised so that the users are aware about the existence of this facility. In addition, there should be a time limit to resolve registered grievances and if this is not complied with, it should automatically be escalated to the next higher level. This will strengthen efficiency and accountability.

Community participation and involvement of civil society organisations in quality improvement initiatives is vital. So, in addition to above, they should be constantly encouraged to participate in various facility improvement processes for redressal of grievances.

8.7.3.4. Patient centric services

All necessary efforts to ensure that patients and their attendants have a comfortable, respectful, and hassle-free experience at the facility must be ensured. This includes an empathetic and compassionate attitude towards patients and relatives and a professional bedside manner.

Wherever possible, there should be no user fees at the facility. However, if the RKS and management decide to introduce user fees, these should be minimal, exclude those below the poverty line, the marginalised and the vulnerable and be competitive for the rest. Patients should be provided a receipt and the annual financial audit should account for the utilisation of monies received.

8.7.3.5. Intersectoral Convergence

Convergence is central for the success of health promotion strategies and requires close coordination of health with other allied departments. Currently, convergence has been undertaken with:

- Education department for school-based health promotion camps.

- ICDS for delivery of six services, viz. supplementary nutrition, pre-school non-formal education, nutrition and health education, immunization, health check-up and referral services at Anganwadi Centres (AWC).
- Panchayati Raj/ULBs to address spread of outbreaks of communicable diseases such as dengue, chikungunya, malaria for sanitation drives, vector control, controlling water accumulation, water testing, chlorination in tanks/wells, cleaning of drains etc. and ensure participation of community during the times of disaster.
- Removal of garbage and general waste is also the responsibility of Panchayat/ULB/Municipality.

Both rural and urban CHCs will provide a platform for coordination and holding of meetings with Zila/Block/Gram Panchayat and ULBs for planning avenues and strategies for health promotion related to various dimensions of secondary care. Such phase-wise meetings will also support in planning health education and communication strategies.

8.7.3.6. Compliance with statutory norms

All statutory acts, rules and regulations must be strictly adhered to. It will be the duty of senior officials to comply with these and they can delegate roles and responsibilities to relevant officials. They must also provide regular monitoring and feedback mechanism that is followed. The following must be included although it not an exhaustive list:

- No Objection Certificate from the Fire Authority
- Compliance with state by-laws and the National Building Code (NBC) for all infrastructure
- Gas cylinder rule 1981, ISO 7396-1:2016 and Indian Explosive Acts, 1984
- Authorisation under the revised Biomedical Waste (Management and Handling Rules)
- Seismic safety guidelines
- Registration of Births and Deaths Act
- License for Blood Bank or Authorisation for Blood Storage facilities
- Consumer Protection Act
- Drugs and Cosmetics Act
- Indian Medical Council Act and the Code of Medical Ethics
- Indian Nursing Council Act
- Pharmacy Act
- Medical Termination of Pregnancy Act
- Persons with Disability Act
- PC & PNDT Act
- Mental Health Act
- Narcotics and Psychotropic Substances Act
- Authorisation and approval from the Atomic Energy Regulation Board (AERB)

- Boilers Act
- Excise permit to store spirits
- Vehicle Registration Certificates for Ambulances
- Clinical Establishment (Registration and Regulation) Act
- Right to Information Act

ANNEXURES

"Logo Of State Government" *"Logo Of NHM"*

CITIZENS' CHARTER

"Name Of the State" *"Name Of the Facility & Type (Non-FRU/CHC/ FRU CHC/FRU UCHC) "* **Contact No: CHC In-charge: _____**

(This Facility is IPHS & KAYAKALP/NQAS/NABH/NABL/LaQshya* Certified)

Mission Statement & Objective:

The NHM envisages achievement of universal access to equitable, affordable & quality healthcare services as per IPHS for all with respect, dignity & without any discrimination.

General Information:

General beds including maternity, surgical and other special beds…

Critical care beds like NBSU, Emergency etc. _____

Staff:

*No. of Specialists (If any)……

No. of GDMOs _____

No. of Paramedical staff……

No. of Nursing staff ……

Any other* _____

Services Available:

Services		Days	Timings
OPD Services Including Special Services		Mon-Sat (except on public holidays)	8.00am-2.00pm
Fixed Day Clinics			
NCD Clinic			
Geriatric Clinic*			
AFHC			
Any other			
Key services available during OPD			
Antenatal Care (ANC)/PNC and FP services			
Immunization			
Critical Care Services (NBSU/HDU/ICU)		24 x 7	
Emergency Services		24 x 7	
O.T. services	General surgery	Elective	
	Emergency Surgery	24 x 7	
	Obstetrics & Gynecology Surgery	24 x 7	
	Any Other Surgery	Elective	
Maternity Services (LDR, OBS-OT With NBCC)		24 x 7	
Laboratory	Clinical/ Central Lab	Mon-Sat	00.00-00.00
	Emergency Lab	24 x 7	
Pharmacy		Mon-Sat	00.00-00.00
Blood Storage Facility		24 x 7	
Ambulance Services		24 x 7	
Administrative Office Services		Mon-Sat	00.00-00.00
Medico-Legal and Postmortem Services			

Available OPD Services:

- General Medicine
- General Surgery
- Obstetrics & Gynecology
- Pediatrics
- Eye (Screening for refractive errors)
- DOTS Centre
- NCD Clinic
- Geriatric Clinic*
- Adolescent friendly health Clinic
- Integrated Counselling services
- ICTC / ART Centre/ STI Clinic*
- Physiotherapy/Rehabilitative services
- Dental Clinic*
- AYUSH*: Homoeopathy/Ayurveda etc

Available IPD Services:

- General ward: Male and female
- Surgical ward: Male and female
- Maternity ward
- Pediatric Ward*
- Isolation room

Available Radiological Services:

- USG and X-ray: 24X7
- Cardio-diagnostics: ECG: 24X7

Support Services (In House / Linked*):

- CSSD/ Equipment sterilization services
- Laundry services
- Dietary services
- Security services

Other Services:

- Stretcher and wheelchair
- Separate queue for senior citizens
- Disabled & Elderly-friendly facilities
- Potable water
- Washroom facility
- Waiting areas
- Canteen
- Generic Drug store*

Free Entitlements:

- Free drugs as per the Essential Drug List (EDL)
- Free diagnostics as per Free Diagnostic Initiative (FDI) guidelines
- 24x7 Ambulance services (including drop back services)
- Blood transfusion services
- Dietary services
- Services under Pradhan Mantri Jan Arogya Yojana (PM-JAY), Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakaram (JSSK) & Mission Indra Dhanush

Financial Benefits:

Schemes	Benefits	
Janani Suraksha Yojana (JSY)		
Compensation for Family Planning procedures ○ Tubectomy ○ NSV ○ IUCD ○ Indemnity Scheme		
National TB Elimination Program (NTEP)		

#Paid Services: *(if applicable)*

*The user fee for the payable services is displayed in the respective service areas. Do not pay any extra money to anybody.

*National Programme Carried on in the Facility:

- Janani Suraksha Yojana (JSY)
- Janani Shishu Suraksha Karyakaram (JSSK)
- Routine Immunization & Mission Indra Dhanush
- Integrated Disease Surveillance Programme (IDSP)
- National AYUSH Mission (NAM)
- National Mental Health Programme (NMHP)
- National Oral Health Program (NOHP)
- National AIDS Control Programme (NACP)
- National Leprosy Eradication Programme (NLEP)
- National TB Elimination Programme (NTEP)
- National Viral Hepatitis Control Programme (NVHCP)
- National Vector Borne Diseases Control Programme (NPCVBP)
- National Programme for the Health Care for the Elderly (NPHCE)
- National Tobacco Control Programme (NTCP)
- National Programme for Control and Treatment of Occupational Diseases
- National Programme for Prevention and Control of Deafness (NPPCD)
- National Programme for Control of Blindness (NPCB)
- National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)
- National Programme for Palliative Care (NPPC)
- National Iodine Deficiency Disorder Control Programme (NIDDCP)
- National Programme for Prevention & Management of Burn Injuries (NPPMBI)
- Rashtriya Kishor Swasthya Karyakram (RKSK)
- Rashtriya Bal Swasthya Karyakram (RBSK)
- Surakshit Matritva Aashwasan (SUMAN)

(State specific Programme to be entered)

Referral services:

Toll free number:

Details of nearest FRU……

Details of nearest District Hospital……

Details of nearest Tertiary care hospital ……

Patient Rights:

- Right to informed consent prior to specific treatments and digitalization of medical records
- Right to confidentiality and privacy during treatment
- Right to be treated with respect and dignity without any discrimination
- Timely release of dead body commensurate to legal protocols
- Right to emergency care and grievance redressal

Patient Responsibilities:

- Respect dignity of doctors and other hospital staff
- Never resort to violence
- Please refrain from causing any damage to public property
- Please do not cause inconvenience to other patients and staff
- Maintain queues and respect others, particularly the elderly, disabled, women & children
- Please do not spit on the floor/walls/ inside the campus
- Please cooperate to keep the facility clean and tidy. Use the dustbin
- Hospital is a no smoking zone and smoking is a punishable offence
- Please register your experience through Meri Aspataal

Visitor's Policy:

Visiting time: Morning: Evening:

- Only one person allowed to visit at a time *(Mention about pass system)*
- Respect visiting hours.

Complaints And Grievances:

- Any Patient/ Attendant can register their grievance through Grievance Redressal (GR) Helpdesk/ calling toll free number (….)/ online GR web portal (www.….)
- Every grievance will be duly acknowledged with an SMS and registration number for status tracking.
- We aim to settle your genuine complaints within (7) days of its receipt
- Suggestions/Complaints may also be put in the complaint boxes provided at every department.
- Contact details of the RTI Officer are displayed below.

GR Help Desk:

- Toll free number:
- Designated officer: (with Mobile & Email)
- Complaint Box

Funds:

- *RKS detail
- *Untied fund detail – Rs. 5,00,000/annum

Training* & Tele-Consultation Services:

- Tele-medicine, Tele-radiology
- Tele-conferencing – ECHO, ZOOM

Note: The details of the nodal person can be displayed based on the program requirements '' marked points can be edited according to the conditions/services provided in the respective facility.*
'@' Indicate amount, as applicable.

Note - This is a suggestive draft for CHC. The states can add or delete as per the services available at the facility.

ANNEXURE 2

LIST OF SERVICES AVAILABLE AT COMMUNITY HEALTH CENTRES

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
CLINICAL SERVICES											
EMERGENCY SERVICES											
1	**ACCIDENT AND EMERGENCY**										
1.1	Triage	E	-	E	-	E	-	E	-	E	-
1.2	Resuscitation	E	-	E	-	E	-	E	-	E	-
1.3	Stabilisation	E	-	E	-	E	-	E	-	E	-
1.4	Management and referral, as appropriate	E	-	E	-	E	-	E	-	E	-
1.5	Medico Legal Reporting	E	-	E	-	E	-	E	-	E	-
2	**CAPACITY TO MANAGE COMMON EMERGENCIES, INCLUDING BUT NOT LIMITED TO**										
2.1	RTA (including blast injuries)	E	-	E	-	E	-	E	-	E	-
2.2	Coma/ unconsciousness	E	-	E	-	E	-	E	-	E	-
2.3	Snake/dog Bite/other animal bites	E	-	E	-	E	-	E	-	E	-
2.4	Shock	E	-	E	-	E	-	E	-	E	-
2.5	Convulsions	E	-	E	-	E	-	E	-	E	-
2.6	Poisoning	E	-	E	-	E	-	E	-	E	-
2.7	Drowning	E	-	E	-	E	-	E	-	E	-
2.8	Burns	E	-	E	-	E	-	E	-	E	-
2.9	Septicemia	E	-	E	-	E	-	E	-	E	-
2.10	Dehydration	E	-	E	-	E	-	E	-	E	-
2.11	Myocardial Infarction	E	-	E	-	E	-	E	-	E	-
2.12	Acute respiratory conditions	E	-	E	-	E	-	E	-	E	-
2.13	Stroke	E	-	E	-	E	-	E	-	E	-
2.14	Meningoencephalitis	E	-	E	-	E	-	E	-	E	-
2.15	Dengue/cerebral malaria	E	-	E	-	E	-	E	-	E	-
2.16	Hemorrhage	E	-	E	-	E	-	E	-	E	-
2.17	Fractures	E	-	E	-	E	-	E	-	E	-
3	**PEDIATRIC EMERGENCIES INCLUDE**										
3.1	Dehydration	E	-	E	-	E	-	E	-	E	-
3.2	Pneumonia	E	-	E	-	E	-	E	-	E	-
3.3	Fever	E	-	E	-	E	-	E	-	E	-
3.4	Convulsions	E	-	E	-	E	-	E	-	E	-
3.5	Shock	E	-	E	-	E	-	E	-	E	-
Intensive Care and Operative services											
4	Operation Theatre (with NBCC)		-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
5	Labour room/LDR (with NBCC)	E	-	E	-	E	-	E	-	E	-
6	NBSU	E	-	E	-	E	-	E	-	E	-
7	Blood Storage		D	E	-	E	-	E	-	E	-
8	**COMMON SURGICAL PROCEDURES**										
8.1	Suturing of wounds	E	-	E	-	E	-	E	-	E	-
8.2	Incision and drainage of abscesses	E	-	E	-	E	-	E	-	E	-
8.3	Debridement of compound wounds	E	-	E	-	E	-	E	-	E	-
OPD services											
9	General medicine	E	-	E	-	E	-	E	-	E	-
10	General surgery	-	D	E	-	E	-	E	-	E	-
11	Obstetrics & Gynecology (including Family Planning)	-	D	E	-	E	-	E	-	E	-
12	Pediatrics	-	D	E	-	E	-	E	-	E	-
13	Ophthalmology	-	-	-	-	-	D	-	D	E	-
14	Orthopedics	-	-	-	-	-	D	-	D	E	-
15	Pathology/ Microbiology	-	-	-	D	E	-	E	-	E	-
16	ENT	-	-	-	-		D	-	D	-	D
17	Pre-Anesthetic Check Up	-	D	E	-	E	-	E	-	E	-
18	Family Medicine	-	D	-	D	-	D	-	D	-	D
19	Physiotherapy	E	-	E	-	E	-	E	-	E	-
20	PMR Services	-	-	-	-	-	-	-	-	-	D
21	Family Welfare Clinic	E	-	E	-	E	-	E	-	E	-
22	Counselling	E	-	E	-	E	-	E	-	E	-
23	Nutrition	E	-	E	-	E	-	E	-	E	-
24	Health & Wellness Services	E	-	E	-	E	-	E	-	E	-
25	Immunization Services	E	-	E	-	E	-	E	-	E	-
26	Dental	E	-	E	-	E	-	E	-	E	-
27	AYUSH	-	D	-	D	-	D	-	D	-	D
28	Eye – Refraction, Screening for Glaucoma/Cataract etc on daily basis) and cataract/ glaucoma (weekly basis)	E	--	E	-	E	-	E	-	E	-
29	NCD clinic (diagnosis, management, follow-up, and referral, as appropriate)	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
30	Cold chain services	E	-	E	-	E	-	E	-	E	-
31	Integrated Counseling and Testing services (HIV)	E	-	E	-	E	-	E	-	E	-
32	**INTEGRATED COUNSELLING SERVICES**										
	Maternal and child health (including Family Planning)	E	-	E	-	E	-	E	-	E	-
	Adolescent health	E	-	E	-	E	-	E	-	E	-
	Tobacco cessation	E	-	E	-	E	-	E	-	E	-
	Mental health	E	-	E	-	E	-	E	-	E	-
	Drug de-addiction	E	-	E	-	E	-	E	-	E	-
	Nutritional counseling (and early childhood development)	E	-	E	-	E	-	E	-	E	-
	Domestic violence, sexual violence etc.	E	-	E	-	E	-	E	-	E	-
	Health education and BCC	E	-	E	-	E	-	E	-	E	-
	Health education for prevention of RTIs/ STIs	E	-	E	-	E	-	E	-	E	-
33	**IPD services**										
	General ward- gender based	E	-	E	-	E	-	E	-	E	-
	Post-Operative ward	-	-	E		E	-	E	-	E	-
	Isolation room	-	D	-	D	-	D	-	D	-	D
	Maternity ward	E	-	E	-	E	-	E	-	E	-
34	**Referral services**										
	Assured referral services with transportation facilities	E	-	E	-	E	-	E	-	E	-
NATIONAL HEALTH PROGRAMMES (NHP)											
NHPs should be delivered through the CHCs. Integration with other existing programmes is vital to provide comprehensive services											
35	**MATERNAL HEALTH**										
	Minimum 4 ANC check-ups that include all the undermen-tioned services:	E	-	E	-	E	-	E	-	E	-
	Registration & associated services:										
	As some antenatal cases may directly register with CHC, the suggested schedule of antenatal visits is reproduced below.										

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	1st visit: Within 12 weeks—preferably as soon as pregnancy is suspected—for registration of pregnancy and first antenatal check-up.										
	2nd visit: Between 14 and 26 weeks										
	3rd visit: Between 28 and 34 weeks										
	4th visit: Between 36 weeks and term										
	24-hour delivery services including normal and assisted deliveries.										
	All referred cases of complications in pregnancy, labour, and post-natal period										
	Ensure postnatal care for 0 & 3rd day at the health facility both for the mother & newborn and referring to the ANM of the mother's area for ensuring 7th& 42nd day postnatal home visits.										
	Identification and Management of obstetric complications including PPH, Eclampsia, Sepsis etc. during PNC.										
	Provisions of Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakarm (JSSK) as per guidelines										
	Essential and Emergency Obstetric Care including surgical interventions (Caesarean Section) and other medical interventions	-	D	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
36	**NEWBORN CARE AND CHILD HEALTH**										
	Care and Resuscitation in the Newborn Corner in the Labour Room and Operation Theatre (where Caesarean Section takes place).	E	--	E	-	E	-	E	-	E	-
	Early initiation of breastfeeding within one hour of birth and support for expressing breast milk and using katori/ spoon for LBW/pre-terms										
	Newborn Stabilization Unit (NBSU) – 4-6 bedded for basic care and stabilization prior to referral, if needed										
	Counselling on Infant and Young Child Feeding as per IYCF guidelines. Routine and emergency care of sick children as per Facility based IMNCI strategy.										
	Full Immunization of infants and children against Vaccine Preventable Diseases and Vitamin-A prophylaxis Tracking of vaccination dropouts and left outs										
	Prevention and management of routine childhood diseases, infections, and anemia etc.										
	Kangaroo mother care for LBW babies										
	Management of Malnutrition cases										
37	**FAMILY PLANNING**										
	Full range of family planning services including IEC, counselling,	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	provision of Contraceptives, Non-Scalpel Vasectomy (NSV), Laparoscopic Sterilization Services and their follow up										
	Safe Abortion Services as per MTP act and Abortion care guidelines of MoHFW	-	D	E	-	E	-	E	-	E	-
	MTP Facility approved for 2nd trimester of pregnancy										
	Medical method of abortion	E	-	E	-	E	-	E	-	E	-
	MTP using manual vacuum aspiration (MVA) technique	E	-	E	-	E	-	E	-	E	-
38	**ADOLESCENT HEALTH CARE**										
	To be provided through adolescent friendly clinics Services should be comprehensive i.e., a judicious mix of promotive, preventive, curative, and referral services.	E	-	E	-	E	-	E	-	E	-
	Package of services										
	Information, education, and counselling on issues related to nutrition, SRH, mental health, gender-based violence, non-communicable diseases and substance use and appropriate referrals										
	Commodities: IFA Tablets, Tab Albendazole, sanitary napkins, contraceptives, other medicines (paracetamol, anti-spasmodic etc.) and immunization services.										

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	Management of common adolescent health problems, RTI/STI, anemia, menstrual problems, ANC for pregnant adolescents.										
	Screening for diabetes and hypertension and HIV testing and counselling										
	Referral services for ICTC, de-addiction centre, non-Communicable diseases clinics.										
	Outreach services by counsellors will be carried out at schools, colleges, youth clubs and in community at least twice a week to sensitise the adolescents, caregivers and influencers on various adolescent health issues and apprise them of various available adolescent friendly health services										
39	**SCHOOL HEALTH**										
	Screening, health care and referral:	E	-	E	-	E	-	E	-	E	-
	Screening of adolescents for 4 D's										
	Basic medicines for common ailments in young children.										
	Referral cards for priority services at District/Sub-District hospitals.										
	Immunization (Fixed day activity; coupled with education about the issues of Micronutrient (Vitamin A & IFA) management:										

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	Weekly supervised distribution of Iron-Folate tablets coupled with awareness raising	E									
	Administration of Vitamin-A										
	De-worming during National Deworming Day										
	Provision of sanitary napkins										
	Peer education interventions										
	Monitoring & Evaluation										
	Health Promoting Schools		-	E	-	E	-	E	-	E	-
	Counselling services										
	Regular practice of yoga, Physical education, health education										
	Peer leaders as health educators.										
	Adolescent health education-existing in few places										
	Linkages with the out of school children										
	Health clubs, Health cabinets										
	First Aid room/ corners or clinics										
40	**COMMUNICABLE DISEASES PROGRAMMES**										
	NTEP: Diagnostic services through the microscopy Centre at the CHCs and treatment services in line with NTEP guidelines	E	-	E	-	E	-	E	-	E	-
	HIV/AIDS Control Programme services to be provided at the CHC level include:										
	Integrated Counselling and Testing Centre (ICTC)										
	Blood Storage Centre										
	Sexually Transmitted Infection clinic										

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
41	**NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME**										
	Provide diagnostic/ linkages to diagnosis and treatment facilities for routine and complicated cases of Malaria, Filaria, Dengue, Japanese Encephalitis, and kala-azar in endemic zones	E	-	E	-	E	-	E	-	E	-
42	**NATIONAL LEPROSY ERADICATION PROGRAMME (NLEP)**										
	Diagnosis and treatment of cases and complications including reactions of leprosy along with counselling of patients on prevention of deformity and cases of uncomplicated ulcers	E	-	E	-	E	-	E	-	E	-
43	**NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS AND VISUAL IMPAIRMENT (NPCB&VI)**										
	The eye care services that should be made available at the CHC include:	E	-	E	-	E	-	E	-	E	-
	Vision Testing with Vision drum/Vision Charts.										
	Refraction										
	The early detection of visual impairment and their referral.										
	Awareness generation through appropriate IEC strategies and involving community for primary prevention and early detection of impaired vision and other eye conditions.										
44	**INTEGRATED DISEASE SURVEILLANCE PROJECT (IDSP)**										
	Under Integrated Disease Surveillance Project, CHC will function as peripheral surveillance unit and collate, analyse, and	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	report information to District Surveillance Unit on selected epidemic prone diseases. In outbreak situations, appropriate action will be initiated through Rapid Response Teams (RRT)										
45	**NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF DEAFNESS (NPPCD)**										
	The early detection of cases of hearing impairment, deafness, and referral.	E	-	E	-	E	-	E	-	E	-
	Provision of Basic Diagnosis and treatment services for common ear diseases.										
	Awareness generation through appropriate IEC strategies and greater participation/role of community in primary prevention and early detection of hearing impairment/ deafness										
46	**NATIONAL MENTAL HEALTH PROGRAMME (NMHP)**										
	Early identification, diagnosis, and treatment of common mental disorders (anxiety, depression, psychosis, schizophrenia, Manic Depressive Psychosis).	E	-	E	-	E	-	E	-	E	-
	IEC activities for prevention, removal of stigma and early detection of mental disorders.										
	Follow-up care for cases on treatment.										
	With short-term training, medical officers can deliver basic mental health care using limited number of drugs and provide appropriate referral service	-	D	-	D	-	D	-	D	-	D

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
47	**NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF CANCER, DIABETES, CARDIOVASCULAR DISEASES AND STROKE (NPCDCS)**										
	Cancer Control	E	-	E	-	E	-	E	-	E	-
	Facilities for early detection and referral of suspected cancer cases.										
	Screening/diagnosis for Cervical, Breast & Oral Cancers										
	Education about Breast Self-Examination and Oral Self Examination.										
	PAP smear for Cancer Cervix										
48	Diabetes, CVD and Stroke	E	-	E	-	E	-	E	-	E	-
	Promotion & Prevention:										
	Promotion of healthy dietary habits										
	Promotion of physical activity										
	Avoidance of tobacco and alcohol										
	Stress Management										
	Diagnosis, management, and follow-up of uncomplicated cases of Diabetes, CVD, and strokes										
	Treatment & Timely Referral of complicated cases of Diabetes Mellitus, Hypertension, IHD, CHF etc.										
49	**NATIONAL IODINE DEFICIENCY DISORDERS CONTROL PROGRAMME (NIDDCP)**										
	IEC activities in the form of posters, pamphlets, and Interpersonal communication to promote consumption of iodized salt, monitoring of iodized salt through salt testing kits.	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
50	**NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF FLUOROSIS (NPPCF)**										
	(*Essential in Fluorosis affected villages)	E	-	E	-	E	-	E	-	E	-
	Clinical examination and preliminary diagnostic assessment for cases of fluorosis if facilities are available										
	Monitoring of village/ community level										
	Fluorosis surveillance and IEC activities.										
	Referral Services										
	IEC activities in the form of posters, pamphlets, Interpersonal communication to prevent Fluorosis.										
51	**NATIONAL TOBACCO CONTROL PROGRAMME (NTCP)**										
	Health education and IEC activities regarding harmful effects of tobacco use and secondhand smoke.	E	-	E	-	E	-	E	-	E	-
	Promote quitting of tobacco in the community and offering brief advice to all smokers and tobacco users.										
	Making the premises of CHC tobacco free; display of mandatory signages										
	Setting up a Tobacco cessation Clinic, by training the counselor in tobacco cessation	E	-	E	-	E	-	E	-	E	-
52	**NATIONAL PROGRAMME FOR HEALTH CARE OF ELDERLY**										
	Medical rehabilitation services.	E	-	E	-	E	-	E	-	E	-
	Home visits to disabled/bed ridden clients by rehabilitation workers (on referral from PHC/ Sub-centre. Geriatric Clinic: twice a week).										

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
53	**PHYSICAL MEDICINE AND REHABILITATION (PMR)**										
	Primary prevention of Disabilities:	E	-	E	-	E	-	E	-	E	-
	Screening, early identification and detection										
	Counseling.										
	Issue of Disability Certificate by CHC doctors.										
	Community based Rehabilitation Services										
	Referral to higher centres and follow-up										
	Basic treatments like Exercise and Heat therapy, ROM exercises, cervical and Lumbar Traction	E	-	E	-	E	-	E	-	E	-
54	**NATIONAL ORAL HEALTH PROGRAMME**										
	Dental care and Dental Health education services as well as root canal treatment and filling/ extraction of routine and emergency cases.	E	-	E	-	E	-	E	-	E	-
	Oral Health education in collaboration with other activities e.g., Nutritional education, school health and adolescent health										
55	**NATIONAL PROGRAMME FOR PALLIATIVE CARE (NPPC)**										
	Health education/ awareness raising	E	-	E	-	E	-	E	-	E	-
	OPD services through trained manpower/ Consultation for all patients requiring pain management due to any cause	E	-	E	-	E	-	E	-	E	-
	Rehabilitation Services	E	-	E	-	E	-	E	-	E	-
	Referral for Higher centre	E	-	E	-	E	-	E	-	E	-
	Home based care	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
SUPPORT SERVICES											
56	Central Sterilization Supply Department (CSSD)/equipment sterilization services	E	-	E	-	E	-	E	-	E	-
57	Laundry services	E	-	E	-	E	-	E	-	E	-
58	Engineering Services: Electricity/water (Civil Engineering may be outsourced)	E	-	E	-	E	-	E	-	E	-
69	Generator: 5 kVA with POL for Immunization Cold Chain maintenance	E	-	E	-	E	-	E	-	E	-
60	Telephony: minimum two direct lines with intercom facility	E	-	E	-	E	-	E	-	E	-
61	Use of power through solar panels	-	D	-	D	-	D	-	D	-	D
OTHER SERVICES											
62	Disabled friendly services	E	-	E	-	E	-	E	-	E	-
63	Hospital Management Information System	E	-	E	-	E	-	E	-	E	-
	IT Section										
	Reporting										
	Feedback										
	Surveillance										
64	**Server Room**	E	-	E	-	E	-	E	-	E	-
65	Internal Communication system	E	-	E	-	E	-	E	-	E	-
	Intercom										
	Biometrics										
	Public addressal system										
66	Token Display system	E	-	E	-	E	-	E	-	E	-
67	Disability Certificates as defined in the PWD Act	-	D	E	-	E	-	E	-	E	-
68	Ambulance Services (referral)	E		E	-	E	-	E	-	E	-
69	Housekeeping Services	E	-	E	-	E	-	E	-	E	-
70	**Dietary Services**	E		E	-	E	-	E	-	E	
71	Security Services	E		E	-	E	-	E	-	E	-
72	Telemedicine and tele-radiology	E		E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
73	Skype, ZOOM etc. for consultation for a higher identified centre	-	D	-	D	-	D	-	D	-	D
74	Birth & Death registration/ certificate	E	-	E	-	E	-	E	-	E	-
TRAINING											
75	**Training and Orientation**										
	Orientation training of male and female health workers in various National Health Programmes including RCH, Adolescent health services and immunization	E	-	E	-	E	-	E	-	E	-
	Skill based training to ASHAs.	E	-	E	-	E	-	E	-	E	-
	Initial and periodic Training of allied health professionals in treatment of minor ailments.	E	-	E	-	E	-	E	-	E	-
	Periodic training of doctors and allied health professionals through Continuing Medical Education, conferences, skill development trainings.	E	-	E	-	E	-	E	-	E	-
	All health staff of CHC to be trained in IMEP.	E	-	E	-	E	-	E	-	E	-
	There should be provision of induction training for doctors, nursing, and allied health professionals	E	-	E	-	E	-	E	-	E	-
	Mechanism for ensuring quality assurance in trainings by Training feedback and Training effectiveness evaluation	E	-	E	-	E	-	E	-	E	-
	Trainings in minor repairs and maintenance of available equipment should be provided to the user.	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	Training of para medics in indenting, forecasting, inventory, and store management	E	-	E	-	E	-	E	-	E	-
	Development of protocols for equipment (operation, preventive, and breakdown maintenance)	E	-	E	-	E	-	E	-	E	-
ADMINISTRATIVE & MAINTENANCE SERVICES											
76	**Administrative and other services**										
77	System of assured grievance redressal	E	-	E	-	E	-	E	-	E	-
78	Store	E	-	E	-	E	-	E	-	E	-
	General										
	Medicine										
	Storage for temperature sensitive Medicines										
	Condemnation Multi purposes services maintenance Room										
79	Electric Supply (power generation and stabilization)	E	-	E	-	E	-	E	-	E	-
80	Standby power back up facility	E	-	E	-	E	-	E	-	E	-
81	Water supply (plumbing)	E	-	E	-	E	-	E	-	E	-
82	Pest control services	E	-	E	-	E	-	E	-	E	-
83	Ambience	E	-	E	-	E	-	E	-	E	-
84	Horticulture	E	-	E	-	E	-	E	-	E	-
85	Designated space for IEC	E	-	E	-	E	-	E	-	E	-
86	Signages	E	-	E	-	E	-	E	-	E	-
87	Bio waste material management with linkage with common biomedical waste treatment facility	E	-	E	-	E	-	E	-	E	-
88	Rainwater harvesting in facilities more than 500 square meter	-	D	-	D	-	D	-	D	-	D
89	Finance	E	-	E	-	E	-	E	-	E	-
90	Monitoring and Supervision	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
	Monitoring and supervision of activities of Sub Centre through regular meetings/ periodic visits, by LHV, Health Assistant Male and Medical Officer etc.										
	Monitoring of all National Health Programmes by Medical Officer with support of LHV, Health Assistant Male and Health educator.										
	Monitoring activities of ASHAs by LHV and ANM (in her Sub Centre area).										
	Health educator will monitor all IEC and BCC activities										
	Health Assistants Male and LHV should visit Sub Centres once a week. Vi. Checking for tracking of missed out and left out ANC/PNC, Vaccinations etc. during monitoring visits and quality parameters (including using Partograph, AMTSL, ENBC etc.) during delivery and post-delivery. Timely payment of JSY beneficiaries.										
	Timely payment of TA/DA to ASHAs.										
91	Medical records Room	E	-	E	-	E	-	E	-	E	-
92	Inventory Management	E	-	E	-	E	-	E	-	E	-
93	Epidemic Control and Disaster Preparedness	E	-	E	-	E	-	E	-	E	-
94	Nosocomial Disease reporting	E	-	E	-	E	-	E	-	E	-

S. No.	Services	Non-FRU – CHC		FRU – CH		FRU – CH		FRU – UCHC		FRU – UCHC	
		30 beds		30 beds		50 beds		50 beds		100 beds	
		E	D	E	D	E	D	E	D	E	D
95	Immunization of Health care workers against Tetanus, Typhoid and Hepatitis B.	E	-	E	-	E	-	E	-	E	-
96	Provision of round the clock Post exposure prophylaxis against HIV in cases of needle sticks injuries and maintenance of appropriate records	E	-	E	-	E	-	E	-	E	-
97	**Record of Vital Events and Reporting**	E	-	E	-	E	-	E	-	E	-
	Recording and reporting of Vital statistics including births and deaths.										
	Maintenance of all the relevant records concerning services provided in PHC										
98	**Clinical Governance**	E	-	E	-	E	-	E	-	E	-
	Incident reporting (including Maternal Death Surveillance and Response (MDSR); Child Death Review (CDR); Near miss reporting										
	Audits (including prescription audit)										

Note: The services mentioned under desirable are over and above the services mentioned as essential.

ANNEXURE 3

List of Service Areas at CHC/UCHC

Service Area	Non-FRU CHC	FRU CHC		FRU UCHC	
	30 beds	30 beds	50 beds	50 beds	100 beds
Emergency					
24*7 Emergency Care*	4 beds	4 beds	6 beds	6 beds	11 beds
Labour Room Complex					
NBSU	4 beds	4 beds	4 beds	4 beds	4 beds
Labour Delivery Recovery (LDR) Units	2	2	3	3	3
NBCC	1	1	1	1	1
IPD	30 Beds	30 Beds	50 Beds	50 Beds	100 Beds
NRC (10 Beds)	-	D	D	D	D
Operative Services					
Pre- Anaesthetic Check Up	D	E	E	E	E
OBGYN Surgery	D	E	E	E	E
Emergency Surgery					
General Surgery	D	E	E	E	E
Eye Surgery	-	-	-	-	E
Outpatient Services					
Medicine/Family Medicine	E	E	E	E	E
Surgery	D	E	E	E	E
Paediatrics	D	E	E	E	E
Obstetrics and Gynaecology	D	E	E	E	E
Family Medicine	D	D	D	D	D
Oral/Dental	E	E	E	E	E
Ophthalmology	-	-	D	D	E
Orthopedics	-	-	D	D	E
ENT	-	-	D	D	D
Pathology/Microbiology/Biochemistry	_	D	E	E	E
NCD	E	E	E	E	E
Counselling	E	E	E	E	E
Family Welfare Clinic	E	E	E	E	E
Nutrition	E	E	E	E	E
AYUSH	D	D	D	D	D
Health and Wellness services	E	E	E	E	E
Community Based Rehabilitation Services	E	E	E	E	E
Dressing Room	E	E	E	E	E

Service Area	Non-FRU CHC	FRU CHC		FRU UCHC	
	30 beds	30 beds	50 beds	50 beds	100 beds
Immunization	E	E	E	E	E
Physiotherapy	E	E	E	E	E
ART Services	E	E	E	E	E
PMR Services	-	-	-	-	D
In-patient Services					
Wards	3	3	3	3	3
Laboratory Services					
Number of Lab tests	97	97	97	97	97
Diagnostic Services					
USG with colour doppler (including for new borns)	D	E	E	E	E
Digital X-Ray	E	E	E	E	E
Radio-Visio-Graphy (RVG) – digital dental X-Ray	E	E	E	E	E
Support Services					
Blood Storage Unit	D	E	E	E	E
Medical Record room (MRD)	E	E	E	E	E
Registration Counter	E	E	E	E	E
Pharmacy	E	E	E	E	E
Store	E	E	E	E	E
Dietary	E	E	E	E	E
Effluent Treatment Plant (ETP)	E	E	E	E	E
Power Sub-Station/Transformer	E	E	E	E	E
Overhead water tank – two independent water sources. Separate tank for critical care areas (450 L per bed per day)	15300 L	16200 L	16200 L	16200 L	45000 L
Telemedicine	E	E	E	E	E
Administrative Area					
Administrative offices/areas	E	E	E	E	E
Birth and Death Registrations	E	E	E	E	E
Server Room	E	E	E	E	E
Housekeeping Room	E	E	E	E	E
Staff Room	E	E	E	E	E
Ambiance					
Digital Token System and Computerized Registration	E	E	E	E	E
Cafeteria	D	D	D	D	D

Service Area	Non-FRU CHC	FRU CHC		FRU UCHC	
	30 beds	30 beds	50 beds	50 beds	100 beds
ATM	D	D	D	D	D
Parking	E	E	E	E	E
Garden	E	E	E	E	E
GR Help Desk	-	-	-	-	D
Suggestion & feedback System	E	E	E	E	E
Water harvesting	E	E	E	E	E
Residential Area					
Staff Residences	E	E	E	E	E
Guest house linkages for patients and attendants	D	D	D	D	D
Other Area					
Ambulance (Linked Services)	E	E	E	E	E

Note: The services mentioned under desirable are over and above the services mentioned as essential.

Number of beds for 24x7 emergency care:

Non-FRU CHC (30 Beds): 4 beds (2 Red +2 Yellow)

FRU CHC (30 beds): 4 beds (2 Red +2 Yellow)

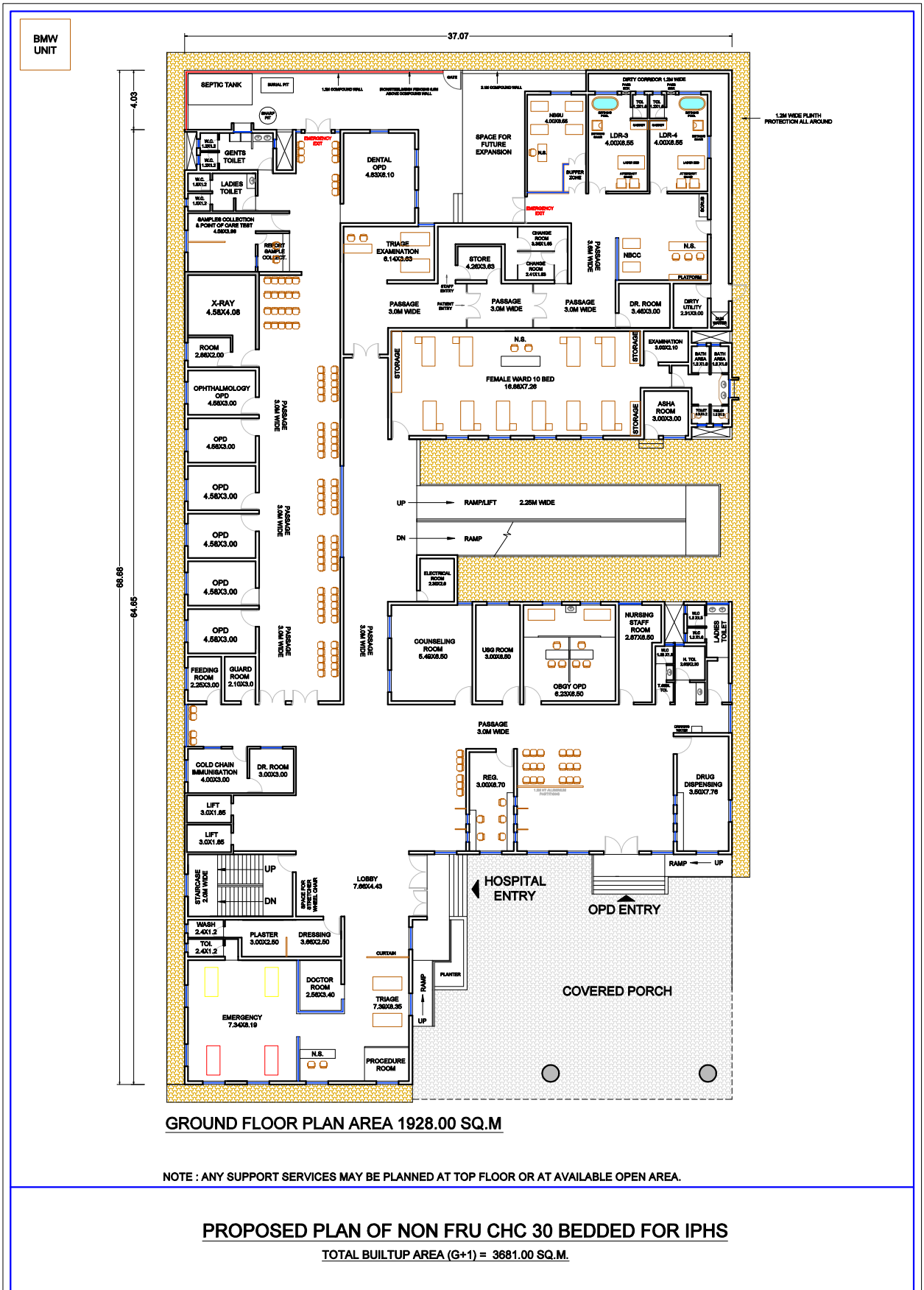
FRU CHC (50 beds): 6 beds (2 Red +2 Yellow +1 Isolation +1 Paediatrics)

FRU UCHC (50 beds): 6 beds (2 Red +2 Yellow +1 Isolation +1 Paediatrics)

FRU UCHC (50 beds): 11 beds (3 Red +5 Yellow +1 Isolation +2 Paediatrics)

ANNEXURE 4

Layout of 30 Bedded Non-FRU CHC

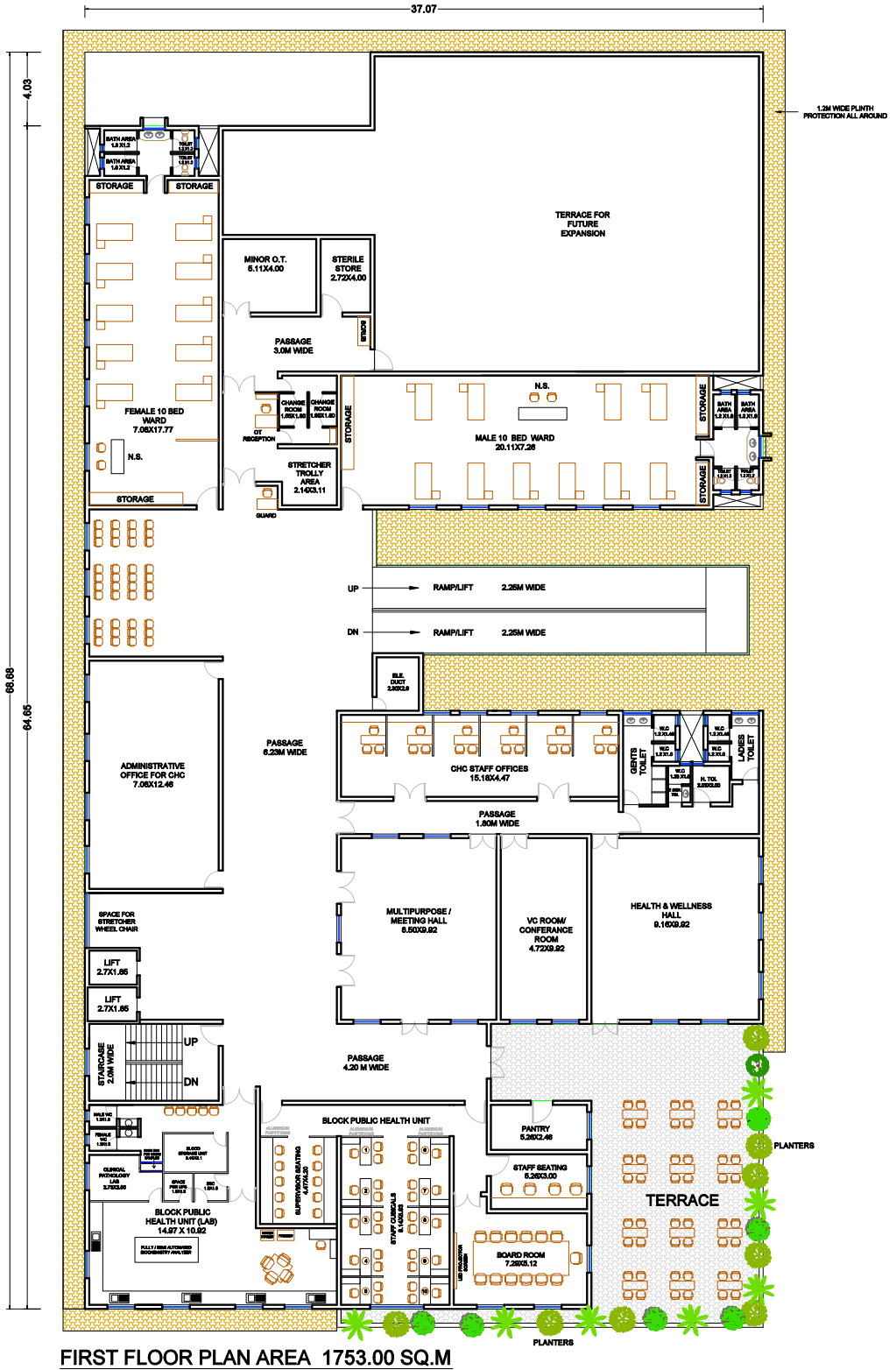


GROUND FLOOR PLAN AREA 1928.00 SQ.M

NOTE : ANY SUPPORT SERVICES MAY BE PLANNED AT TOP FLOOR OR AT AVAILABLE OPEN AREA.

PROPOSED PLAN OF NON FRU CHC 30 BEDDED FOR IPHS

TOTAL BUILTUP AREA (G+1) = 3681.00 SQ.M.



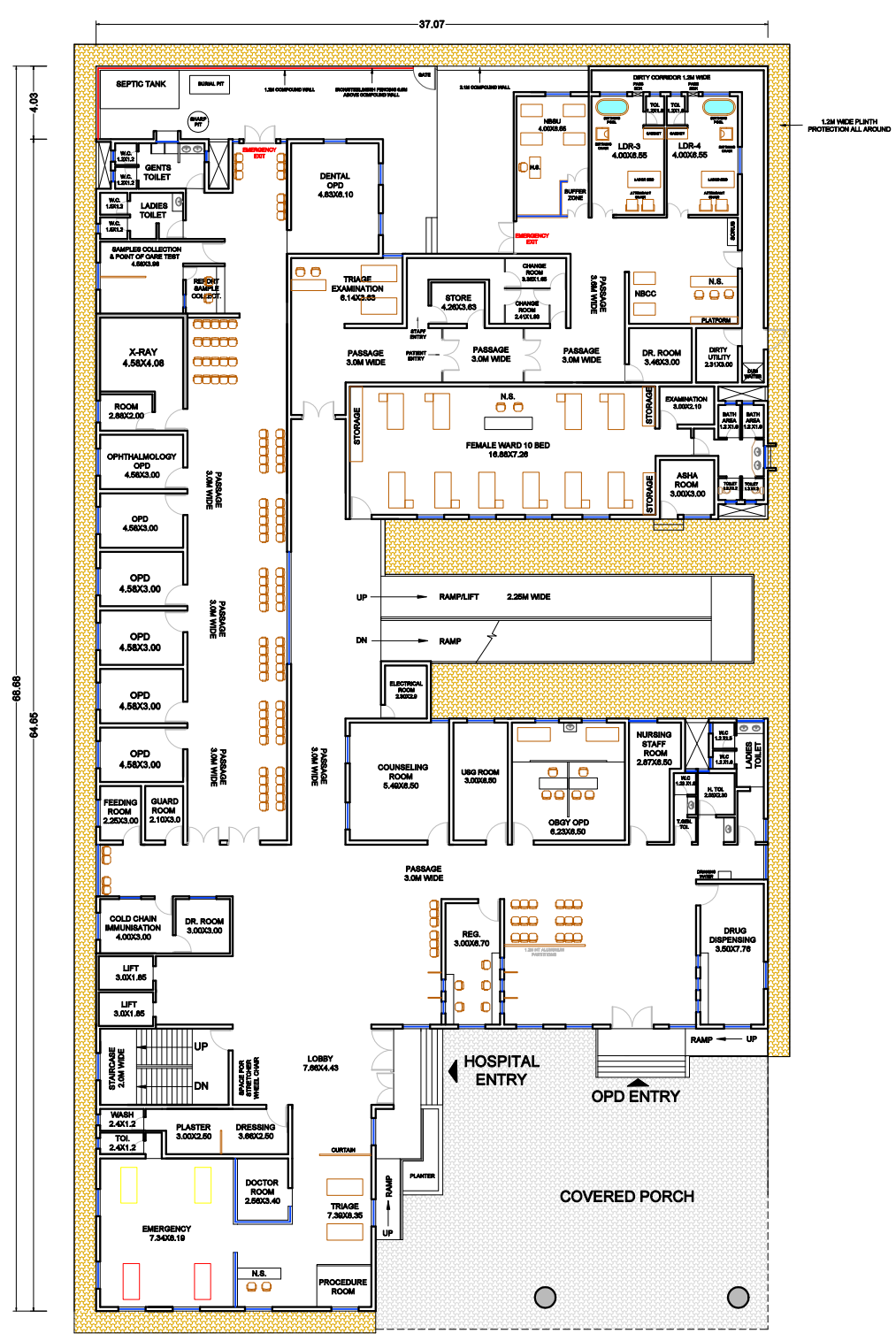
FIRST FLOOR PLAN AREA 1753.00 SQ.M

NOTE : ANY SUPPORT SERVICES MAY BE PLANNED AT TOP FLOOR OR AT AVAILABLE OPEN AREA.

PROPOSED PLAN OF NON FRU CHC 30 BEDDED FOR IPHS

TOTAL BUILTUP AREA (G+1) = 3681.00 SQ.M.

Layout of 30 Bedded FRU CHC

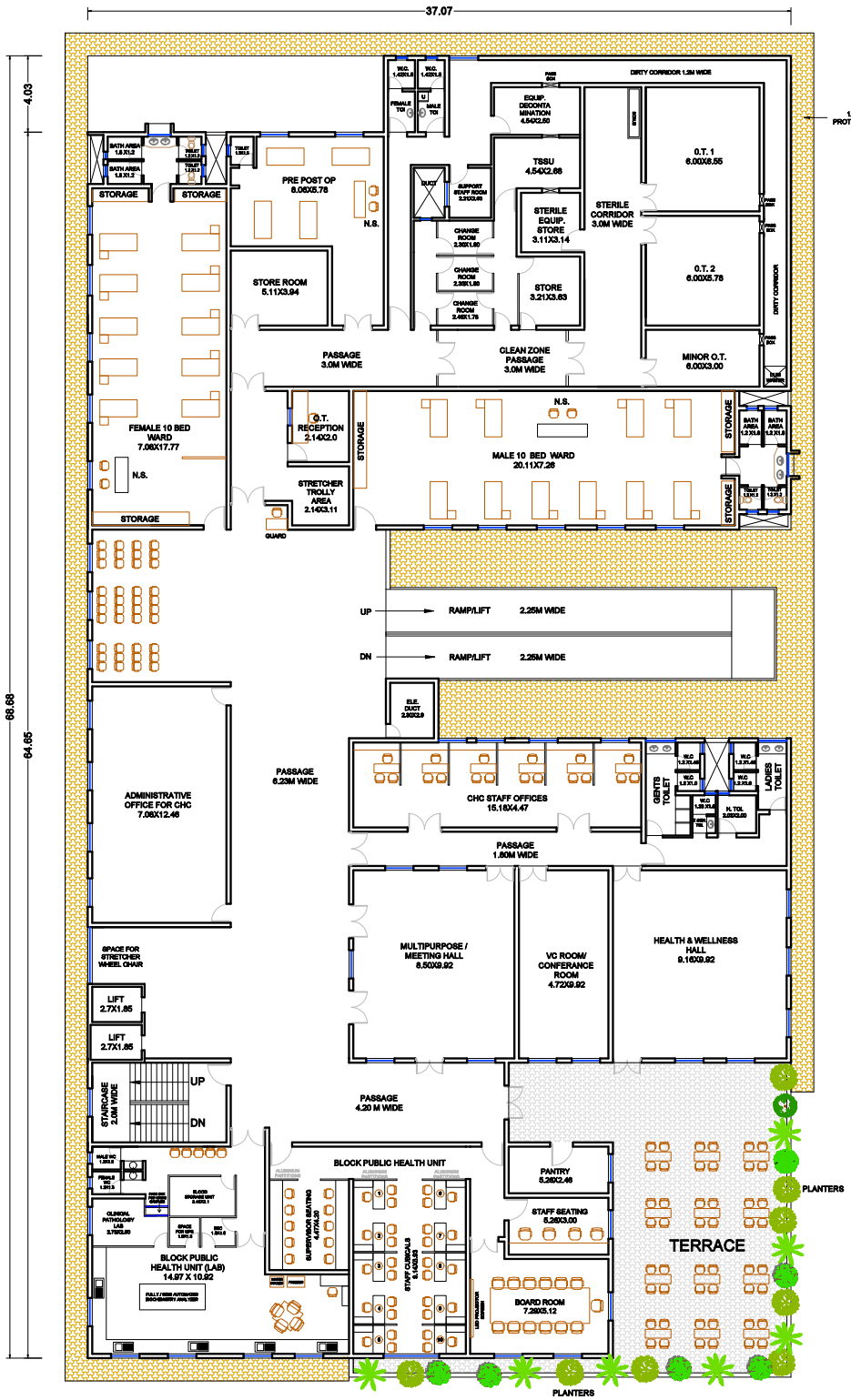


GROUND FLOOR PLAN AREA 1928.00 SQ.M

NOTE : ANY SUPPORT SERVICES MAY BE PLANNED AT TOP FLOOR OR AT AVAILABLE OPEN AREA.

PROPOSED PLAN OF CHC 30 BEDDED FOR IPHS

TOTAL BUILTUP AREA (G+1) = 4106.00 SQ.M.



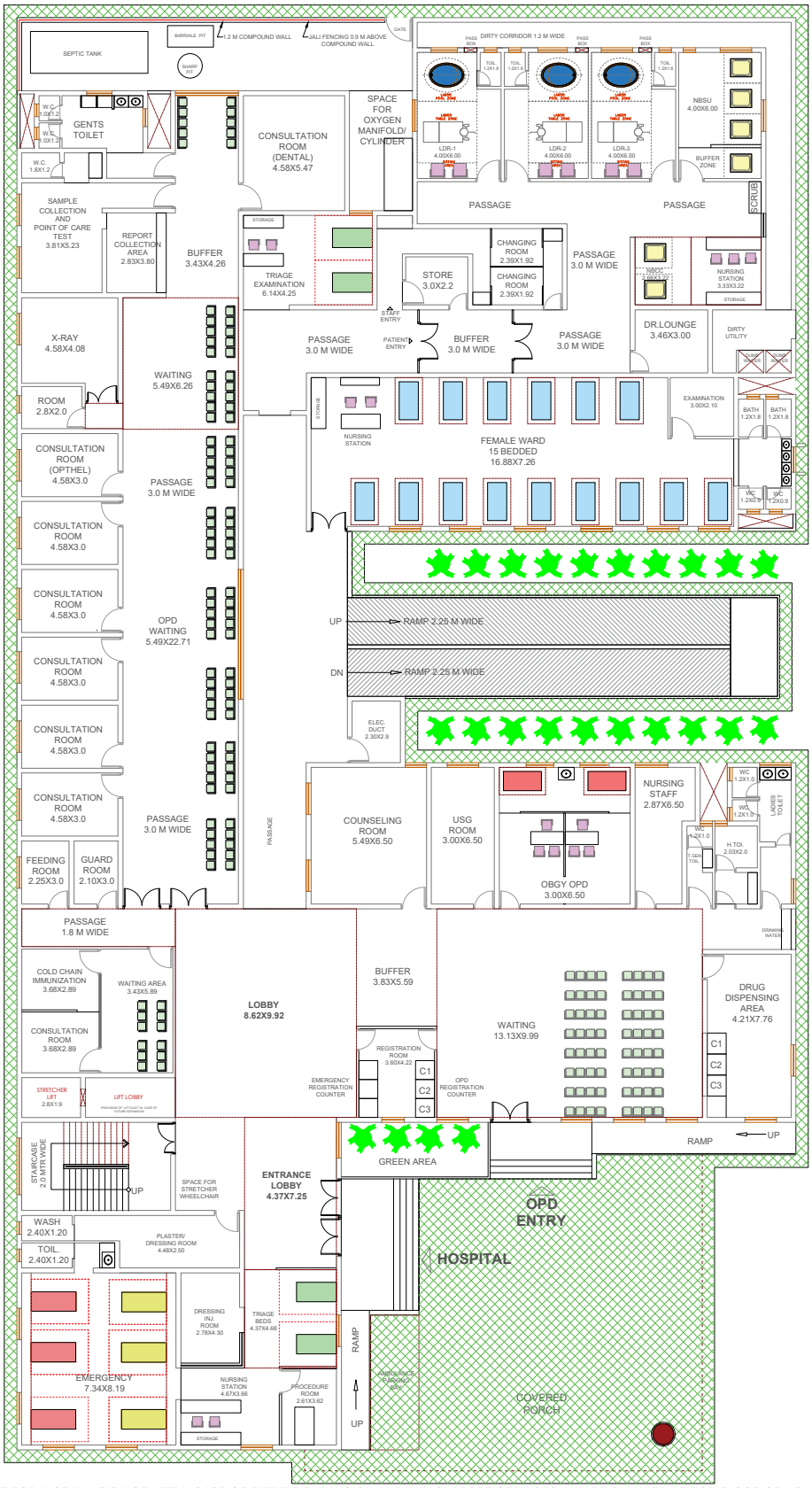
FIRST FLOOR PLAN AREA 2178.00 SQ.M

NOTE : ANY SUPPORT SERVICES MAY BE PLANNED AT TOP FLOOR OR AT AVAILABLE OPEN AREA.

PROPOSED PLAN OF CHC 30 BEDDED FOR IPHS

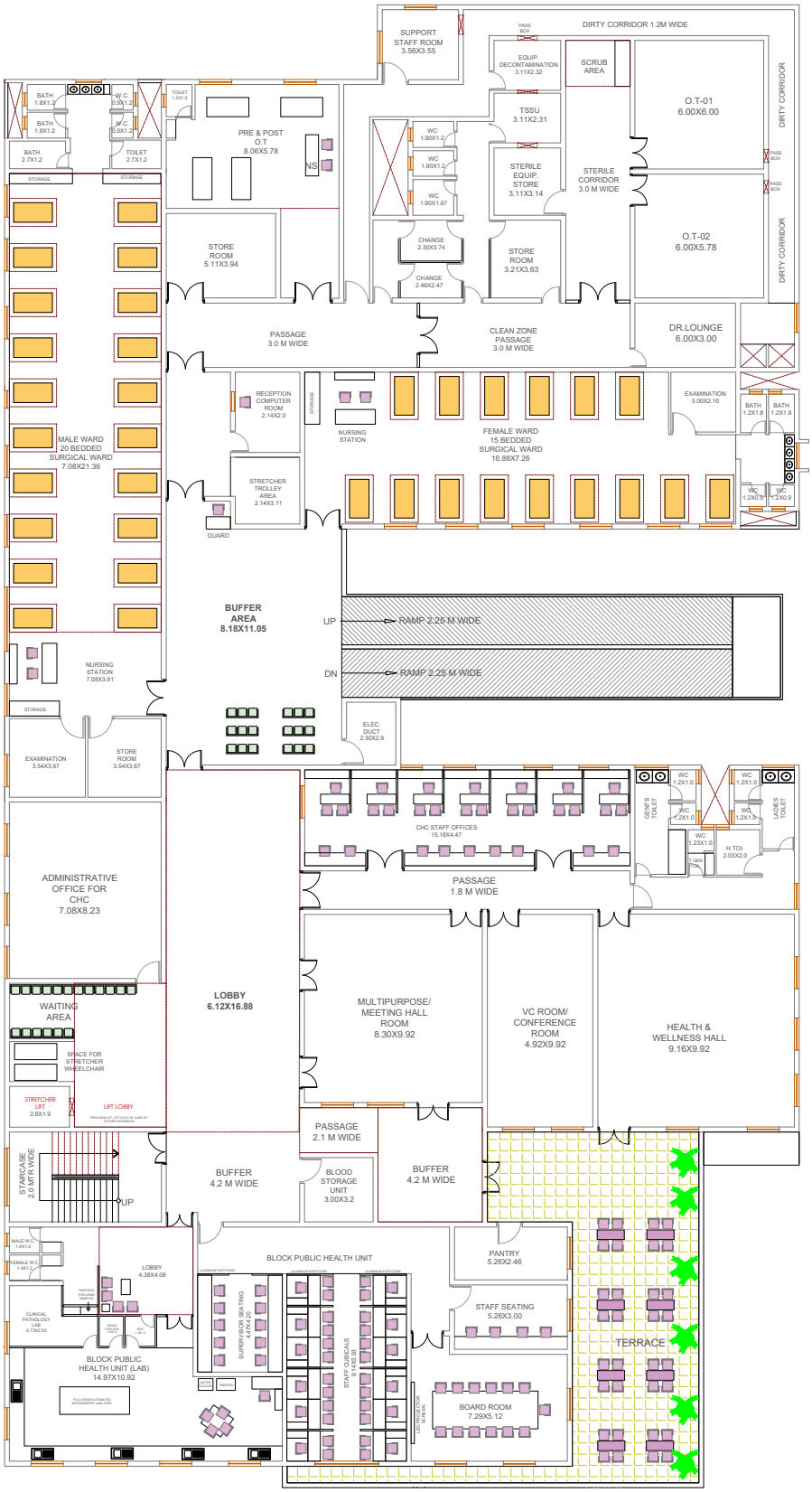
TOTAL BUILTUP AREA (G+1) = 4106.00 SQ.M.

Layout of 50 Bedded FRU CHC/UCHC



NOTE:
PROVISION OF LIFT DUCT FOR INSTALLATION OF LIFT INCASE OF FUTURE EXPANSION AND ANY SUPPORT SERVICES AMY BE PLANNED AT TOP FLOOR OR AT AVILABLE OPEN AREA.

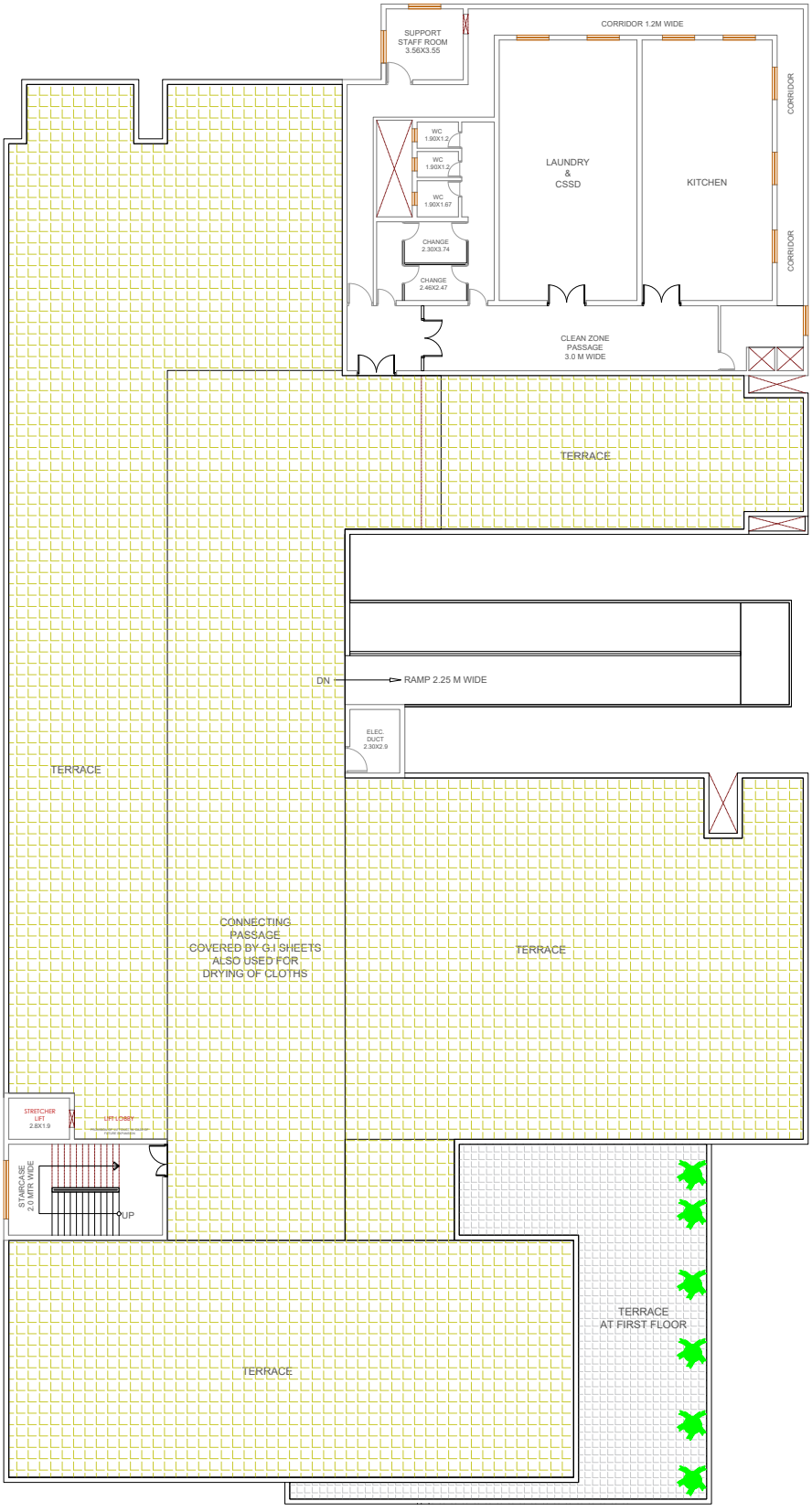
GROUND FLOOR PLAN	COVERED AREA-2250 SQM
PROPOSED PLAN OF CHC 50 BEDDED FOR IPHS	TOTAL BUILTUP AREA (G+2)=4750.00 SQMT



NOTE:
PROVISION OF LIFT DUCT FOR INSTALLATION OF LIFT INCASE OF FUTURE EXPANSION AND ANY SUPPORT SERVICES AMY BE PLANNED AT TOP FLOOR OR AT AVILABLE OPEN AREA.

FIRST FLOOR PLAN | **COVERED AREA-2145 SQM**

PROPOSED PLAN OF CHC 50 BEDDED FOR IPHS

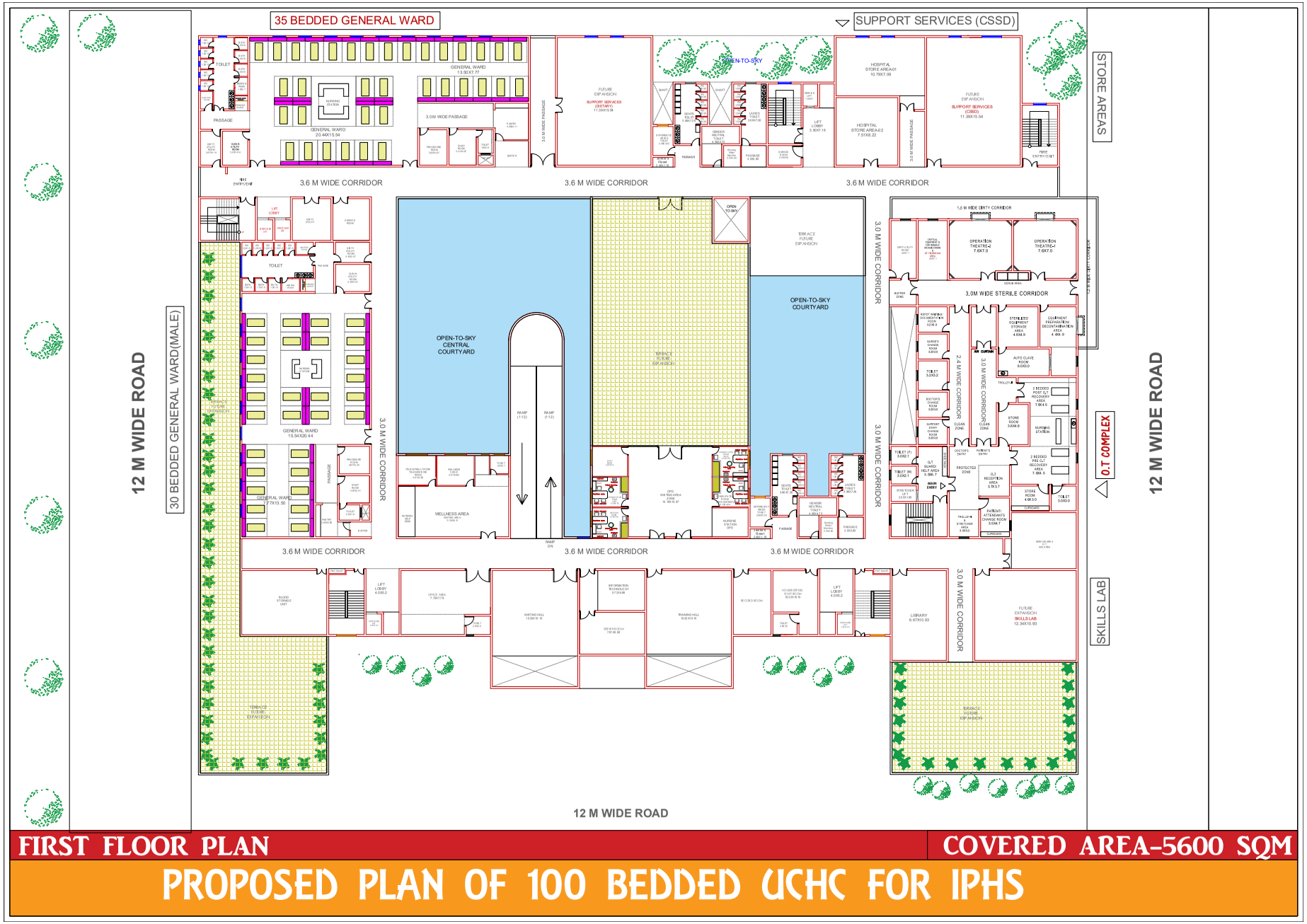


NOTE:
PROVISION OF LIFT DUCT FOR INSTALLATION OF LIFT INCASE OF FUTURE EXPANSION AND ANY SUPPORT SERVICES AMY BE PLANNED AT TOP FLOOR OR AT AVILABLE OPEN AREA.

SECOND FLOOR PLAN | **COVERED AREA-355 SQM**

PROPOSED PLAN OF CHC 50 BEDDED FOR IPHS

Layout of 100 Bedded FRU UCHC



FIRST FLOOR PLAN | COVERED AREA-5600 SQM

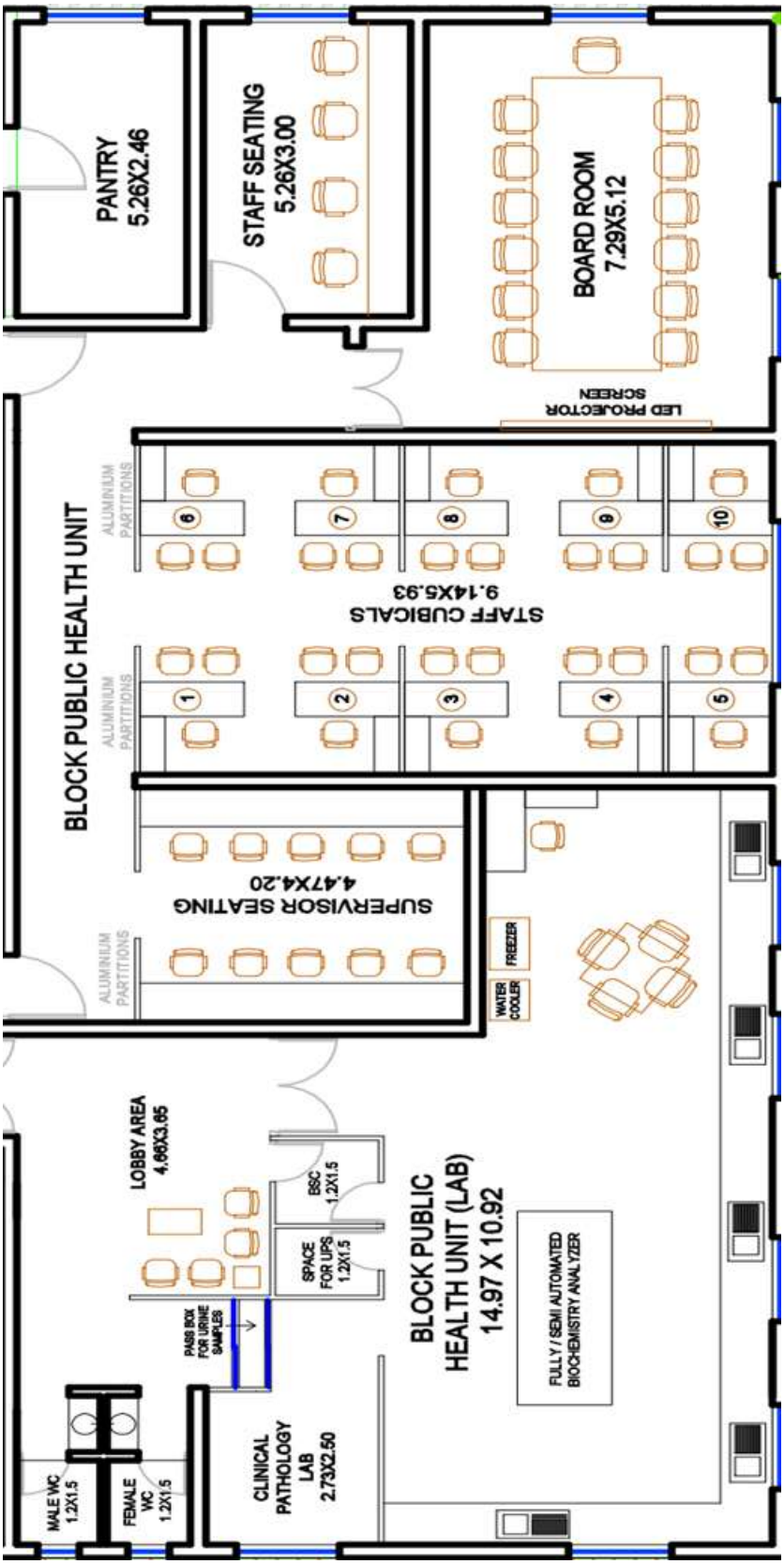
PROPOSED PLAN OF 100 BEDDED UCHC FOR IPHS


COMMUNITY HEALTH CENTER (CHC)
COMMUNITY HEALTH CENTER (CHC)


COMMUNITY HEALTH CENTER (CHC)


COMMUNITY HEALTH CENTER (CHC)
COMMUNITY HEALTH CENTER (CHC)

Layout of Block Public Health Unit



The detailed layout plan for CHCs with varying bed strength can be accessed through the link provided: https://nhsrcindia.org/IPHS2022

ANNEXURE 5

Disaster Management & Preparedness

Fire safety Norms

Provisions laid down in National building code 2016 (4.5.2 - sub division C-1) are the minimum requirements for a reasonable degree of safety from fire emergencies in hospitals, such that the probability of injury and loss of life from the effects of fire are reduced. All healthcare facilities should be so designed, constructed, maintained, and operated as to minimize the possibility of a Fire emergency requiring the evacuation of occupants, as safety of hospital occupants cannot be assured adequately by depending on evacuation alone. Hence measures shall be taken to limit the development and spread of a fire by providing appropriate arrangements within the hospital through adequate staffing & careful development of operative and maintenance procedures consisting of:

(1) Design and Construction.

(2) Provision of Detection, Alarm and Fire Extinguishment.

(3) Fire Prevention

(4) Planning and Training programs for Isolation of Fire; and,

(5) Transfer of occupants to a place of ***comparative safety*** or evacuation of the occupants to achieve ***ultimate safety***.

Expected Levels of Fire Safety in Hospitals

Hospitals shall provision for two levels of safety within their premises:

(1) ***Comparative Safety:*** which is protection against heat and smoke within the hospital premises, where removal of the occupants outside the premises is not feasible and/or possible. Comparative Safety may be achieved through:

(a) Compartmentation (b) Fire Resistant wall integrated in the Flooring (c) Fire Resistant Door of approved rating (d) Corridor, Staircase (e) Pressurized Shaft or naturally ventilated stair balconies (f) Refuge Area (g) Independent Ventilation system(h) Fire Dampers (i) Automatic Sprinkler System (j) Automatic Detection System (k) Manual Call Point (l) First Aid (m) Fire Fighting Appliances (n) Fire Alarm System (o) Alternate Power Supply (p) Public Address System (q) Signage (r) Fire Exit Drills and orders

(2) ***Ultimate Safety:*** which is the complete removal of the occupants from the affected area to an assembly point outside the hospital building. Ultimate Safety may be achieved through:

(a) Compartmentation (b) Fire Resistant Door of approved rating (c) Protected Lobby, Corridor, Staircase and Shaft (d) Public Address System (e) Signage (f) Fire Drills and orders

Open space

(1) Hospitals shall make provisions for sufficient open space in and around the hospital building to facilitate the free movement of patients and emergency/fire vehicles.

(2) These open spaces shall be kept free of obstructions and shall be motorable.

(3) Adequate passageway& clearance for fire fighting vehicles to enter the hospital premises shall be provided.

(4) The width of such entrances shall not be less than 4.5 meters with clear head room not less than 5 meters.

(5) The width of the access road shall be a minimum of 6 meters.

(6) A turning radius of 9 meters shall be provided for fire tender movement.

(7) The covering slab of storage/static water tank shall be able to withstand the total vehicular load of 45 tone equally divided as a four-point load (if the slab forms a part of path/driveway).

(8) The open space around the building shall not be used for parking and/or any other purpose.

(9) The Setback area shall be a minimum 4.5 meters.

(10) The width of the main street on which the hospital building abuts shall not be less than 12 mtrs & when one end of that street shall join another street, the street shall not be less than 12 meter wide.

(11) The roads shall not be terminated in dead ends.

Instructions for Fire Safety for Hospital Staff Instructions for Personal Safety

All Hospital Staff should know:

(1) The location of MOEFA push button fire alarm boxes. They should read the operating instructions.

(2) Location of the fire extinguishers, hose reel, etc. provided on their respective floors.

(3) The nearest exit from their work area,

(4) heir assembly point.

Matters to be reported to the Fire officer

(1) If any exit door/route is obstructed by loose materials, goods, boxes, etc.

(2) If any staircase door, lift lobby door does not close automatically, or does not close completely.

(3) If any push button fire alarm point or fire extinguisher is obstructed, damaged or apparently out of order.

Instructions for Fire Incidents

During any fire incident in the hospital premises, staff should:

(1) Break the glass of the nearest fire alarm (if they are the first ones to discover the fire)

(2) Attack the fire with fire extinguishers/hose reel provided on the floor

Clean electricity

(1) Two nos. of earthling should be there at each electrical installation. Copper plate earthing should be preferred.

(2) Provision of surge protection/suppressor should be there. Surge suppressors are rated according to size of voltage spike they can handle, so only units of high enough joules rating to protect the equipment should be used.

(3) Load calculation should be proper, accordingly the distribution, electrical switchgear rating, circuitry, cabling, and electrical installation should be there.

(4) The size of cabling and wiring should be about 1.5 times or more to the actual electrical load calculated.

(5) Adequate powers back up with another source such as DG, Photovoltaic etc. should be there in synchronization with the first source.

(6) Some places which are very important, provision of uninterrupted power supply should be there.

(7) Phase sequence should be proper as for motorized load.

(8) Load monitoring should be there. to avoid any overloading

(9) A lot of motorized as well as semiconductor material devices are there hence provision of power factor improvement should be there.

(10) All the Connection and joint should be tight with proper size of thimbling.

(11) Balancing of electrical load should be proper and monitored via measuring devices.

(12) Suitable place should be selected for electrical installation.

(13) Sensitive equipment should be provided with proper rating UPS for extra safety against disturbances as voltage spike and noise.

(14) The Electrical Switch Room shall be housed in a dedicated room/cupboard located on the ground floor and in association with an external wall and shall have internal access. The room shall be located so that it does not present difficulties for services distribution from adjoining spaces or rooms, and it shall be located to provide for economic distribution of services. The main switchboard shall be of metal clad cubicle design to approved standards and regulations. Each switchgear assembly shall have sufficient spare capacity. Electronic surge protection shall be provided on the incoming mains.

Earthquake Safety Provisions

All New hospital buildings or hospital buildings being retrofitted in seismic zone IV and V, and hospital buildings in wind zones with basic wind speed 42 m/s or more, shall be instrumented with proper mechanism prescribed in NBC.

Safer and functional Hospital: - One of the main concerns regarding the safety of hospitals is that hospital structures (i.e., the buildings) are themselves vulnerable to collapse in the face of extreme forces (such as those experienced during earthquakes). Therefore, to ensure the safety of hospitals and achieve the goal of 'safer and functional hospitals', mitigation measures (as presented in NBC) need to be undertaken in a programmatic manner by the Ministry of Health on an urgent basis.

Post-Earthquake Assessment of Hospital Structures

Hospital buildings shall be inspected by competent licensed engineers after every damaging earthquake to document damages (if any) to Structural element (SEs) and non-structural element (NSE)s of the buildings, along with recommendations for detailed study and suitable retrofitting as found necessary.

ANNEXURE 6

List of Human Resource for Health at CHC/UCHC

Staff	Non-FRU CHC		FRU CHC		FRU CHC		FRU- UCHC		FRU- UCHC	
	30 Beds		30 Beds		50 Beds		50 Beds		100 Beds	
	E	D	E	D	E	D	E	D	E	D
Administrative staff										
Nursing In charge (Administrative cum clinical staff)	1	-	1	-	1	-	1	-	1	-
Hospital Manager	-	1	1	-	1	-	1	-	1	-
Health Information Management Professional/Medical Record Analyst/ Medical Record Assistant	-	1	1	-	1	-	1	-	1	1
Accountant	1	-	1	-	1	-	1	-	1	-
Data Entry Operator/ statistical assistant**	3	1	4	1	4	1	4	1	4	2
Sanitary Inspector	1	-	1	-	1	-	1	-	1	-
Registration Clerk	1		1	-	1	1	1	1	2	1
Specialists and Medical Officers										
Physician/Family Medicine Specialist	1	1	1	1	1	1	1	1	1	1
Surgeon	-	1	1		1	-	1	-	1	-
Obstetrician & Gynecologist	-	1	1		1	-	1	-	1	-
Pediatrician	-	1	1		1	-	1	-	1	-
Anesthesiologist	-	1	1		1	-	1	-	1	-
Ophthalmologist	-	-	-	-	-	1	-	1	1	-
Orthopaedician	-	-	-	-	-	1	-	1	1	-
ENT	-	-	-	-	-	1	-	1	-	1
Microbiologist/ Pathologist/ Biochemist	-	-	-	1	1	-	1	-	1	-
PMR Specialist	-	-	-	-	-	-	-	-	-	1
GDMO*	3	1	6	2	6	2	6	2	9	3
MO AYUSH	-	1	-	1	-	1	-	1	-	1
MO Dental	1	-	1	-	1	-	1	-	1	-
Allied Health Professionals										
Clinical Psychologist or Psychiatrist Social worker	1	-	1	-	1	-	1	-	1	-
Dietitian	-	1	-	1	-	1	-	1	1	-
Social Worker/ Community Based Rehabilitation Worker	-	1	1	-	1	-	1	-	1	-
Counselor***	3	-	3	-	3	-	3	-	3	-
Physiotherapist	1	-	1	-	1	-	1	-	1	-

Staff	Non-FRU CHC		FRU CHC		FRU CHC		FRU- UCHC		FRU- UCHC	
	30 Beds		30 Beds		50 Beds		50 Beds		100 Beds	
	E	D	E	D	E	D	E	D	E	D
Other Allied Health Professionals										
Medical Laboratory Technologist/Lab technician****	4	-	5	2	5	2	5	2	6	2
OT technologist/ OT technician	-	1	1	1	2	-	2	-	2	1
Radiology and Imaging Technologist/ Radiology technician	1	1	1	1	1	1	1	1	2	1
ECG Technologist/ ECG Technician	1	-	1	-	1	-	1	-	1	1
TSSU Assistant	-	2	2	-	2	-	2	-	2	1
Dental Assistant	1	-	1	-	1	-	1	-	1	-
Optometrist/ Opthamic assistant/ Vision technician	1	-	1	-	1	-	1	-	1	-
Cold chain/Vaccine logistic Assistant	1	-	1	-	1	-	1	-	1	-
Pharmacists										
Pharmacist (Allopathic)	1	-	2	-	2	-	2	-	2	-
Pharmacist (AYUSH)	-	1	-	1	-	1	-	1	-	1
Storekeeper/Store In charge	1	-	-	1	-	1	-	1	1	1
Sanitation staff										
OT #	-	3	3	-	3	-	3	-	3	-
LDR									3	-
Floor including, blood storage unit, OPD, wards, kitchen utensils/premises and other areas	2	_	2	-	3	-	3	-	6	-
Outer Premises	2	-	2	-	2	-	2	-	2	-
Other Staff										
Dresser	1	1	1	1	2	1	2	1	3	-

Staff Nurses

Staff Nurses	Nurse: Bed ratio	Non-FRU CHC	FRU CHC	FRU CHC	FRU-UCHC	FRU-UCHC
		30 Beds	30 Beds	50 Beds	50 Beds	100 Beds
IPD	1:6	15	15	24	24	48
NBSU	1:3	3	3	3	3	3
NRC@ *(Desirable)*	1 per shift	-	3	3	3	3
Emergency	1 per shift	3	3	6	6	9
OT	*2 nurses in each OT for each shift + 2 Nurse in elective OT for one shift +1 Nursing I/C + 2 nurses for pre & post Operative areas*	-	11	11	11	13
LDR	*1 Nurse/Midwife for 2 LDRs +1 Neonatal Nurse for 4 LDRs*	6	6	9	9	9
OPD	-	2	5	5	5	10

**GDMOs:*

Non-FRU CHC (30 Bedded): 3 (1 for Emergency, OPD and IPD in each shift)

FRU CHC (30 Bedded): 6 (1 in Emergency & OPD and 1 in IPD in every shift for three shifts)

FRU CHC (50 Bedded): 6 (1 in Emergency & OPD and 1 in IPD in every shift for three shifts)

FRU UCHC (50 Bedded): 6 (1 in Emergency & OPD and 1 in IPD in every shift for three shifts)

FRU UCHC (100 Bedded): 9 (1 in Emergency & OPD and 2 in IPD in every shift for three shifts)

*** Data Entry Operator: Data Entry and other IT related activities*

**** Counsellor: RMNCHA–1, NTEP- 1 and NCD- 1 (at least two should be female)*

***** Lab Technician:*

Non-FRU CHC (30 Bedded): 4 (1 in each shift and one additional in morning shift)

FRU CHC (30 Bedded): 5 (1 in each shift and one additional in morning & evening shift)

FRU CHC (50 Bedded): 5 (1 in each shift and one additional in morning & evening shift)

FRU UCHC (50 Bedded): 5 (1 in each shift and one additional in morning & evening shift)

FRU UCHC (100 Bedded: 6 (2 in in each shift for three shifts)

@ NRC is a desirable service for CHC FRU and onwards, so the total Staff Nurse required does not include the staff nurse in NRC, However the desired number are indicated in the table.

Note:

1. The number of HR indicated as desirable is over and above the HR indicated as essential.

2. All the HR indicated under the support staff is to be only hired in-house, if the related services are not outsourced.

3. Meaning thereby, for outsourced services, the HR is to be provided by the outsourcing agency.

ANNEXURE 7

Roles & Responsibilities of HRH at Non-FRU CHC/FRU CHC/FRU-UCHC

General Physician

- Provide quality OPD and IPD services.
- Prescribe and administer medication, therapy, and other specialized medical care to treat or prevent illness, disease, or injury.
- Management of all emergencies.
- Management of lifestyle diseases including Hypertension, Diabetes, Bronchial asthma, Obesity etc. and treat chronic ailments of immune disorders like Arthritis and other multisystem diseases, metabolic diseases, hematological or blood-related aberrations.
- Follow standard operating procedures/clinical protocols, evidence-based practice, rational prescription of medication while treating the patient.
- The management of special cases referred to her/him; providing curative prescription/procedures/ surgeries; based on need, emergency and availability of resources.
- Refer the patient to other specialist/practitioners when necessary.
- Attend and treat all medico-legal cases.
- Keeping himself/herself up to date with recent medical developments, new drugs, treatments and medications, including complementary medicine.
- Maintaining the highest standards of ethical practices by adhering to the code of medical ethics.
- Following the Acts, Rules, Regulations made by the Central/State Governments or local administrative bodies or any other relevant act relating to the protection and promotion of public health.
- Provide Teaching/Training/Capacity building to doctors and other healthcare staff, as and when required.
- Participate in community outreach programmes and in National Health Programmes.
- Ensure his/her attendance and availability at the Hospital/Health Centre, during prescribed working hours, as well as during emergency duty hours, as ordered.
- He/she must also ensure availability to the hospital over the residential landline/mobile, whenever necessary.
- Monitor the patient progress or response to treatments and ensure records of the same are maintained by the Superintendent/Officer-in-charge of the Hospital/Health Centre.
- Ensure that sick patients under her/his care are properly treated and cared for in every way.
- She/he must resolve observed deficiency (if any) in the patient care immediately or report it in writing, to the officers-in-charge.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- Provide supportive supervision to nursing staff and delegates tasks appropriately.
- Comply to the orders of the Superintendent/Officer-in-charge, on all matters connected with the patient and management of the Hospital/Health Centre..

Obstetrics & Gynaecology Specialist

- Provide quality OPD, IPD and OT services related to Obstetrics & Gynaecology.
- Management of normal and complicated deliveries.
- Provision of ultrasonography services, in case of the specialist, is trained in ultrasound.
- Counselling and provision of family planning services and performing family planning operations (conventional and laparoscopic).
- Management of common neonatal problems.
- Provision of services regarding RTI/STI and infertility.
- Perform duties regarding MTP/MVA services and provision of safe abortion services.
- Conducting Maternal Death Review in the institution as FB-MDSR.
- Management of Medico-Legal Cases (Rape, Sexual Assault).
- Follow standard operating procedures/clinical protocols, evidence-based practice, rational prescription of medication while treating the patient.
- Collect, record, and maintain patient's information, such as medical history, reports, and examination results, from patients, family members, or other medical professionals.
- He/she shall be responsible for all the special cases referred to her/him; providing curative prescription/procedures/surgeries; based on need, emergency and availability of resources.
- Refer the patient to other specialist/practitioners when necessary.
- Keeping himself/herself up to date with recent medical developments, new drugs, treatments and medications, including complementary medicine.
- Maintaining the highest standards of ethical practices by adhering to the code of medical ethics.
- Following the Acts, Rules, Regulations made by the Central/State Governments or local administrative bodies or any other relevant act relating to the protection and promotion of public health.
- Participate in community outreach programmes (e.g. anaemia prevention, pulse polio, save the girl child, adolescent and school health, etc.) throughout the year.
- Ensure his/her attendance and availability at the Hospital/Health Centre, during prescribed working hours, as well as during emergency duty hours, as ordered.
- He/she must also ensure availability to the hospital over the residential landline/mobile, whenever necessary.
- Monitor the patient progress or response to treatments and to ensure records of the same as maintained by the Superintendent/Officer-in-charge of the Hospital/Health Centre.
- Ensure that sick patients under her/his care are properly treated and cared for in every way.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- Provide supportive supervision to nurses and GDMOs tasks appropriately.
- Implement orders of the Superintendent/Officer-in-charge, on all matters connected with the patient and management of the Hospital/Health Centre.
- Any additional responsibility, as assigned by the authority.

Paediatrician

- Provide paediatric OPD and IPD services.
- Attend all paediatric emergencies.

- Examine infants, adolescents, and young adults to evaluate their mental and physical growth and development. Also, Plan and execute medical care programs for this.
- Attend all high-risk deliveries, caesareans and attend to all neonatal emergencies.
- Management of paediatric Indoor patient department, Sick New-born Care unit (SNCU)/New-born stabilization Unit (NBSU) and Nutritional Rehabilitation Centre (NRC)/CMTC (Child Malnutrition Training Centre) in the district.
- Review of child Death in FB-MDSR.
- Follow standard operating procedures/clinical protocols, evidence-based practice, rational prescription of medication while treating the patient.
- Collect, record, and maintain patient's information, such as medical history, reports, and examination results, from patients, family members, or other medical professionals.
- He/she shall be responsible for all the special cases referred to her/him; providing curative prescription/procedures/surgeries; based on need, emergency and availability of resources.
- Refer the patient to other specialist/practitioners when necessary.
- Attend and treat all medico-legal cases
- Keeping himself/herself up to date with recent medical developments, new drugs, treatments and medications, including complementary medicine.
- Maintaining the highest standards of ethical practices by adhering to the code of medical ethics.
- Following the Acts, Rules, Regulations made by the Central/State Governments or local administrative bodies or any other relevant act relating to the protection and promotion of public health.
- Provide Teaching/Training/Capacity building to GDMOs and other healthcare staff, as and when required.
- Monitor the paediatric patient progress or response to treatments and to ensure maintained records of the same.
- Ensure that sick patients under her/his care are properly treated and cared for in every way.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- Supportive Supervision to GDMOs and nursing staffs.
- Implant orders of the Superintendent/Officer-in-charge, on all matters connected with the patient and management of the Hospital/Health Centre.

General Surgeon

- Provision of quality OPD and IPD services and also management of all kinds of surgical emergencies.
- Management of cases of poisoning, burns.
- Performing surgery (elective and emergency) on patients to treat injuries, diseases, or deformities.
- Work with other physicians and surgeons to decide on treatments and procedures before, during, and after surgery.
- Management of patients in the intensive care unit, particularly when there is non-availability of 'General Medicine specialist'.
- Follow standard operating procedures/clinical protocols, evidence-based practice, rational prescription of medication while treating the patient.
- Maintaining the highest standards of ethical practices by adhering to the code of medical ethics.

- Collect, record, and maintain patient's information, such as medical history, reports, and examination results, from patients, family members, or other medical professionals.
- He/she shall be responsible for all the special cases referred to her/him; providing curative prescription/procedures/surgeries; based on need, emergency and availability of resources.
- Refer the patient to other specialist/practitioners when necessary.
- Attend and treat all medico-legal cases
- Keeping himself/herself up to date with recent medical developments, new drugs, treatments and medications, including complementary medicine.
- Following the Acts, Rules, Regulations made by the Central/State Governments or local administrative bodies or any other relevant act relating to the protection and promotion of public health
- Provide Teaching/Training/Capacity building to doctors and other healthcare staff, as and when required.
- Ensure his/her attendance and availability at the Hospital/Health Centre, during prescribed working hours, as well as during emergency duty hours, as ordered.
- Monitor the patient progress or response to treatments and to ensure maintenance of records of the same
- Ensure that sick patients under her/his care are properly treated and cared for in every way.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- Supportive supervision for GDMOs and Staff nurses.
- Implant orders of the Superintendent/Officer-in-charge, on all matters connected with the patient and management of the Hospital/Health Centre.
- Any additional responsibility, as assigned by the authority.

Anaesthetist

- Provide quality OPD (Pre Anaesthetic Check-up Clinic and Pain Clinic), OT sessions and IPD services.
- Perform bedside Pre-Anaesthetic Check-up for the patients who cannot move or be shifted from their beds.
- Provide services as an intensivist, in management of critical cases.
- Clinical management of acute pain services and participation in pain medicine units where applicable.
- Provision of acute resuscitation services for all emergencies.
- Management of patients in the intensive care unit.
- Follow standard operating procedures/clinical protocols, evidence-based practice, rational prescription of medication while treating the patient.
- He/she shall be responsible for all the special cases referred to her/him; providing curative prescription/procedures/surgeries; based on need, emergency and availability of resources.
- Refer the patient to other specialists/practitioners when necessary.
- Attend and treat all medico-legal cases
- Keeping himself/herself up to date with recent medical developments, new drugs, treatments and medications, including complementary medicine.
- Maintaining the highest standards of ethical practices by adhering to the code of medical ethics.

- Following the Acts, Rules, Regulations made by the Central/State Governments or local administrative bodies or any other relevant acts relating to the protection and promotion of public health.
- Provide Teaching/Training/Capacity building to GDMOs and other healthcare staff, as and when required.
- Ensure his/her attendance and availability at the Hospital/Health Centre, during prescribed working hours, as well as during emergency duty hours, as ordered.
- Monitor the patient progress or response to treatments and ensure maintenance of records of the same as directed by the Superintendent/Officer-in-charge of the Hospital/Health Centre.
- Ensure that sick patients under her/his care are properly treated and cared for in every way.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- Supportive supervision for GDMOs and Staff nurses.
- Managing nursing staff and delegates tasks appropriately.
- Implant orders of the Superintendent/Officer-in-charge, on all matters connected with the patient and management of the Hospital/Health Centre.

Medical Officer (GDMO)

- The Medical Officer will be organizing and performing duties necessary for the routine Outpatient services and make suitable arrangements for the treatment of emergency cases which come outside the normal OPD hours.
- He/she will screen cases needing specialized medical attention, and scale attention of a specialist in the hospital.
- He/she will support specialists in OPD, IPD, emergency, OT etc.
- The Medical Officer will ensure that all the members of his/her Health Team are fully conversant with the various National Health & Family Welfare Programs including NHM to be implemented in the area allotted to each Health functionary.
- He/she will prepare operational plans and ensure effective implementation of the same to achieve the laid down targets under different National Health and Family Welfare Programmes.
- The MO will ensure the effective implementation of National Health Programmes – Reproductive and Child Health Programme, Universal Immunization Programme, National Vector Borne Disease Control Programme, National Programme for control of Blindness, Non-Communicable Diseases Programmes, National Mental Health Programme, Control of Communicable Diseases, Leprosy, Tuberculosis, Sexually Transmitted Diseases and Ayushman Bharat
- He/she will take timely actions for RTI, court cases and expeditious implementation of orders of the courts as applicable.
- He/she will discharge all the financial duties entrusted to him/her.
- He/she will ensure appropriate utilization of funds as per the guidelines and GFR (General Financial Rules) provisions.
- He/she will monitor and guide the activities of Hospitals/PHC/CHC committees, patient welfares societies of hospitals, village health & sanitation committees.
- He/she will attend all calls from the in-patients, while He/she is 'on-call duty'.
- He/she will ensure inter-sectoral/inter-departmental coordination, involvement of community leaders, various social welfare agencies and people for effective provision of patient centric healthcare.

- He/she will be involved in 'performance audit' of staff as per the guidelines of 'Performance Audit'.
- He/she will facilitate, coordinate, supervise, monitor, and implement the provisions of all the health sector Acts and the Rules
- As a member of the health care team, he/she will exemplify an example in attitude toward patients and staff, thereby, performing duties with respect, dignity, privacy, and modesty to the patients.
- He/she will perform any other duties which a Medical Officer is expected to perform in view of his position and any other duties which will be assigned as and when required.
- Ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.

Staff Nurse

- S/he will assess the needs of the patients in the ward, make a nursing care plan for all patients consulting with ward sister.
- S/he will give direct patient care and allotted responsibility to her/him by the ward sister.
- S/he will take steps to ensure the patient are comfortable and maintain the safety of the patient (universal safety precaution).
- S/he will carry out procedures of admission, discharge and transfer of patient of the ward.
- S/he will be responsible for taking a history of the patient.
- S/he will prepare and assist in the diagnostic procedure in the ward.
- S/he will provide minor dressing in an emergency.
- S/he will ensure sterilization of all articles, maintain all equipment, gadgets, electrical connections, light, fan etc.
- S/he will administer drugs by injection upon written order of the Doctor.
- S/he will keep abreast of the handling of special gadgets & equipment including in patient care in the place of posting.
- S/he will ensure the distribution of the diet, milk, etc.
- S/he will be responsible for observation of the patient's condition, take prompt action and report to the concerned medical officer.
- S/he will give health education to the patients and their family members under care.
- S/he will make records of all procedures of her/his patients and keep them up to date.
- S/he will take care that case papers are not allowed to be handled by anyone except the doctor-in-charge of the patient. This is specifically for medico-legal cases.
- S/he will ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- S/he will respect the cultural and religious differences of the patients.
- Any other assignments given from time to time.

S/he will be responsible

- To maintain the aseptic environment of the Operation Theatre.
- To carry out the instruction of O.T. staff nurse when necessary and to act as the O.T. staff nurse in her/his absence.
- To assist the Surgeon and Anaesthetist in operation theatre.

- To count all instruments and mops before closing the wounds.
- To monitor the condition and take care of the patient during the operation and postoperatively in the recovery room.
- To ensure fumigation in the O.T. room as and when indicated.

S/he will be responsible -To provide antenatal, intra-natal, postnatal care as taught in the and practice protocols as per LAQSHYA standards.

Medical Laboratory Technologist/Lab technician

- He/she will receive and process samples.
- He/she will draw blood samples for testing (primarily by performing vein punctures).
- He/she will label specimens/vials accurately and distribute them to the appropriate departments/ processing centres at the recommended transportation condition.
- He/she will prepare samples/slides for testing using various types of laboratory equipment.
- He/she will conduct all the necessary laboratory investigations including routine microscopy.
- He/she will give instructions to the patient regarding sample collection.
- He/she will be friendly, courteous and sympathetic while working with patients.
- He/she will write/print and issue the laboratory reports to the patients.
- He/she will ensure that patient confidentiality is always maintained.
- He/she will be responsible for the upkeep and routine maintenance of the instruments in the laboratory and update of instrument maintenance records.
- He/she will ensure cleanliness clean/sterilize and maintain work area and all lab equipment, accessories and supplies.
- He/she will make timely indents for chemical, reagents & equipment repairs.
- He/she will prepare chemical reagents, stains, solutions and biological media according to formulae, accurately label all reagents and other stock in the laboratory.
- He/she will take care of all quality assurance and quality control norms in the laboratory, including EQAS, IQAS.
- He/she will follow all safety protocols and standard operating procedures to maintain hygiene and for prevention of the infection.
- He/she will maintain the data about all lab procedures and will maintain records of supplies, stock and investigations that are done.
- He/she will submit weekly/monthly reports of the laboratory work.
- He/she will keep himself/herself informed about new laboratory techniques.
- He/she will participate in the development of new medical laboratory procedures and techniques.
- He/she will participate in training, workshops and continuing education programmes.
- He/she will keep himself/herself updated regarding various guidelines on hospital infection control and management of spills (e.g. Mercury, Chemicals, Body fluids).
- He/she will be responsible for the implementation of biomedical waste management as per guidelines in the Lab.

- He/she shall maintain the containers and specimens that may be involved in court cases, in as applicable.
- He/she will act as auditee during an internal audit of the lab.
- S/he will ensure the privacy and confidentiality of the patients.
- Will give adequate time to each patient and provide care with respect and dignity.
- S/he will respect the cultural and religious differences of the patients.
- Any other assignments given from time to time.

ANNEXURE 8: LIST OF MEDICINES

Essential Medicines for Community Health Centre (CHC)

S. No.	Medicine Name
Anaesthetics Agent	
1.	Halothane gas for Inhalation (Protect from light and store at temperature not exceeding 25°C)
2.	Isoflurane gas for Inhalation
3.	Ketamine Injection 10 mg/ml[1] Ketamine Injection 50 mg/ml
4.	Nitrous oxide gas for Inhalation (Store under pressure in metal cylinders of the type conforming to the appropriate safety regulations and at temperature not exceeding 37^{0}C)
5.	Oxygen gas for Inhalation
6.	Propofol Injection 10 mg/ml [2] (Should not allow to freeze)
7.	Promethazine* Injection 25 mg/ml[3] Promethazine Injection 50 mg/ml
8.	Pentazocin Injection 30 mg/ml[5] (Protect from light & moisture)
9.	Thiopentane Injection 0.5 gm/1gm[2]
10.	Bupivacaine Injection (0.5% IP), 5 mg/ml, 20 ml vial
11.	Sevoflurane Inhalation **(Only in DH)**
12.	Lignocaine Injection 2% Lignocaine Injection 4% Lignocaine Jelly Lignocaine Ointment 2-5% Lignocaine Injection 5%w/v
13.	Lignocaine (A) + Adrenaline (B) Injection 1% (A) + 1:200000 (5 mcg/ml) (B) Injection 2% (A) + 1:200000 (5 mcg/ml) (B)
14.	Atropine* Injection 0.6 mg/ml Atropine Injection 1mg/ml (Protect from light)
15.	Midazolam* Injection 1 mg/ml [2,4] Midazolam Tablet 250 mg Midazolam Tablet 500 mg
Non-opioid analgesics, antipyretics and nonsteroidal anti-inflammatory medicines	
16.	Acetylsalicylic acid* (Aspirin) Tablet 25 mg Acetylsalicylic acid (Aspirin) Tablet 75 mg Acetylsalicylic acid (Aspirin) Tablet 150 mg Acetylsalicylic acid (Aspirin) Tablet 300 mg

S. No.	Medicine Name
17.	Diclofenac Tablet 50 mg
	Diclofenac Injection 25 mg/ml
	Diclofenac Injection 25 mg/3 ml
18.	Ibuprofen Tablet 200 mg
	Ibuprofen Tablet 400 mg
	Ibuprofen Syrup 100 mg/5 ml
19.	Paracetamol* (Acetaminophen) Tablet 500 mg,
	Paracetamol (Acetaminophen) Injection 150 mg/ml
	Paracetamol (Acetaminophen) Syrup 125 mg/5 ml
	Paracetamol (Acetaminophen) Syrup 120 mg/5 ml, 60 ml bottle
	Paracetamol Syrup 125 mg/5 ml, 60 ml bottle
20.	Mefenamic acid capsule 250 mg, 500 mg
21.	Naproxen Tablet 500 mg
22.	Tramadol Capsule 50 mg [4]
	Tramadol Capsule100 mg
	Tramadol Injection 50 mg/ml
23.	Allopurinol Tablet 100 mg
	Allopurinol Tablet 300 mg
Opioid Analgesic agents	
24.	Morphine Tablet 10 mg [6]
	Morphine Injection 10 mg/ml
25.	Codeine Tablet 15 mg, [6]
	Codeine oral solution 15 mg/5 ml
26.	Fentanyl Injection 50 mcg/ml [6]
	(Only in DH)
27.	Methadone injection 10 mg/ml [6]
	(Only in DH)
28.	Adrenaline (Epinephrine) Injection 1 mg/ml
	(Protect from light, preferably in containers filled with nitrogen)
29.	Cetirizine Tablet 5 mg
	Cetirizine Tablet 10 mg
	Cetirizine Oral liquid 5 mg/5 ml
30.	Hydrocortisone sodium succinate* Injection 100 mg
	Hydrocortisone sodium succinate Injection 200 mg
31.	Hydroxyzine Syrup 10 mg/5ml
	Hydroxyzine Tablet 25 mg
32.	Pheniramine maleate Injection 22.75 mg/ml
33.	Chlorpheniramine Tablet 4 mg, 5 mg, 10 mg, 20 mg, 40 mg [3]
	Chlorpheniramine Oral liquid 2 mg/5 ml, 5 mg/5 ml
Antidotes and other substances used in poisoning	
34.	Activated charcoal powder (as licensed)

S. No.	Medicine Name
35.	Calcium gluconate* Injection 100 mg/ml Calcium gluconate Injection 1 gm, IV-10 ml amp
36.	Desferrioxamine Injection 500 mg **(Only in DH)** (Protect from light in refrigerator (2-8^{0}C). Do not freeze)
37.	Naloxone 0.4mgml Injection
38.	Pralidoxime Chloride (2-PAM) 25 mg/ml Injection
39.	Neostigmine Injection 0.5 mg/ml
Anticonvulsants/Antiepileptics	
40.	Carbamazepine Tablet 100 mg, 200 mg Carbamazepine Oral liquid 100 mg/5 ml, 200 mg/5 ml
41.	Levetiracetam Tablet 250 mg Levetiracetam Tablet 500 mg
42.	Lorazepam Tablet 1 mg/2 mg[5] Lorazepam Injection 1 mg/ml, 2 mg/ml
43.	Magnesium sulphate Injection 500 mg/ml
44.	Phenytoin Tablet 50 mg/100 mg, 300 mg, ER Tablet 300 mg Phenytoin Oral liquid 30 mg/5 ml, 125 mg/5 ml Phenytoin Injection 25 mg/ml, 50 mg/ml
45.	Sodium valproate* Tablet 200 mg, 300 mg, 500 mg Sodium Valproate Oral Liquid 200 mg/5 ml
Intestinal Anti- helminthics medicines	
46.	Albendazole Tablet 400 mg Albendazole Oral liquid 200 mg/5 ml
47.	Diethylcarbamazine Tab 100 mg Diethylcarbamazine oral liquid 120 mg/5 ml (Protect from moisture)
48.	Ivermectin Tablet 600 mg
Anti-Fungal medicines	
49.	Clotrimazole Tablet 100 mg Clotrimazole Pessary Tablet 100 mg (Do not crush pessaries.)
50.	Fluconazole Tablet 150 mg (Store in an airtight container)
51.	Griseofulvin Tablet 125 mg, 250 mg
Anti- Bacterial and other anti-infective medicines	
52.	Ampicillin Capsule 500 mg Ampicillin Injection 500 mg/ml
53.	Amoxicillin Syrup 125 mg/5 ml Amoxicillin Tablet/capsule 250 mg Amoxicillin powder for suspension 125 mg/5 ml (Capsule, oral suspension: Store protected from moisture and light at a temperature not exceeding 30^{0}C)

S. No.	Medicine Name
54.	Amoxicillin (A) + Clavulanic acid (B) Tablet 500 mg (A) + 125 mg (B) Tablet 875 mg (A) + 125 mg (B) Powder for Injection 500 mg (A) + 100 mg (B) Powder for Injection 1 g (A) + 200 mg (B)
55.	Penicillin V Tablet 250mg
56.	Benzathine benzylpenicillin Injection 12 lacs unit
57.	Benzyl penicillin Powder for Injection 10 lac units
58.	Cefazolin Injection 500 mg Cefazolin Injection 1 gm (The constituted solution should be stored protected from light and used within 24 hours when stored at a temperature not exceeding 30^0C or within 4 days when stored between 2 to 8^0)
59.	Cefixime Tablet 200 mg, 400 mg[4] Cefixime Oral liquid 50 mg/5 ml
60.	Cefotaxime Injection 250 mg[4] Cefotaxime Injection 1 g
61.	Ceftazidime Powder for Injection 250 mg [4] Ceftazidime Powder for Injection 1 g (Store in sterile containers sealed, so as to exclude micro-organisms protected from moisture at a temperature not exceeding 30^0C)
62.	Cloxacillin Capsule 250 mg Cloxacillin oral liquid 125 mg/5 ml Cloxacillin Injection 500 mg/vial
63.	Cefuroxime 250mg tablet Cefuroxime 1g Injection
64.	Azithromycin Tablet 250 mg Azithromycin Tablet 500 mg Azithromycin Oral liquid 200 mg/5 ml
65.	Norfloxacin Dispersible Tablet 100 mg Norfloxacin Tablet 400 mg
66.	Ciprofloxacin* Tablet 250 mg, 500 mg Ciprofloxacin IV 200 mg/100 ml Ciprofloxacin Oral liquid 250 mg/5 ml
67.	Clarithromycin Tablet 500 mg
68.	Co-trimoxazole Tablet [Sulphamethoxazol (A) +Trimethoprim (B)] 400 mg (A) + 80 mg (B) 800 mg (A) + 160 mg (B) Oral liquid 200 mg (A) + 40 mg (B)/5 ml
69.	Doxycycline Tablet 100 mg Doxycycline Syrup 50 mg/5 ml

S. No.	Medicine Name
70.	Metronidazole Tablet 200 mg Metronidazole Tablet 400 mg (Protect from light and moisture. Store injection in a single dose container.)
71.	Nitrofurantoin Tablet 100 mg Nitrofurantoin Oral liquid 25 mg/5ml
72.	Amikacin Injection 100 mg[2] Amikacin Injection 500 mg
73.	Clofazimine Tablet 50 mg[4] Clofazimine Capsule 100 mg, 200 mg
74.	Delamanid 50 mg
75.	Dapsone Tablet 25 mg Dapsone Tablet 100 mg
76.	Capreomycin Injection 500 mg, 750 mg, 1 gm[4]
77.	Cycloserine Capsule 125 mg/250 mg [4]
78.	Ethambutol Tablet 100 mg [4] Ethambutol Tablet 200 mg Ethambutol Tablet 400 mg Ethambutol Tablet 600 mg Ethambutol Tablet 800 mg
79.	Tab Ethionamide 125 mg/250 mg[4]
80.	Isoniazid Tablet 50 mg [4] Isoniazid Tablet 75 mg Isoniazid Tablet 100 mg Isoniazid Tablet 300 mg Isoniazid Oral liquid 100 mg/5 ml
81.	Kanamycin Injection 500 mg [2] Kanamycin Injection 750 mg Kanamycin Injection 1 gm
82.	Levofloxacin Tablet 250 mg [4] Levofloxacin Tablet 500 mg Levofloxacin Tablet 750 mg
83.	Linezolid Tablet 600 mg
84.	Ofloxacin Tablet 200 mg Ofloxacin Tablet 400 mg
85.	Moxifloxacin Tablet 400 mg Moxifloxacin Tablet 500 mg
86.	Sodium Amino salicylate granules 10 gm/9.2 gms[4] Para- amino salicylic acid Tablet 500 mg
87.	Pyrazinamide Tablet 150 mg, 400 mg, 500 mg, 750 mg[4] Pyrazinamide Oral liquid 250 mg/5

S. No.	Medicine Name
88.	Rifabutin Capsule 150 mg[4]
89.	Rifampicin Tablet 75 mg [4] Rifampicin Capsule 150 mg, 300 mg, 450 mg, 600 mg Rifampicin Oral liquid 100 mg/5 ml
90.	Injection Streptomycin 750 mg/1000 mg [2] Injection Streptomycin 500 mg
91.	Bedaquiline Tablet 100 mg
92.	Diloxanide furoate Tablet 500 mg
Anti-Viral medicines	
93.	Acyclovir Tablet 200 mg (Store tablets protected from light.)
Anti-Malarial medicines	
94.	Tab Artemether (A) + Lumefantrine (B) Tablet 20 mg (A) + 120 mg (B) Tablet 40 mg (A) + 240 mg (B) Tablet 80 mg (A) + 480 mg (B) Oral liquid 80 mg (A) + 480 mg (B)/5 ml
95.	Artesunate (A) + Sulphadoxine -Pyrimethamine (B) Combi pack (A+B) 1 Tablet 25 mg (A) + 1 Tablet (250 mg + 12.5 mg) (B) 1 Tablet 50 mg (A) + 1 Tablet 500 mg + 25 mg) (B) 1 Tablet 100 mg (A) + 1 Tablet (750 mg + 37.5 mg) (B) 1 Tablet 150 mg (A) + 2 Tablet (500 mg + 25 mg) (B) 1 Tablet 200 mg (A) + 2 Tablet (750 mg + 37.5 mg) (B)
96.	Chloroquine Tablet 150 mg Chloroquine Oral liquid 50 mg/5 ml
97.	Hydroxychloroquine tablet 200 mg, 400 mg
98.	Artesunate Powder for injection 120 mg
99.	Primaquine Tablet 2.5 mg Primaquine Tablet 7.5 mg Primaquine Tablet 15 mg (Protect from moisture)
100.	Quinine Tablet 300 mg (Protect from light)
Anti-COVID-19 Medicines	
101.	Favipiravir Tablet 200 mg, 400 mg
102.	Remdesivir Injection 100 mg/20 ml

S. No.	Medicine Name
Medicines used in palliative care	
103.	Diazepam* Tablet 5 mg [5] Diazepam Injection 5 mg/ml, 10 mg/2 ml Diazepam Oral liquid 2 mg/5 ml Diazepam Suppository 5 mg (Injection: store in single dose or multi dose container protected from light)
Anti-parkinsonism medicines	
104.	Levodopa (A) + Carbidopa (B) Tablet 100 mg (A) + 10 mg (B) Tablet 100 mg (A) + 25 mg (B) CR Tablet 100 mg (A) + 25 mg (B) CR Tablet 200 mg (A) + 50 (B) mg Tablet 250 mg (A) + 25 mg (B)
105.	Trihexyphenidyl Tablet 2 mg
Medicines affecting blood	
106.	Ferrous salts equivalent to 60 mg of elemental iron Oral liquid equivalent to 25 mg of elemental iron/ml
107.	Ferrous salt (A) + Folic acid (B) Tablet 45mg elemental iron (A) + 400 mcg (B) Tablet 100 mg elemental iron (A)+ 500 mcg (B) Oral liquid 20 mg elemental iron(A) + 100 mcg (B)/ml Tablet 100 mg elemental iron (A)+ 500 mcg (B) as enteric coated
108.	Folic acid Tablet 5 mg
109.	IFA syrup
110.	Iron sucrose Injection 20 mg/ml (Protect from light and store at temperature not exceeding 30^{0}C.)
111.	Phytomenadione (Vitamin K1) Tablet 10 mg Phytomenadione (Vitamin K1) Injection 10 mg/ml (Protect from light.)
112.	Menadione Injection (Vitamin K3) 10 mg/ml (Protect from light.)
113.	Tranexamic acid Tablet 500 mg
114.	Streptokinase Injection 15 lac/vial Streptokinase Injection 7.5 lac/Vial (Store in a sealed container protected from light in refrigerator (2 to 8^{0}C). The container should be sterile and sealed so as to exclude micro-organisms.)
115.	Heparin Sodium Injection 1000 IU[2]
116.	Warfarin Tablet 1 mg [2] Warfarin Tablet 2 mg Warfarin Tablet 5 mg

S. No.	Medicine Name
Cardiovascular medicines	
117.	Clopidogrel Tablet 75 mg
118.	Diltiazem Tablet 60 mg Diltiazem SR Tablet 90 mg
119.	Glyceryl trinitrate Sublingual Tablet 0.5 mg Glyceryl trinitrate 125 mg/5ml (Glyceryl trinitrate tablets are unstable) (Store protected from light and moisture in glass container of not more than 100 tablets at a temperature not exceeding 30^{0}C.)
120.	Isosorbide dinitrate Tablet 5 mg Isosorbide dinitrate Tablet 10 mg
121.	Isosorbide-5- mononitrate Tablet 10 mg Isosorbide-5- mononitrate SR Tablet 30 mg
122.	Atenolol Tablet 50 mg/100 mg
123.	Metoprolol Tablet 25 mg Metoprolol Tablet 50 mg Metoprolol Tablet 100 mg Metoprolol SR Tablet 25 mg
124.	Propranolol Tablet 40 mg
125.	Amiodarone Tablet 100 mg
126.	Amlodipine Tablet 2.5 mg/5 mg (Protect from moisture.) Amlodipine Ta blet 10 mg
127.	Indapamide Tablet 1.5 mg
128.	Chlorthalidone Tablet 12.5 mg
129.	Injection Mannitol
130.	Labetalol Injection 20 mg
131.	Methyldopa Tablet 250
132.	Enalapril Tablet 2.5 mg Enalapril Tablet 5 mg Enalapril Tablet 10 mg
133.	Captopril Tablet 25 mg
134.	Lisinopril Tablet 5 mg
135.	Telmisartan Tablet 40 mg
136.	Digoxin Tablet 250 mg
137.	Dopamine Injection 40 mg/ml (Store in an airtight container protected from light.)
138.	Noradrenaline Injection 2 mg/ml (Store in single dose containers. Store at room temperature (25^{0}C). Store in tight, light resistant containers as it is readily oxidized. Do not use if discolored (e.g., pink, dark yellow, brown) or if there is a precipitate.)
139.	Enoxaparin Injection LMWH

S. No.	Medicine Name
140.	Atorvastatin Tablet 10 mg (Protect from moisture and store at temperature not exceeding 30°C.) Atorvastatin Tablet 40 mg
Medicines used in Dementia	
141.	Donepezil Tablet 5 mg (Protect from moisture and store at a temperature not exceeding 25°C.)
Dermatological medicines (Topical)	
142.	Clotrimazole Cream 1% Clotrimazole Oral Lotion or mouth paint: 15 ml
143.	Framycetin Cream 0.5% (Protect from light, moisture and store at temperature not exceeding 30°C. If the material is sterile, the container should be tamper-evident and sealed so as to exclude micro-organisms.)
144.	Fusidic Acid Cream 5 mg/10 gm preparation 2% or 20 mg per gram Fusidic Acid Cream 2%: 5 mg/10 mg Preparation
145.	Silver sulphadiazine Cream 2 to 4 %
146.	Miconazole Ointment or Cream 2% 15 gm preparation (Protect from light, moisture and store at temperature not exceeding 30°C. If it is packed in aluminates; the inner surface of tubes should be coated with suitable lacquer.)
147.	Betamethasone Cream 0.05%/0.1%
148.	Calamine lotion
149.	Benzoyl peroxide 2.5%/5%
150.	Coal tar solution 5%
151.	Salicylic acid Ointment 6%
152.	Gamma Benzene Hexa Chloride Lotion 100 ml (Protect from light.)
153.	Permethrin Lotion 1% Permethrin Cream 5%
154.	Glycerin Oral liquid
155.	Petroleum Jelly 100%
Diagnostic agents	
156.	Lignocaine Eye drop 4% (Store in cool place.)
157.	Tropicamide Eye drop 1% (Store in a refrigerator (8 to 15°C). It should not be allowed to freeze)
158.	Cetrimide Solution 20% (Concentrate for dilution)
159.	Chlorhexidine Solution 5% (Concentrate for dilution)
160.	Ethyl alcohol (Denatured) (Store in a tightly closed container at a temperature not exceeding 30°C. Away from fire and protected from moisture.)
161.	Hydrogen peroxide Solution 6%
162.	Sodium Hypochlorite
163.	Povidone iodine Solution 4% to 10% Povidone iodine Solution 10% (equivalent to 1% available iodine)

S. No.	Medicine Name
164.	Bleaching powder Containing not less than 30% w/w of available chlorine (as per I.P) (Protect from moisture in a tightly closed container.)
165.	Potassium permanganate Crystals for topical solution
Diuretics Medicines	
166.	Furosemide Tablet 40 mg Furosemide Injection 10 mg/ml
167.	Hydrochlorothiazide* Tablet 12.5 mg Hydrochlorothiazide Tablet 25mg
168.	Spironolactone Tablet 25 mg
169.	Methyl Cellulose tablet/powder
170.	Ciprofloxacin Drops 0.3 % Ciprofloxacin Eye/Ear drops (Protect from light)
171.	Normal Saline nasal drop: sodium chloride drops 0.05% w/v
172.	Xylometazoline nasal drop: Pediatric (0.05) and adult (0.1%)
173.	Wax solvent ear drops: benzocaine, paradicholorobenzene, turpentine oil
174.	Boro-spirit ear drop-0.183 gm boric acid in 2.08 ml of alcohol
175.	Combo ear drop-Chloramphenicol 5% w/v + clotrimazole 1% +Lignocaine hydrochloride 2%
176.	Liquid paraffin-menthol drop: Menthol 10 gm +Eucalyptus 2 ml+ Camphor 10 mg+ liquid paraffin to 100 ml
Gastrointestinal medicines	
177.	Omeprazole Capsule 20 mg
178.	Ranitidine Tablet 150 mg Ranitidine Injection 25 mg/ml
179.	Pantoprazole 40mg Injection
180.	Sucralfate Tablet 10 mg Sucralfate Oral liquid 1 mg/ml
181.	Ondansetron Oral Liquid 2 mg base/5 ml; syrup 30 ml bottle Ondansetron tablet 4 mg Ondansetron Injection 2 mg/ml
182.	Metoclopramide Injection 5 mg/ml
183.	Domperidone Tablet 10 mg Domperidone Oral Suspension 1 mg/ml; 30 ml bottle or 5 ml drops containing 10 mg/ml
184.	Dicyclomine Tablet 10 mg (Injection: Protect from light, in single dose or multiple dose containers.) Dicyclomine Injection 10 mg/ml Dicyclomine Tablet 500 mg (Tablets: Protect from light)
185.	Hyoscine butyl bromide Injection 20 mg/ml
186.	Bisacodyl Tablet 5 mg Bisacodyl suppository 5 mg

S. No.	Medicine Name
187.	Zinc sulphate Tablet 20 mg
	Zinc sulphate Dispersible Tablet USP eq. to Elemental Zinc 20 mg
188.	Lactulose Oral liquid 10 g/15 ml
189.	Ispaghula- Granules/Husk/Powder
	(Protect from light and moisture)
190.	Senna tablet/granules/Powder
	(Protect from light and moisture)
Hormones, other endocrine medicines and contraceptives	
191.	Dexamethasone Injection 4 mg/ml.
	Dexamethasone Tablet 0.5 mg
192.	Methylprednisolone Tablet 4 mg
	Methylprednisolone Tablet 8 mg
193.	Prednisolone Tablet 5 mg, 10 mg
194.	Ethinylestradiol Tablet 0.01 mg
	Ethinylestradiol Tablet 0.05 mg
195.	Levonorgestrel Tablet 0.75 mg
	Levonorgestrel Tablet 1.5 mg
196.	Gliclazide Tablet 40mg
197.	Medroxyprogesterone acetate Tablet 5 mg
	Medroxyprogesterone acetate Injection 150 mg
198.	Family Planning medicines and commodities
Thyroid and Antithyroid medicines	
199.	Carbimazole Tablet 5 mg
200.	Levothyroxine Tablet 50 mcg, 100 mcg
	(Protect from light and moisture.)
Antidiabetic medicines	
201.	Glimepiride Tablet 1 mg/2 mg
202.	Insulin (Soluble) Injection 40 IU/ml [2,3]
203.	Metformin Tablet 500 mg [3]
	Metformin Controlled released 750 mg
204.	Premix Insulin 30:70 Injection (Regular: NPH) [2,3]
	Premix Insulin 30:70 Injection 40 IU/ml.
205.	Glibenclamide Tablet 2.5 mg/5 mg[3]
206.	Norethisterone 5 mg Tablet
Immunological/Vaccines	
207.	Diphtheria antitoxin
208.	Hepatitis B immunoglobulin[7]
209.	Snake venom antiserum*[7]
	Soluble/liquid polyvalent
	Lyophilized polyvalent
210.	BCG vaccine[7]
211.	DPT + Hib + Hep B vaccine[7]

S. No.	Medicine Name
212.	DPT vaccine [7]
213.	Hepatitis B vaccine [7]
214.	Japanese encephalitis vaccine [7] (In the selected districts only)
215.	Measles vaccine [7]
216.	Oral poliomyelitis vaccine [7]
217.	Tetanus toxoid [7]
218.	Inactivated Polio Vaccine (IPV) [7]
219.	Pneumococcal Conjugated Vaccine (PCV) [7]
220.	Measles Rubella vaccine (MR) [7]
221.	Rabies vaccine [7] Anti- Rabies Immunoglobulin
222.	As per current immunization programme guidelines (Stored as per manufacturer's instructions.)
223.	Vecuronium Powder for Injection 4 mg
Ophthalmological Medicines	
224.	Acyclovir Ointment 3%
225.	Atropine 1% Drops
226.	Gentamicin Drops 0.3% Gentamicin Injection 40 mg/ml
227.	Povidone iodine Drops 0.6% Povidone iodine Drops 5%
228.	Prednisolone Drops 0.1% Prednisolone Drops 1%
229.	Acetazolamide Tablet 250 mg
230.	Pilocarpine Drops 2% Pilocarpine Drops 4%
231.	Timolol Drop 0.5%
232.	Atropine Ointment 1%
233.	Homatropine Drops 2%
234.	Tropicamide Drops 1% (Store in a refrigerator (8 to 15^{0}C). It should not be allowed to freeze)
235.	Carboxymethylcellulose Drops 0.5%
236.	Erythromycin 0.5% ointment
Oxytocic and Anxiolytics	
237.	Mifepristone Tablet 200 mg
238.	Misoprostol Tablet 100 mcg Misoprostol Tablet 200 mcg (oral/vaginal)
239.	Oxytocin Injection 5 IU/ml Oxytocin Injection 10 IU/ml
240.	Methylergometrine 0.125 mg Tablet Methylergometrine 0.2 mg/ml Injection

S. No.	Medicine Name
241.	Nifedipine Tablet 10 mg
	Nifedipine Soft gelatin Capsule 5 mg
Psychotherapeutic medicines	
242.	Chlorpromazine Tablet 100 mg
243.	Diphenylhydantoin Tablet 100 mg [3]
244.	Fluphenazine Depot Injection 25 mg/ml
245.	Haloperidol Tablet 5 mg
	Haloperidol Injection
246.	Phenobarbitone Tablet 30 mg[1]
	Phenobarbitone oral liquid 20 mg/5 ml [5]
247.	Risperidone Tablet 2 mg.
248.	Olanzapine Tablet 5 mg
249.	Amitriptyline Tablet 25 mg
	Amitriptyline Tablet 75 mg
250.	Escitalopram Tablet 5 mg
	Escitalopram Tablet 10 mg
251.	Fluoxetine Capsule 20 mg
252.	Imipramine Tablet 75 mg
	Imipramine Tablet 25 mg
253.	Lithium Tablet 300 mg
254.	Clonazepam Tablet 0.25 mg
Medicines acting on the respiratory tract	
255.	Budesonide Inhalation (MDI/DPI) 100 mcg/dose
	Budesonide Respirator solution for use in nebulizer 0.5 mg/ml
256.	Budesonide (A)+ Formoterol (B)
	Inhalation (MDI/DPI) 100 mcg (A)+ 6 mcg (B)
	Inhalation (MDI/DPI) 200 mcg (A)+ 6 mcg (B)
	Inhalation (MDI/DPI) 400 mcg (A)+ 6 mcg (B)
257.	Combination of LABA+ICS (Formoterol, Salmeterol/Fluticasone) MDI, DPI
	(Protect from light, moisture and store at temperature not exceeding 30^0C)
	(Protect from light, moisture and store at temperature not exceeding 30^0C.)
258.	Etofylline B Plus (A), Anhydrous Theophylline IP (B) combination injection 84.7 mg/ml (A) + 25.3 mg/ml (B)
259.	Ipratropium Inhalation (MDI/DPI) 20 mcg/dose Ipratropium Respirator solution for use in nebulizer 250 mcg/ml.
260.	Levosalbutamol 50 mcg/dose
261.	Salbutamol Tablet 2 mg/4 mg
	Salbutamol 100 mg/dose
	Salbutamol Oral liquid 2 mg/5 ml
262.	Theophylline Tablet
	(Protect from moisture.)

S. No.	Medicine Name
263.	Syrup Salbutamol
	Salbutamol Nebulizing solution.
264.	Tiotropium Inhalation (MDI) 9 mcg/dose
	Tiotropium Inhalation (DPI) 18 mcg/dose
265.	Deriphyllin SR Tablet
266.	Montelukast Tablet 5 mg
	Montelukast syrup
267.	N Acetyl Cystine Tablet 600 mg/Dispersible
268.	Betamethasone Injection 4 mg/ml
Solutions correcting water, electrolyte disturbances and acid-base disturbances	
269.	Dextrose IV Injection 5%w/v, 500ml
270.	Glucose Injection 5%
	Glucose Injection 10%
	Glucose Injection 25%
	Glucose Injection 50%
271.	Glucose (5%) + Sodium chloride (0.9%) Injection
272.	Hydroxyethyl Starch 6% IP (6% Saline solution for infusion)
273.	Oral rehydration salts* (ORS)
	Oral Rehydration powder 27.5 gm WHO Formula
274.	Potassium chloride Injection 150 mg/ml [2]
	Potassium chloride Oral liquid 500 mg/5 ml
275.	Ringer lactate solution (as per IP)
276.	Sodium bicarbonate Injection (as per IP) [2]
277.	Sodium Chloride 0.9%
278.	Water for Injection
Vitamins and minerals	
279.	Ascorbic acid (Vitamin C) Tablet 100 mg [7]
	Ascorbic acid (Vitamin C) Tablet 500 mg
280.	Calcium carbonate Tablet 250 mg
	Calcium carbonate Tablet 500 mg
281.	Calcium with Vitamin D tablets USP
	Syrup Calcium with Phosphate in the ratio 2:1 with Vitamin D Tablet Calcium Carbonate 650 mg equivalent to elemental calcium 250 mg and Cholecalciferol USP 125 mg
282.	Cholecalciferol Granules 60,000 IU in Sachet [7]
	Cholecalciferol Injection of 6,00,000 IU
	Vitamin D3 60,000 granules in 1gm sachet
283.	Nicotinamide Tablet 50 mg[7]
284.	Multivitamin Tab/Cap
285.	Pyridoxine Tablet 40 mg[7]
	Pyridoxine Tablet 50 mg
	Pyridoxine Tablet 100 mg

S. No.	Medicine Name
286.	Riboflavin Tablet 5 mg[7]
287.	Thiamine Tablet 100 mg[7] Thiamine Injection 100 mg/ml
288.	Vitamin A Oral liquid 100000 IU/ml [7]
Dental restorative materials and medicines	
289.	Zinc Oxide Eugenol
290.	Silver Amalgam
291.	Glass ionomer cement (GIC)
292.	Calcium Hydroxide
293.	Sodium Hypochlorite*
294.	Gutta Percha (GP)
295.	Light Cure composite
296.	Ketorolac 10 mg tablet
297.	Gum Paint (Tannic Acid)
298.	Povidone-iodine Germicide Gargle 20% w/v
299.	Toothpaste (Potassium Nitrate)

Above list is suggestive only. This needs to be updated periodically as per newer evidence and guidelines.

Remarks[x]-This is not all inclusive, users are advised to refer standard textbooks, guidelines and manufacturer's instructions- regarding storage.

Schedule X[1]- Prescription shall be in duplicate and one copy of which shall be retained by the licensee for a period of two years.

High Alert Medicine[2]**-** Drugs that bear a heightened risk of causing significant patient harm when they are used in error.

Schedule G[3] - Caution: it is dangerous to take this preparation except under medical supervision.

Schedule H1[4] - Separate H1 Register shall be maintained- Name of prescriber, patient name, medicine name and dispensed quantity shall be recorded.

NDPS[5] **- Narcotic** Drugs and Psychotropic Substances.

Controlled medicine under NDPS[6] - Shall store and dispense against respective Form No. 3D, 3E and 3H. It shall also be preserved for a minimum period of two years from the date of last entry: -

1. **Form No. 3D** – Shall maintain day to day accounts in respect of all transactions of essential narcotic drugs in the sub-storage room of wards/departments/sub- departments.
2. **Form No. 3E** – Shall maintain record of each patient, whom essential narcotic drugs are being dispensed.
3. **Form No. 3H** – Shall maintain record of essential narcotic drugs at the main drug storage room.

- **Schedule P**[7]- Life Period of drugs.
- ***** - Medicines are categorized under different therapeutic categories.

ANNEXURE 9

List of Diagnostic Tests and Equipment at CHC/UCHC

List of diagnostic tests at Non-FRU Community Health Centres (Rural)

S. No.	Diagnostic test	Product/Equipment Required
1.	**Essential** Hemoglobin, Total leucocyte count, Differential leucocyte count, Platelet count, Complete blood count, Erythrocyte sedimentation rate, Blood group and Rh typing, Blood cross matching, Peripheral blood film, Reticulocyte count, Absolute eosinophil count, Bleeding time and clotting time, Sickling Test for screening of Sickle cell anemia, Sickle cell test rapid for screening of Sickle cell anemia (Strip test), NESTROFT Test for screening of Thalassemia, DCIP test for screening HbE hemoglobinopathy, Screening test for G6PD enzyme deficiency, MP slide method, Malaria rapid test, Prothrombin Time (PT) and INR, Activated partial thromboplastin time, Human chorionic gonadotropin (HCG) (Urine test for pregnancy), Urine test for ph, specific gravity, leucocyte esterase, glucose, bilirubin, urobilinogen, ketone, protein, nitrite, Urine Microscopy, Urine for microalbumin, Urine for creatinine and Albumin to creatinine ratio (ACR), Stool for ova and cyst, Stool for Occult Blood, Test for Dengue, RPR/VDRL test for syphilis, HIV test (Antibodies 1/2 and HIV 1/2), Hepatitis B surface antigen test, HCV Antibody Test (Anti HCV), Sputum, pus etc. for AFB, Typhoid test (IgM), Blood sugar, Glucose Tolerance test (GTT), S. Bilirubin (T), S. Bilirubin direct and indirect, Serum creatinine, Blood Urea, SGPT, SGOT, S. Alkaline Phosphatase, S. Total Protein, S. Albumin & AG ratio, S. Globulin, S. Total Cholesterol, S. Triglycerides, S. VLDL, S.HDL, S. LDL, S. Uric acid, Glycosylated hemoglobin (HbA1C), Serum Calcium, Wet mount and Gram stain for RTI/STD, Gram staining for clinical specimen, Visual Inspection Acetic Acid (VIA), rK39 for Kala Azar, Test for Filariasis, TB – Mantoux, Troponin – I, CRP (including newborn) (Quantitative), Pap smear, Chip based Real time micro-PCR test	**Essential** Hemoglobinometer, 3-part Hematology analyzer, Manual with reading using ESR analyzer, Blood group kit, Microscopy, Rapid Card Test, Rapid card tests for combined P. Falciparum and P. vivax, Multiparameter urine strip (dipstick), Turbidometer, Semi automated biochemistry analyzer, Rapid card test for combined NS1 antigen, IgM, and IgG antibodies, ELISA, Glucometer only for screening, HbA1C Analyzer, Wet mounting, gram staining, Filaria Strip test,
2.	**Desirable** D-dimer, S. Sodium, S. Potassium, S. Magnesium, Throat swab (Albert stain) for Diphtheria, Stool for hanging drop for Vibrio Cholera, S.TSH (including for new-born screening), Hemoglobin electrophoresis, Blood culture, Urine Culture, Other cultures (pus, throat swab etc.), Organism identification and antimicrobial sensitivity for all the above-mentioned cultures,	**Desirable** 5 Part Hematology analyzer, Fully Automated Biochemistry Analyzer, Electrolyte Analyzer (Indirect ion selective electrode) *, Chemiluminescence immunoassay*, Automated for blood culture and for other cultures*

** (For Hub Lab)*

Note: The Diagnostic tests and equipment mentioned under desirable are over and above the essential tests and equipment

List of diagnostic tests at FRU Community Health Centres (Rural & Urban)

S. No.	Diagnostic test	Product/Equipment Required
1.	**Essential** Urine test for ph, specific gravity, leucocyte esterase, glucose, bilirubin, urobilinogen, ketone, protein, nitrite, Urine Microscopy, 24-hours, urinary protein, Urine for microalbumin, Urine for creatinine and Albumin to creatinine ratio (ACR), Stool for ova and cyst, Stool for Occult Blood, Semen analysis, Test for Dengue, RPR/VDRL test for syphilis, HIV test (Antibodies 1/2 and HIV 1/2), Hepatitis B surface antigen test, HCV Antibody Test (Anti HCV), Sputum, pus etc. for AFB, Typhoid test (IgM), Blood sugar, Glucose Tolerance test (GTT), S. Bilirubin (T), S. Bilirubin direct and indirect, Serum creatinine, Blood Urea, SGPT, SGOT, S. Alkaline Phosphatase, S. Total Protein, S. Albumin & AG ratio, S. Globulin, S. Total Cholesterol, S. Triglycerides, S. VLDL, S.HDL, S. LDL, S. GGT, S. Uric acid, S. Amylase, S. Iron, Total Iron binding capacity, Glycosylated hemoglobin (HbA1C), S. Sodium, S. Potassium, Serum Calcium, S. Magnesium, Wet mount and Gram stain for RTI/STD, Gram staining for clinical specimen, Throat swab (Albert stain) for Diphtheria, Stool for hanging drop for Vibrio Cholera, Visual Inspection Acetic Acid (VIA), rK39 for Kala Azar, Test for Filariasis, TB – Mantoux, Troponin - I, CRP (including newborn) (Quantitative), Pap smear Chip based Real time micro-PCR test	**Essential** Hemoglobinometer, Hematology analyzer (5 Part), Hematology analyzer (5 Part), Manual with reading using ESR analyzer., Blood group kit (manual), Microscopy, Rapid card tests for combined P. Falciparum and P. vivax, Automated coagulation analyzer, Multiparameter urine strip (dipstick), Manual method/Fully automated biochemistry analyzer, Turbidometer, Microscopy (with Neubauer chamber and slide), Rapid card test for combined NS1 antigen, IgM, and IgG antibodies b) ELISA, Glucometer only for screening, Filaria Strip test
2.	**Desirable** Throat swab (Albert stain) for Diphtheria, Stool for hanging drop for Vibrio Cholera, S.TSH (including for new-born screening), S. Free T3, S. Free T4, S. Ferritin, Cytology, Histopathology, Hemoglobin electrophoresis, Blood culture, Urine Culture, Other cultures (pus, throat swab etc.), Organism identification and antimicrobial sensitivity for cultures	**Desirable** Electrophoresis Machine, Chemoluminescence Immunoassay, Automated Blood Culture System

** For Hub Lab*

Note: The Diagnostic tests and equipment mentioned under desirable are over and above the essential tests and equipment

ANNEXURE 10

List of Equipment at CHC/UCHC

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
1.	**Medicine/ Family Medicine OPD**	**Equipment*:** Thermometer, Examination Light, Wall mounted Hight Measuring Scale, Stethoscope, Weighing Machine (Both adults and pediatrics), LED torch, Measuring tape., Sphygmomanometer, stethoscope+ Otoscope, tuning fork (156), percussion hammer, wooden tongue depressor		**Equipment*:** Thermometer, Examination Light, Wall mounted Hight Measuring Scale, Stethoscope, Weighing Machine, (Both adults and pediatrics), LED torch, Measuring tape, Sphygmomanometer, stethoscope+ Otoscope, tuning fork (156), percussion hammer, wooden tongue depressor	
		Accessories/Consumables:** roof/wall mounted single piece curtain to ensure privacy, LED Torch, Gloves, Shoe covers. Head Caps, masks, Gowns.		**Accessories/Consumables**:** roof/wall mounted single piece curtain to ensure privacy, LED Torch, Gloves, Shoe covers. Head Caps, masks, Gowns.	
		Furniture*:** Examination table with in built IV stand, with, Footstool, Colour coded bins, Stool, slim model doctor's table and chair, and slim model two armless chairs for patients and attendants. X-Ray's view box		**Furniture***:** Examination table with in built IV stand, with, Footstool, Colour coded bins, Stool, slim model doctor's table and chair, and slim model two armless chairs for patients and attendants. X-Ray's view box	
2.	**Surgery OPD**		**Equipment:** Same as under * in Medicine OPD	**Equipment:** Same as under * in Medicine OPD	
			Instruments: Removal of Stitches Tray	**Instruments:** Removal of Stitches Tray	
			Accessories/Consumables: Same as under ** in Medicine OPD	**Accessories/Consumables:** Same as under ** in Medicine OPD	
			Furniture: Same as under *** in Medicine OPD	**Furniture:** Same as under *** in Medicine OPD	
3.	**Obs & Gynecology OPD**		**Equipment:**	**Equipment:**	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
			Same as under * in Medicine OPD + Foetal Doppler, CTG Machine, Obstetric/ Gynaecologic Ultrasound, Foetoscope	Same as under * in Medicine OPD + Foetal Doppler, CTG Machine, Obstetric/ Gynaecologic Ultrasound, Foetoscope	
			Instruments: Removal of Stitches Tray, Gynaecological Examination Tray, Vaginal speculums, and spatula Tray	**Instruments:** Removal of Stitches Tray, Gynaecological Examination Tray, Vaginal speculums, and spatula Tray.	
			Accessories/Consumables: Same as under ** in Medicine OPD+ Macintosh, OPT.	**Accessories/Consumables:** Same as under ** in Medicine OPD	
			Furniture: Same as under *** in Medicine OPD	**Furniture:** Same as under *** in Medicine OPD	
4.	**Pediatrics OPD**		**Equipment:** Same as under * in Medicine OPD + Otoscope, tuning fork (156), percussion hammer, weighing scale (Digital and standing Weighing scale), infantometer, stadiometer, wooden tongue depressor, non-stretchable measuring tape.	**Equipment:** Same as under * in Medicine OPD + Otoscope, tuning fork (156), percussion hammer, weighing scale (Digital and standing Weighing scale), infantometer, stadiometer, wooden tongue depressor, non-stretchable measuring tape.	
			Accessories/Consumables: Same as under ** in Medicine OPD	**Accessories/Consumables:** Same as under ** in Medicine OPD	
			Furniture: Same as under *** in Medicine OPD	**Furniture:** Same as under *** in Medicine OPD	
5.	**NCD Clinic**	**Equipment:** Same as under * in Medicine OPD+ glucometer, Otoscope, tuning fork (156), percussion hammer, wooden tongue depressor		**Equipment:** Same as under * in Medicine OPD+ glucometer, Otoscope, tuning fork (156), percussion hammer, wooden tongue depressor	
		Instruments: Mouth Mirror and Cusco's speculum.		**Instruments:** Mouth Mirror, Cusco's Speculum	
		Accessories/Consumables: Same as under ** in Medicine OPD		**Accessories/Consumables:** Same as under ** in Medicine OPD	
		Furniture: Same as under *** in Medicine OPD+ glucometer strips		**Furniture:** Same as under *** in Medicine OPD+ glucometer strips	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
6.	**Dental OPD**	**Equipment:** Dental chair with all the probes (Air Rotor, Ultrasonic Scalar with four tips, Compressor oil free medical grade (noise-free), Suction fitted in the dental chair medium and high vacuum., Air rotor hand piece contra angle two and one straight hand piece (4 lakhs RPM), LED light cure unit, Diathermy Bipolar, Latest foot operated light of 20,000 and 25,000/- Lux, Dental X-ray IOP/OPG X-ray viewer with LED light), Horizontal Autoclave with UV light		**Equipment:** Dental chair with all the probes (Air Rotor, Ultrasonic Scalar with four tips, Compressor oil free medical grade (noise-free), Suction fitted in the dental chair medium and high vacuum., Air rotor hand piece contra angle two and one straight hand piece (4 lakhs RPM), LED light cure unit, Diathermy Bipolar, Latest foot operated light of 20,000 and 25,000/- Lux, Dental X-ray IOP/OPG X-ray viewer with LED light), Horizontal Autoclave with UV light	
		Instruments: Mouth mirror and Examination Instruments		**Instruments:** Mouth mirror and Examination Instruments	
		Accessories & Consumables: Same as under ** in Medicine OPD		**Accessories & Consumables:** Same as under ** in Medicine OPD	
		Furniture: Same as under *** in Medicine OPD		**Furniture:** Same as under *** in Medicine OPD	
7.	**Pre-Anesthetic Check Up Room**		**Equipment** * Same as under Medicine OPD + Spirometer	**Equipment** * Same as under Medicine OPD + Spirometer	
			Accessories & Consumables: Same as under ** in Medicine OPD	**Accessories & Consumables:** Same as under ** in Medicine OPD	
			Furniture: Same as under *** in Medicine OPD	**Furniture:** Same as under *** in Medicine OPD	
8.	**Family Medicine**		**Equipment** * Same as under Medicine OPD		**Equipment** * Same as under Medicine OPD
			Accessories/Consumables ** Same as under Medicine OPD		**Accessories/Consumables** ** Same as under Medicine OPD
			Furniture *** Same as under Medicine OPD		**Furniture** *** Same as under Medicine OPD

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
9.	**Eye OPD#**			**Equipment** Same as under * in Medicine OPD + Ophthalmoscope- Direct, Ophthalmoscope- Indirect with 20 D Lens, slit lamp refraction units, Streak retinoscope, A- Scan Biometer, B- Scan Biometer, Keratometer, Auto-refractometer, Punctum Dilator, Applanation Tonometer, Fundus Camera, OCT.	
				Accessories: Trial lens set with trial frame Adult/ Children, Torch	
				Accessories & Consumables **Same as under Medicine OPD	
				Furniture: Same as under *** in Medicine OPD	
10.	**Orthopedics OPD#**			**Equipment:** Same as under * in Medicine OPD+ Reflex hammer, Goinometer	
				Instruments: Removal of Stitches Tray	
				Accessories/Consumables: Same as under ** in Medicine OPD	
				Furniture: Same as under *** in Medicine OPD	
11.	**ENT OPD##**				**Equipment:** Same as under * in Medicine OPD+ Ear & nasal Suction machine, Otoscope, Jobson Horne probe, Head lamp
					Instruments: Nasal Speculum, Laryngeal mirror, Nasopharyngeal mirrors Aural speculum Siegles speculum, Tuning fork (512 Hz), Bayonet forces
					Accessories/Consumables: Same as under ** in Medicine OPD

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
					Furniture: Same as under *** in Medicine OPD+ ENT examination chair
12	**24x7 Emergency**	**Equipment:** Resuscitation Bed, Multi-Para monitors, Sphygmomanometer, Laryngoscopes with Blades (both straight and curved for adult and paediatric), Oxygen cylinder Type D, Suction Machine (Electrical), Defibrillators, Mechanical ventilators (only for red Beds), Infusion pump, Ultrasonic nebulizer, ECG Machine, Transport monitor, Transport Ventilator, Thermometers, Glucometer, stethoscope, ophthalmoscope, otoscope, Examination light.		**Equipment:** Resuscitation Bed, Multi-Para monitors, Sphygmomanometer, Laryngoscopes with Blades (both straight and curved for adult and paediatric), Oxygen cylinder Type D, Suction Machine (Electrical), Defibrillators, Mechanical ventilators (only for red Beds), Infusion pump, Ultrasonic nebulizer, ECG Machine, Transport monitor, Transport Ventilator, Thermometers, Glucometer, stethoscope, ophthalmoscope, otoscope Examination light.	
		Instruments: Magill's forceps, Artery forceps, Surgical Blade, Mayo scissors, sponge forceps etc.		**Instruments:** Magill's forceps, Artery forceps, Surgical Blade, Mayo scissors, sponge forceps etc.	
		Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, wall/roof mounted single piece curtains to ensure privacy, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, splints of various sizes, Goodle's airway etc.		**Accessories/Consumables:** Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, wall/roof mounted single piece curtains to ensure privacy, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, splints of various sizes, Goodle's airway etc.	
		Furniture: Colour coded BMW Bins, Intravenous stand, Stool, Cardiac Tables,		**Furniture:** Colour coded BMW Bins, Intravenous stand, Stool, Cardiac Tables,	
		Crash Cart with Emergency Medicines, Tray for management of anaphylactic shock,		Crash Cart, Emergency Medicine Trolly.	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
13.	**Minor OT**	**Equipment:** OT Table, OT light, Electrical Suction, Laryngoscope with 5 Blades (LED), Flash Autoclave - (Chamber capacity of app. 20 litres/cycle,		**Equipment:** OT Table, OT light, Electrical Suction, Laryngoscope with 5 Blades (LED), Flash Autoclave - (Chamber capacity of app. 20 litres/cycle,	
		Instruments: Surgical instruments and sets as required for each surgery/ procedure		**Instruments:** Surgical instruments and sets as required for each surgery/ procedure.	
		Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.		**Accessories/Consumables:** Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	
		Furniture: Colour coded BMW Bins, Intravenous stand, Stool, Cardiac Tables, Crash Cart, Emergency Medicine Trolly.		**Furniture:** Colour coded BMW Bins, Intravenous stand, Stool, Cardiac Tables, Crash Cart, Emergency Medicine trolly.	
14.	**OT General**		**Equipment:** OT Table, OT light - Ceiling Double Dome, Anaesthesia workstation, Electrical Suction, Laryngoscope with 5 Blades (LED), Defibrillator (AED plus Manual with ECG, Flash Autoclave - (Chamber capacity of app. 20 litres/cycle, Surgical Diathermy – Bipolar, ECG Machine - 6 Channel, Bowl Sterilizers - Different Sizes, Oxygen Cylinder D type, Washer Disinfector - 30- 45 Litres, Blood Warmer, Glucometer, Thermometer, Infusion Pump	**Equipment:** OT Table, OT light - Ceiling Double Dome, Anaesthesia workstation, Electrical Suction, Laryngoscope with 5 Blades (LED), Defibrillator (AED plus Manual with ECG, Flash Autoclave - (Chamber capacity of app. 20 litres/cycle, Surgical Diathermy – Bipolar, ECG Machine - 6 Channel, Bowl Sterilizers - Different Sizes, Oxygen Cylinder D type, Washer Disinfector - 30- 45 Litres, Blood Warmer, Glucometer, Thermometer, Infusion Pump	
			Instruments: Surgical instruments as required for each surgery.	**Instruments:** Surgical instruments as required for each surgery.	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
			Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	
			Furniture: Mayo Stand, Surgical Trolley, Equipment Trolley, Emergency & Drugs Trolley, Anaesthesia Trolley (Complete with Ambu bags and other items), Difficult Airway Trolley- Bronchoscope and intubating, Crash Cart, Patient Trolley, IV Stand	**Furniture:** Mayo Stand, Surgical Trolley, Equipment Trolley, Emergency & Drugs Trolley, Anaesthesia Trolley (Complete with Ambu bags and other items), Difficult Airway Trolley- Bronchoscope and intubating, Crash Cart, Patient Trolley, IV Stand,	
15.	**Obstetrics & Gynecology OT**	-	**Equipment:** OT Table, OT light - Ceiling Double Dome, Anaesthesia workstation, Electrical Suction, Laryngoscope with 5 Blades (LED), Defibrillator (AED plus Manual with ECG, Flash Autoclave - (Chamber capacity of app. 20 litres/ cycle, Surgical Diathermy – Bipolar, ECG Machine - 6 Channel, Bowl Sterilizers - Different Sizes, Oxygen Cylinder D type, Washer Disinfector - 30- 45 Litres, Blood Warmer, Glucometer, Open care Radiant warmer, Hysteroscopy, Foetal Doppler, CTG Monitor, Vacuum extractor, Pulse Oximeter baby & adult	**Equipment:** OT Table, OT light - Ceiling Double Dome, Anaesthesia workstation, Electrical Suction, Laryngoscope with 5 Blades (LED), Defibrillator (AED plus Manual with ECG, Flash Autoclave - (Chamber capacity of app. 20 litres/ cycle, Surgical Diathermy – Bipolar, ECG Machine - 6 Channel, Bowl Sterilizers - Different Sizes, Oxygen Cylinder D type, Washer Disinfector - 30- 45 Litres, Blood Warmer, Glucometer, Open care Radiant warmer, Hysteroscopy, Foetal Doppler, CTG Monitor, Vacuum extractor, Pulse Oximeter baby & adult	
			Instruments: Surgical instruments as required for each surgery.	**Instruments:** Surgical instruments as required for each surgery.	
			Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and	**Accessories/Consumables:** Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
			BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	
			Furniture: Mayo Stand, Surgical Trolley, Equipment Trolley, Emergency & Drugs Trolley, Anaesthesia Trolley (Complete with Ambu bags and other items), Difficult Airway Trolley- Bronchoscope and intubating, Crash Cart, Patient Trolley, IV Stand	**Furniture:** Mayo Stand, Surgical Trolley, Equipment Trolley, Emergency & Drugs Trolley, Anaesthesia Trolley (Complete with Ambu bags and other items), Difficult Airway Trolley- Bronchoscope and intubating, Crash Cart, Patient Trolley, IV Stand.	
16.	**Anaesthesia Equipment list for each OT**	-	**Equipment:** Anesthesia Machine, O2 cylinder for Boyles- D type, N2O Cylinder for Boyles-D type, CO2 cylinder for laparoscope* (to be provided as per need), Spiro meter, Multi Para Monitor - Desirable if Anaesthesia workstation available in OT, Defibrillator (AED plus Manual with ECG), Infusion Pump, Oxygen concentrator	**Equipment:** Anesthesia Machine, O2 cylinder for Boyles- D type, N2O Cylinder for Boyles-D type, CO2 cylinder for laparoscope* (to be provided as per need), Spiro meter, Multi Para Monitor - Desirable if Anaesthesia workstation available in OT, Defibrillator (AED plus Manual with ECG), Infusion Pump, Oxygen concentrator	
		-	**Instruments:** Anaesthetic - laryngoscope Magill's with four blades, Magill's forceps (two sizes), Tongue depressors* (to be provided as per need), Adult Resuscitation Kit (to be provided as per need), Neonate Resuscitation Kit (to be provided as per need), Emergency First Aid Kit (to be provided as per need),	**Instruments:** Anaesthetic - laryngoscope Magill's with four blades, Magill's forceps (two sizes), Tongue depressors* (to be provided as per need), Adult Resuscitation Kit (to be provided as per need), Neonate Resuscitation Kit (to be provided as per need), Emergency First Aid Kit (to be provided as per need),	
		-	**Accessories/Consumables:** Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	**Accessories/Consumables:** Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc.	
		-	**Furniture:** Patient Trolley	**Furniture:** Patient Trolley	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
17.	**Emergency OT**	-	**Equipment:** Basic operating theatre table, consisting of # head section, # Foot section, # Body section, # Lithotomy poles, # Mattress, # shoulder rest, OT light,	**Equipment:** Basic operating theatre table, consisting of # head section, # Foot section, # Body section, # Lithotomy poles, # Mattress, # shoulder rest, OT light,	
			Oxygen Therapy apparatus, W/masks, flow meter, cylinder trolley, Suction Apparatus, BP Machine, Portable Autoclave, Operating lamp, mobile, 12 V including Battery, Spare bulbs and supplied with charger, Water Bath (Electric), Medium size, Tourniquet – Adult, Tourniquet – Child, Proctoscope – Adult, Proctoscope – Child, Stethoscope, Thermometer, Nebulizer machine, Torch, ECG 3 Channel	Oxygen Therapy apparatus, W/masks, flow meter, cylinder trolley, Suction Apparatus, BP Machine, Portable Autoclave, Operating lamp, mobile, 12 V including Battery, Spare bulbs and supplied with charger, Water Bath (Electric), Medium size, Tourniquet – Adult, Tourniquet – Child, Proctoscope – Adult, Proctoscope – Child, Stethoscope, Thermometer, Nebulizer machine, Torch, ECG 3 Channel	
			Instruments: Ambu- bag, BP handle, No. 4, artery forceps – straight, artery forceps – curved, mosquito forceps – straight, mosquito forceps – curved, plain dissecting forceps, tooth dissecting forceps, right angle detector, needle holder – large, needle holder – small, BP blade, instrument trolley, stomach tube, resuscitation kit, manual, infant, dissecting scissor 8", allis tissue forceps, Mayo's scissors, dissecting scissors 8" curved, ttitch cutting scissors, gauge cutting/bandage cutting scissors 12, kidney tray – small, kidney tray – big, sponge holing forceps, Kocher's artery forceps – straight, Kocher's artery Forceps – curved, cat's paw retractor, ear speculum, nasal speculum – adult, nasal speculum – child, tracheostomy set, female metallic catheter, tongue depressor, catheter introducer, vaginal speculum – large, vaginal speculum – small	**Instruments:** Ambu- bag, BP handle, No. 4, artery forceps – straight, artery forceps – curved, mosquito forceps – straight, mosquito forceps – curved, plain dissecting forceps, tooth dissecting forceps, right angle detector, needle holder – large, needle holder – small, BP blade, instrument trolley, stomach tube, resuscitation kit, manual, infant, dissecting scissor 8", allis tissue forceps, Mayo's scissors, dissecting scissors 8" curved, ttitch cutting scissors, gauge cutting/bandage cutting scissors 12, kidney tray – small, kidney tray – big, sponge holing forceps, Kocher's artery forceps – straight, Kocher's artery torceps – curved, cat's paw retractor, ear speculum, nasal speculum – adult, nasal speculum – child, tracheostomy set, female metallic catheter, tongue depressor, catheter introducer, vaginal Speculum – large, vaginal speculum – small.	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
			Accessories/Consumables: Ambu bag (adults and paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.	**Accessories/Consumables:** Ambu bag (adults and paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.	
		-	**Furniture:** Patient trolley, surgeon's stool, fixed height with stump feet and anti - static cushion, surgical drum inch, surgical down eight inches	**Furniture:** Patient trolley, surgeon's stool, fixed height with stump feet and anti - static cushion, surgical drum inch, surgical down eight inches	
18.	**Eye OT**			**Equipment:** OT Table, OT light - Ceiling Double Dome, Anaesthesia workstation, Electrical Suction, Laryngoscope with 5 Blades (LED), Defibrillator (AED plus Manual with ECG, Flash Autoclave - (Chamber capacity of app. 20 litres/cycle, Surgical Diathermy – Bipolar, ECG Machine - 6 Channel, Bowl Sterilizers - Different Sizes, Oxygen Cylinder D type, Washer Disinfector - 30- 45 Litres, Blood Warmer, Glucometer, Thermometer, Infusion Pump, Cryo surgery unit, Operating Microscope, Phaco Machine, Nd Yag Laser	
				Instruments: Surgical instruments as required for each surgery.	
				Accessories/Consumables: Ambu Bag (Adults and Paediatrics), Dressing material, syringes and needles of different sizes, ET & TT tube in each size, Tracheostomy set, Urinary Catheters, IV cannulas, IV and BT sets, NG tubes with each size, Gloves, Goodle's airway, Shoe covers, Head Caps, masks, Gowns etc	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
				Furniture: Mayo Stand, Surgical Trolley, Equipment Trolley, Emergency & Drugs Trolley, Anaesthesia Trolley (Complete with Ambu bags and other items), Difficult Airway Trolley- Bronchoscope and intubating, Crash Cart, Patient Trolley, IV Stand	
19.	**LDR Complex**	**Equipment:** Labour bed, sphygmomanometer, glucometer, foetal doppler, CTG machine, thermometer, laryngoscope with 5 blades (LED, curved & straight for adult and paediatric each size), suction machine, examination light, open care radiant warmer, vacuum extractors, pulse oximeter		**Equipment:** Labour bed, multipara monitor, sphygmomanometer, glucometer, foetal doppler, CTG machine, thermometer, laryngoscope with 5 blades (LED, curved & straight for adult and paediatric each size), suction machine, examination light, open care radiant warmer, vacuum extractors, pulse oximeter	
		Instruments: Magill's forceps, Mayo scissors, artery forceps, sponge holders, normal delivery kit, episiotomy kit, forceps delivery kit, craniotomy kit		**Instruments:** Magill's forceps, Mayo scissors, artery forceps, sponge holders, normal delivery kit, episiotomy kit, forceps delivery kit, craniotomy kit	
		Accessories/Consumables: Ambu bag (adults and paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.		**Accessories/Consumables:** Ambu bag (adults and paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.	
		Furniture: Colour coded BMW bins, intravenous stand, stool, cardiac tables, crash cart with emergency medicines		**Furniture:** Colour coded BMW bins, intravenous stand, stool, cardiac tables, crash cart with emergency medicine trolley	
20.	**IPD (Wards)**	**Equipment:** Beds, bed side locker/ trolley, thermometer, SpO2 monitor, sphygmomanometer digital), crash cart with multipara monitor, Nebulizer, Laryngoscopes (LED) both straight and curved for adults and pediatrics (for each size), torch		**Equipment:** Beds, bed side locker/ trolley, thermometer, SpO2 monitor, sphygmomanometer digital), crash cart with multipara monitor, nebulizer, laryngoscopes (LED) both straight and curved for adults and pediatrics (for each size), torch	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
		Instruments: Magill's forceps		**Instruments:** Magill's forceps	
		Accessories/Consumables: Ambu bags (adult & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and		**Accessories/Consumables:** Ambu bags (adult & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and	
		BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.		BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.	
		Furniture: Colour coded BMW Bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley		**Furniture:** Colour coded BMW bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley	
21.	**NBSU**	**Equipment:** Radiant warmer, multipara monitor, sphygmomanometer, glucometer, laryngoscope with 5 blades (LED, curved & straight for neonates and paediatric each size), suction machine		**Equipment:** Radiant warmer**,** multipara monitor, sphygmomanometer, glucometer, laryngoscope with 5 blades (LED, curved & straight for neonates and paediatric each size), suction machine	
		Instruments: Magill's forceps		**Instruments:** Magill's forceps	
		Accessories/Consumables: Ambu bags (neonatal & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.		**Accessories/Consumables:** Ambu bags (neonatal & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.	
		Furniture: Colour coded BMW bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley		**Furniture:** Colour coded BMW bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley	
22.	**NRC* (Desirable)**		**Equipment:** Bed, glucometer, height and weight measurement scale (digital), thermometer, infantometer, stadiometer, crash cart with multipara monitor, nebulizer, laryngoscopes (LED) both straight and curved for adults and pediatrics (for each size), torch		**Equipment:** Bed, glucometer, height and weight measurement scale (digital), thermometer, infantometer, stadiometer, crash cart with multipara monitor, nebulizer, laryngoscopes (LED) both straight and curved for adults and pediatrics (for each size), torch.

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
			Instruments: Magill's forceps		**Instruments:** Magill's forceps
			Accessories/Consumables: Ambu bags (adult & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and B		**Accessories/Consumables:** Ambu bags (adult & paediatrics), dressing material, syringes and needles of different sizes, ET & TT tube in each size, tracheostomy set, urinary catheters, IV cannulas, IV and BT sets,
			T sets, NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.		NG tubes with each size, gloves, goodle's airway, shoe covers, head caps, masks, gowns etc.
			Furniture: Colour coded BMW bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley		**Furniture:** Colour coded BMW bins, intravenous, stool, bed side chairs, chair for nurses and doctors, medicine trolley
23.	**Radiology services**	**Equipment:** X- Ray 300 mA., ECG Machine	USG with all the probes	**Equipment:** X-Ray 300 mA, USG with all the probes, ECG machine	
24.	**Basic Rehabilitation Equipment**	Shoulder wheel, wall ladder finger exerciser, finger exerciser web, shoulder pulley, walking aid for training – adjustable walker, reciprocal walker, exercise couch, pillow, towel, floor patterns may be designed having alternate patterns different colour tiles (1 feet X 1 feet) to help in teaching gait pattern/visual feedback for neurological impaired geriatric patients, one wheelchair, exercise charts for teaching basic exercises for neck, back, shoulder, knee joint etc, chart for showing positioning, lifting, and carrying technique for elderly, spirometer with disposable mouthpiece for those patients who need to perform breathing exercises multiple times a day (diagnosed cases of chronic bronchitis, emphysema, cystic fibrosis), lower & upper extremity cycle/ basic ergo meter, Ultrasound therapy, TENS, interferential therapy/electrotherapy unit		Shoulder wheel, wall ladder finger exerciser, finger exerciser web, shoulder pulley, walking aid for training – adjustable walker, reciprocal walker, exercise couch, pillow, towel, floor patterns may be designed having alternate patterns different colour tiles (1 feet X 1 feet) to help in teaching gait pattern/visual feedback for neurological impaired geriatric patients, one wheelchair, exercise charts for teaching basic exercise for neck, back, shoulder, knee joint etc, chart for showing positioning, lifting, and carrying technique for elderly, spirometer with disposable mouthpiece for those patients who need to perform breathing exercise multiple times in a day (diagnosed cases of chronic bronchitis, emphysema, cystic fibrosis), lower & upper extremity cycle/ basic ergo meter, ultrasound therapy, TENS, interferential therapy/electrotherapy unit	

S. No.	Department	Non-FRU CHC (Rural)		FRU CHC (Rural)/(Urban)	
		E	D	E	D
25.	**PMR**				NCV machine*, EMG machine**, VEP machine***, Auditory Brainstem Response machine****

Note: The above is the essential & basic list of equipment, instruments and accessories depending on the type and case load the state can add on. The equipment, consumables and furniture mentioned under desirable are over and above the essential equipment, instrument and accessories.

OPD Services: -

 # Desirable at 50 bedded FRU CHC and UCHC and essential at 100 Bedded UCHC.

Desirable from 50 bedded FRU CHC onwards.

PMR Equipment: -

NCV machine: Desirable at 100 bedded UCHC*

*EMG machine**: Desirable at 100 bedded UCHC*

*VEP machine***: Desirable at 100 bedded UCHC*

*Auditory Brainstem Response machine****: Desirable at 100 bedded UCHC*

ANNEXURE 11

Cleaning Protocols at CHC/UCHC

Routine cleaning is of utmost importance in every area of a health care facility. Certain chemicals are recommended for cleaning, particularly in moderate and high-risk areas, but such chemicals keep on changing based on scientific updates. It needs to be understood that since none of the chemicals used on walls and floors provide 100% safety from various microorganisms and spores. So, behaviour of staff towards routine cleaning and adherence to infection prevention protocols is the most important action which needs to be followed by health care staff and workforce.

Cleaning frequency, level of cleaning/ disinfection and evaluation/ auditing frequency according to the type of functional area risk category Functional Area Risk Category	Frequency of cleaning	Level of cleaning/ disinfection (As per Spaulding's Classification)	Method of cleaning/ Disinfection	Evaluation/ auditing frequency
High risk areas Operation Theatre Complex Labour Room Complex Emergency Laboratory Blood Storage Unit	**Floors, walls and surfaces:** Routine cleaning once in two hours with aldehyde free high-level disinfectant (HLD) like 70% isopropyl alcohol **Spot Cleaning**: As required OT table, Labour beds and other such surfaces to be cleaned and disinfected after every use. **Intensive deep cleaning**: Weekly/ Holidays	Cleaning and Intermediate level disinfection	Routine cleaning with soap. Detergent plus disinfection with aldehyde free high-level disinfectant (HLD) like 70% isopropyl alcohol **Spot cleaning**: As required after disinfection with 0.5% chlorine solution. All equipment and instruments to be disinfected and cleaned with aldehyde free high-level disinfectant like peracetic acid and autoclaving except heat sensitive equipment & instruments.	Weekly or monthly if cleanliness of high standards is maintained as certified by Officer I/C Sanitation and Infection Control Team
Moderate risk areas Consultation Room Examination Room Counselling Room/ Adolescent Friendly Health Clinic Radiology Room Nursing Station	**Floors, walls and surfaces:** Routine cleaning once in four hours with aldehyde free high-level disinfectant (HLD) like 70% isopropyl alcohol	Cleaning and low-level disinfection	Routine cleaning with soap. Detergent plus disinfection with aldehyde free high-level disinfectant (HLD) like 70% isopropyl alcohol **Spot cleaning**:	Once in a month or once in two months if cleanliness of high standards is maintained as certified by Officer I/C Sanitation and Infection Control Team

Cleaning frequency, level of cleaning/ disinfection and evaluation/ auditing frequency according to the type of functional area risk category Functional Area Risk Category	Frequency of cleaning	Level of cleaning/ disinfection (As per Spaulding's Classification)	Method of cleaning/ Disinfection	Evaluation/ auditing frequency
Inpatient wards/ Nutritional Rehabilitation Centre (NRC) Toilets	**Spot cleaning**: As required **Intensive deep cleaning**: Weekly/ Holidays		As required after disinfection with 0.5% chlorine solution. All equipment and instruments to be disinfected and cleaned with aldehyde free high-level disinfectant like peracetic acid and autoclaving except heat sensitive equipment & instruments.	
Low risk areas Corridors Lifts Waiting halls/Waiting Rooms/Registration area Stores (Medicine Store, Linen Store) Pharmacy Kitchen & Pantry Cafeteria	**Floors, walls and Surfaces:** Routine cleaning for areas working round the clock at least once in a shift or in areas having general shift at least twice in the shift with water and Soap/Quaternary Ammonium Compound **Spot Cleaning**: As required **Intensive deep cleaning**: Weekly/ Holiday	Only cleaning	Routine physical removal of soil, dust or foreign material followed by cleaning with water and soap/Quaternary Ammonium Compound. **Spot cleaning**: As required after disinfection with 0.5% chlorine solution.	Once in three months

Note: *For infective spills like blood, it should be first treated with 0.5% hypochlorite solution.*

General cleaning practices for all health care settings

Before cleaning

- Check for additional (isolation) precautions signs
- Follow precautions as indicated
- Remove clutter before cleaning
- Follow manufacturer's instructions for proper dilution and contact time for cleaning and disinfecting solutions

- Gather materials required for cleaning before entering the room
- Visibly check and ensure all cleaning equipment is clean
- Clean hands before entering the room
- Prepare chemical dilutions and put on gloves before beginning cleaning.

During cleaning

- Progress from the least soiled areas to the most soiled areas and from high surfaces to low surfaces
- Remove gross soil (visible to naked eye) prior to cleaning and disinfection
- Minimise turbulence to prevent dispersion of dust that may contain micro-organisms
- Never shake mops
- Use dust control mop prior to wet/damp mop. Do not use brooms
- Wash the mop under running water before doing wet mopping
- Do not 'double-dip' mops (dip the mop only once in the cleaning solution, as dipping it multiple times may re-contaminate it)
- An area of 120 square feet to be mopped before re-dipping the mop in the solution
- Cleaning solution to be changed after cleaning an area of 240 square feet (This does not apply to critical areas like OT and ICU)
- Change more frequently in heavily contaminated areas, when visibly soiled and immediately after cleaning blood and body fluid spills
- Be alert for needles and other sharp objects. Safely handle and dispose sharps into puncture proof container. Report incident to supervisor
- Collect waste, handle plastic bags from the top (do not compress bags with hands)
- Clean hands on leaving the room

After cleaning

- Do not overstock rooms
- Tools used for cleaning and disinfecting should be cleaned and dried between uses
- Launder mop heads daily
- All washed mop heads should be dried thoroughly before re-use
- Clean sanitation cart and carts used to transport biomedical waste daily.

ANNEXURE 12

Surgical Safety Checklist in the Operation theatre

Sign In (Period before induction of anesthesia)

- ☐ **Patient has confirmed**
  - Identity
  - Site
  - Procedure
  - Consent
- ☐ **Site marked/Not Applicable**
- ☐ Anesthesia Safety Check Completed
  - Anesthesia Equipment
  - A B C D E
- ☐ Pulse Oxymeter on Patient and functioning

DOES PATIENT HAVE A:

Known Allergy

- ☐ No
- ☐ Yes

Difficult Airway/Aspiration Risk?

- ☐ No
- ☐ Yes, and assistance available

Risk of >500 ml Blood loss (7 ml/kg in children)

Time Out (Period after induction & before surgical incision)

- ☐ **Confirm all team members have introduced themselves by name & role**
- ☐ **Surgeon, Anesthetist & Nurse verbally Confirm**
  - Patient
  - Site
  - Procedure

ANTICIPATED CRITICAL EVENTS

- ☐ **Surgeons reviews:** What are the critical or unexpected steps, operative duration & anticipated blood loss
- ☐ **Anesthetist reviews:** Are there any patient specific concerns
- ☐ **Nursing Team reviews:** Has sterility been confirmed? Is there equipment issue or any concern?

Has Antibiotic prophylaxis been given with in the last 60 minutes?

- ☐ Yes
- ☐ Not Applicable

Sign Out (Period from wound closure till transfer of patient from OT room)

Nurse Verbally confirm with the team:

- ☐ The name of the procedure recorded
- ☐ **That instrument, sponge, needle counts are correct** (or not applicable)
- ☐ **How the specimen is labeled** (including Patient name)
- ☐ **Whether there are any equipment problems to be addressed?**
- ☐ **Surgeon, Anesthetist & Nurse review the key concerns for recovery and management of patient & post- op orders to be given accordingly**
- ☐ **Information to patients attendant about** procedure performed, condition of the patient & specimen to be shown
- ☐ **Histopathology form**to be filled properly & **return all the records & investigation** to attendant/ patient

ANNEXURE 13

Service Area Wise Protocol

Service Area (Please Mark): (OPD/Clinical Lab/Minor OT/Major OT/NBSU/Emergency/LDR complex/IPD Area/any other etc.)

Room No:

Timings:

Staff in the room:

Designation	Name
Specialist	
MO	
Staff Nurses	
Other health care staff	
Sanitation staff	

Activities (Key services provided):

1.

2.

List of equipment and its maintenance:

S. No.	Equipment/ Material	Quantity	Frequency of utilization	Cleaning material & frequency	Responsible person

Toll-free number of BMMP:

Nodal person at the facility with contact details:

Records and Registers:

S. No.	Name of the Register	Key information recorded in the Register	Frequency of updating	Person responsible	Designation of authority responsible for verification of Register

Performance Indicators (Number/type of services/number of patients served/number of procedures undertaken/number of data recorded/medicines dispensed/diagnostics conducted etc or any key services being provided in the service area to be indicated below and their performance chart comparing current and previous month/year may also be displayed):

1.

Performance

Periodicity: →	Cumulative from April to March		1st quarter (April to June)		2nd quarter (July to September)		3rd quarter (October to December		4th quarter (January to March)	
Indicators ↓										
	Previous Year	Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year	Current Year

Performance Bar Graph

Cleaning protocols

Category of service area (Please tick)	High Risk	Moderate Risk	Low Risk	Remarks
Availability of colour coded bins	Not available	Partially available	Available	
Adherence to IPC protocols	Poor	Needs improvement	Good/Satisfactory	
Segregation of BMW	Not practiced	Partially practiced	Fully adhered	
Frequency of BMW disposal (please indicate in hours)				
Frequency of cleaning (please indicate in hours)				
Date and time of last cleaning				
Date & time of supervision				
Name & signature of Supervisor				

ANNEXURE 14

Checklist for Daily Rounds

S. No.	Observe/Monitor and guide Date:	1	2	3	4	5	6	7	8	9	10
1.	Display of duty roster and presence of staff accordingly in their respective duty station										
2.	Staff is in proper uniform & maintains decorum										
3.	Department/service area-wise protocols and performance displayed in respective service areas.										
4.	Clinical practices as per SoPs in each service area										
5.	Privacy during patients' examination is maintained in all service areas										
6.	Quality of services maintained by nursing and other junior staff										
7.	Wards' readiness for doctors' round										
8.	Infection prevention and control protocols are adhered to										
9.	Biomedical waste is segregated properly										
10.	Adherence to handing over and taking over of protocols in all critical areas										
11.	Records of IPD are maintained and complete in each service area										
12.	Availability of stock required in every service area (drugs, gloves, mask, inj. etc.)										
13.	Necessary equipment is available and functional in every service area										
14.	Sterilisation of the instruments is as per protocols										
	13.1 Operation theatre										
	13.2 Labour Room										
	13.3 Casualty										
	13.4 Any other department										
15.	Only sterilised/autoclaved instruments are used in service areas										
16.	Records of sterilisation are maintained										
17.	Cleanliness and check cleaning checklist for completion in the below mentioned areas (OPD, wards, labour room, OT, Lab. & diagnostic rooms, injection & dressing room, toilets etc.) as per cleaning protocols										
18.	Presence of junk or unnecessary item in service areas										
19.	Availability of linen and quality of laundry services										
20.	Availability of food to patients is on time, is hot and fresh and of good quality										
21.	Requisitions for special diet are sent to dietician/ kitchen and is served accordingly										
22.	Visiting times are maintained										

Round taken by (Please tick and sign):

1. Medical Superintendent/Health Facility In-charge:
2. Deputy Medical Superintendent/Hospital Manager:
3. Nursing Superintendent/Matron/Nursing-In charge:
4. Any other:

ANNEXURE 15

List of Contributors

A. Ministry of Health and Family Welfare

S. No.	Name	Designation
1.	Mr. Rajesh Bhushan	Secretary
2.	Ms. Preeti Sudan	Former Secretary
3.	Prof. (Dr.) Sunil Kumar	Director General of Health Services
4.	Mr. Vikas Sheel	Additional Secretary & Mission Director, NHM
5.	Mr. Manoj Jhalani	Former Additional Secretary & Mission Director, NHM
6.	Ms. Vandana Gurnani	Former Additional Secretary & Mission Director, NHM
7.	Mr. Vishal Chauhan	Joint Secretary, Policy
8.	Dr. Harmeet Singh	Joint Secretary, Urban Health
9.	Ms. Preeti Pant	Former Joint Secretary, Urban Health
10.	Dr. Sachin Mittal	Director – NHM
11.	Dr. Neha Garg	Director – NHM
12.	Dr. Harsh Mangla	Director – NHM
13.	Dr. N. Yuvaraj	Former Director – NHM

B. NITI Aayog

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C. Committee Members (As notified)

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11. Director Public Health - Tamil Nadu
12. Dr. Satish Pawar (Additional Mission Director) - Maharashtra
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14. CMO - Uttar Pradesh (State to nominate)
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5. Municipal Corporations Mumbai- representative
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2.	Dr. Jyoti	DD	IDSP, NCDC

S. No.	Name	Designation	Organisation
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4.	Dr. Aakash Srivastava	Additional Director and HOD NPCCHH	NCDC
5.	Dr. Rameshwar Sorokhaibam	Deputy Director NPCCHH	NCDC
6.	Dr. Anu George	APD	SHARE India
7.	Dr. Vinay Garg	DD	NCDC
8.	Mr. J Chaudhary	AMD, WB	H&FW, Govt Of WB
9.	Mr. Prem Prakash	DGM	HITES, Noida
10.	Dr. Anubhav Srivastav	Asstt. Director	NCDC
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17.	Dr. Rajib Das Gupta	Professor	JNU, New Delhi
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19.	Dr. Suraj Singh	Associate Prof.	AIIMS, New Delhi
20.	Dr. Bhawna Gulati	Associate Professor	ASCI, HYD
21.	Dr. Tej Prakash Singh	Associate Professor, Dept of Emergency Medicine JPNATC	AIIMS, Delhi
22.	Dr. Ravikirti	Associate Prof.	AIIMS, Patna
23.	Dr. Rekha Singh	Associate Prof	AIIMS, Bhopal
24.	Dr. Vikas Gupta	Associate Prof.	AIIMS, Bhopal
25.	Dr. Abhir singh	Associate Prof.	AIIMS, Bhopal
26.	Dr. NP Singh	Asst. Prof. Surgery	AIIMS, Bhopal
27.	Dr. R R Bonde	Associate Prof.	EpMC
28.	Dr. Dhiraj Bhandari	Associate Prof & Intensivist	MGIMS, Maharashtra
29.	Dr. Arun Singh	HOD, Dept. of Neonatology	AIIMS, Jodhpur
30.	Dr. Priyanka Bhushan	Prof & Head, Public health Dentistry	ITS Dental College
31.	Lt Col (Dr.) Kundan Kumar	Dental officer	Base Hospital, Army Dental Corps
32.	Dr. R K Singh	HOD, Emergency Medicine Department	SGPGI, Lucknow
	Dr. Kirti Iyengar	NPO (RH)	UNFPA
33.	Dr. Dilip Singh Mairembam	NPO	WHO India
34.	Dr. Madhur Gupta	Technical Officer, Pharmaceutical	WHO India
35.	Er. Dhirendra Chaudhary	Superintendent Engineer	CPWD, GOI
36.	Mr. Rohit	FC	NHM-Finance
37.	Dr. Vandana Kumar	Consultant	WHO India
38.	Dr. Sushant Agarwal	Consultant QI	ADB, NHSRC

4. NHSRC

S.No.	Name	Designation
1.	Maj Gen (Prof) Atul Kotwal	Executive Director
2.	Dr. M. A Balasubramanya	Advisor, CP-CPHC
3.	Dr. Ranjan K Choudhury	Advisor, HCT
4.	Ms. Sweta Roy	Lead Consultant
5.	Dr. Neha Dumka	Lead Consultant, KMD
6.	Dr. Deepika Sharma	Lead Consultant, QPS
7.	Mr. Sandeep Sharma	Lead Consultant, HCF
8.	Mr. Prasanth KS	Senior Consultant, PHA
9.	Dr. Smita Shrivastava	Senior Consultant, PHA
10.	Dr. Aashima Bhatnagar	Senior Consultant, PHA
11.	Mr Divya Prakash	Senior Consultant, HRH
12.	Ms. Vertika Agarwal	Senior Consultant, HCT
13.	Mr. Anjaney Shahi	Senior Consultant, HCT
14.	Mr. Padam Khanna	Senior Consultant, KMD
15.	Dr. Vinay Bothra	Former Sr. Consultant, PHA
16.	Mr. Ajit Kumar Singh	Former Sr. Consultant, PHA
17.	Mr. Mohd. Ameel	Former Sr. Consultant
18.	Dr. Parminder Gautam	Former Sr. Consultant, QPS
19.	Dr. Neha Jain	Former Sr. Consultant
20.	Dr. Rupendra Sahota	Former Sr. Consultant
21.	Dr. Kalpana Pawalia	Consultant, PHA
22.	Dr. Poonam	Consultant, PHA
23.	Dr. Ashutosh Kothari	Consultant, PHA
24.	Ms. Neelam Tirkey	Consultant, PHA
25.	Dr. Aditi Joshi	Consultant, PHA
26.	Dr. Nidhi Awasthi	Consultant, PHA
27.	Ms. Diksha	Consultant, PHA
28.	Ms. Isha Sharma	Consultant, HRH
29.	Ms. Charu	Consultant, HCT
30.	Ms. Manisha Sharma	Consultant, HCT
31.	Dr. Arpita Agrawal	Consultant, QPS
32.	Mr. Gulam Rafey	Consultant, QPS
33.	Ms. Vasudha Khanna	Legal Consultant, PHA
34.	Mr. Mohd. Shoeb Alam	Architect, New Delhi
35.	Mr. Sangramsinh Gaikwad	Architect, Maharashtra
36.	Ms. Ritu	Junior Consultant, HCT
37.	Mr. Hariom Tiwari	Short term Consultant, QPS
38.	Dr. Shuchi Soni	Former Consultant, PHA
39.	Ms. Shivangi Rai	Former Legal Consultant, PHA
40.	Dr. Gurinder Randhawa	Former Consultant, QPS
41.	Mr. PS Vigneshwaran	Former Consultant, HCT

S.No.	Name	Designation
42.	Dr. Yogita Kumar	Former Consultant, HCT
43.	Mr. Ajai Basil	Former Consultant, HCT
44.	Dr. Archana Pandey	Former Consultant, PHA
45.	Dr. Rashmi Wadhwa	Former Consultant, QPS
46.	Dr. Shifa Arora	Former Consultant, PHA
47.	Ms. Vasundhra Bharti	Former External Consultant, PHA
48.	Ms. Nasrain Nikhat Khan	Former External Consultant, QPS
49.	Dr. Bhupinder Singh	Former External Consultant, PHA
50.	Ms. Akshita Singh	Former External Consultant, PHA
51.	Dr. Sujeet Sinha	Former Short-term Consultant, QPS
52.	Ms. Shilpa Pawar	Former Short-term Consultant, QPS
53.	Ms. Ashu Ranga	Fellow, PHA
54.	Dr. Musarrat Siddiqui	Fellow, PHA
55.	Dr. Syeda Tahseen Kulsum	Fellow, PHA
56.	Dr. Isha Chalotra	Former Fellow PHA
57.	Dr. Ishita	Former Fellow PHA
58.	Mr. Pawan	Former Fellow HCT
59.	Ms. Purnima	Former Fellow HCT
60.	Dr. Kushagr Duggal	Former Fellow, PHA
61.	Dr. Diksha Dhupar	Former Fellow, PHA
62.	Dr. Deepak Bhagat	Former Fellow, PHA
63.	Dr. Charu Chandrika	Fellow, PHA
64.	Dr. Priya Goel	Fellow, PHA
65.	Dr. Zeba Bano	Fellow, PHA

5. RRCNE

S. No.	Name	Designation
1.	Dr. Ashok Roy	Director, RRCNE
2.	Dr. Joydeep Das	Lead Consultant, RRCNE
3.	Dr. Pankaj Thomas	Sr. Consultant, RRCNE
4.	Dr. Surajit Choud'hury	Consultant, RRCNE
5.	Dr. Sidharth Maurya	Consultant, RRCNE
6.	Ms. Sagarika Kalita	Consultant, RRCNE

6. Administrative and Secretarial Support

S. No.	Name	Designation
1.	Brig. Sanjay Baweja	Principal Administrative Officer
2.	Ms. Garima Verma	Consultant, Publications
3.	Ms. Megha Mathur	Consultant, Publications
4.	Ms. Manju Bisht	Secretarial Assistant
5.	Mr. Ravi Kumar	Office Assistant
6.	Mr. Prakash Chemjung	Office Assistant

NOTES

Ministry of Health and Family Welfare
Government of India